

The Economics of Charities Serving Indigenous Peoples

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Abstract

Chapter one: The influence of charitable activity on Indigenous communities' well-being and other socio-economic outcomes

Hitherto and within the Canadian context, no one has investigated the role played by the charitable sector on the economic well-being for “on-reserve” First Nations and Inuit communities. On the one hand, Indigenous peoples face longstanding and complex social problems and economic hardships. On the other hand, there are charities which provide public goods and services and benefits to communities by helping to fill needs.

This is the first study to examine how the presence of charities may affect some measurable socio-economic outcomes of Indigenous communities and their people, by triangulating data from multiple sources: administrative data from the Canada Revenue Agency (CRA) on registered charities, the 2001 and 2006 Census Surveys, the 2011 National Household Survey and the Community Well-Being (CWB) Index developed by the Aboriginal Affairs and Northern Development Canada (AANDC).

My findings indicate that having access to at least one charity is associated with increases in a community well-being measure of 3 points on a 100-point scale, in household income (5.1%) and in individual's wages (6.9%). When the number of charities increases in a reserve by one unit, the CWB rises by 1.1 points (on the 100-point scale), household income by 2.7%, individuals' total income by 1.9% and individuals' wages by 3.4%.

Chapter two: Government funding to Indigenous charities

The government is an important revenue source for charitable organizations in Canada. Big differences in public funding can be observed across registered charities that serve Indigenous peoples and all other registered charities. Using charitable organizations' tax returns, the T3010 *Registered Charity Information Return* for the years 2003 to 2017 I investigate these government-funding patterns. I test different hypothesis on financial support from government sources by discerning first between Indigenous and non-Indigenous charities, and second between Indigenous charities on reserve and off reserve. I also analyze the relationship between the funding across levels to see if one level of government funding is contingent on other levels.

The results of my study point to a higher likelihood of Indigenous charities receiving government support as compared to non-Indigenous charities, with a 24% increase in the predicted

probability of funding. Indigenous charities on reserve have a predicted probability of receiving government funding that is almost 17% lower than those off reserve. From the exploration of the link between the three levels of Canadian government funding for Indigenous and non-Indigenous charities two insights emerge. Firstly, the federal government is more likely to support Indigenous charities if they do not receive any other public funds, and the provincial government supports them if they do not get any municipal funding. Secondly, Indigenous charities are more likely than non-Indigenous charities to get both federal and provincial funding, and federal and municipal funding. The comparison between Indigenous charities off reserve and on reserve reveals that the on-reserve ones are less likely to be funded simultaneously by two levels of government.

Chapter three: The causal relationship between government funding and donations to Indigenous charities

While billions of dollars are donated annually to charitable organizations, relatively modest amounts go to charities that specifically serve Indigenous populations. In comparison to their non-Indigenous counterparts, these charities get fewer private donations, have less fundraising revenue and receive less gifts from other charities. This chapter studies the causal relationship between public funding and these three types of revenues, focusing on the Indigenous charities and distinguishing between on-reserve and off-reserve charities.

I use the large T3010 dataset with financial information for over 95,000 registered charities, covering a 15-year period from 2003 to 2017. The estimation and identification strategy relies on novel instruments using a 2SLS model. The results indicate a crowding out effect of public funding on donations for Indigenous charities; I also find evidence that the level of government funding matters.

With the preferred instrument, a one dollar increase in government funding crowds out seven cents of private contributions; the three levels of federal, provincial and municipal funding decrease private donations by 15, 6 and 46 cents respectively. Government funding negatively affects fundraising effort and gifts from other charities. For every dollar in public support the former decreases by one to seven cents and the latter by three to 12 cents. These reductions imply an economically substantial effect on charities' revenue. Little evidence is found that government grants impact differently Indigenous charities on reserve compared to those off reserve. The area and programs in which charities operate matter though, which is critical for how governments structure grants to Indigenous charities.

Keywords: Economics of Indigenous peoples, Indigenous communities, Indigenous charities, community well-being, welfare, government - charitable organization relationship, government funding, crowding out, private donations, fundraising

Dedication

To:

*Paul y Anna,
and
my loves M.J. & J.P.J.*

Acknowledgement

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As a first generation student to attend university, I want to say a few words to my family, in my mother tongue ladin. N gran dilan a mi geniturs Paul y Anna, a mi fre Pio y mia só Martina. Dilan de avëi azetè chësta dezijiun da fà n dotorat de inrescida che me à condüt tan daluc da éiasa. The greatest THANK YOU should go to my husband M.J and to my son J.P.J for all their support and love. I know it has been a very long journey, but now it is done!

Having started as an international student, once I was asked: *“Tell me one thing that you love about Canada and one thing that you hate about Canada!”*. I had only one answer: *“My PhD”*.

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General introduction

This thesis contributes to the economics of philanthropy and to the economics of Indigenous peoples by identifying and addressing gaps in our knowledge of the impact of charitable services on the Indigenous population and the complex relationship between public funding and Indigenous charities.

Charities are supposed to improve the welfare of individuals and are playing an increasingly important role in helping provide much-needed services and social goods to communities (e.g., Andreoni and Payne, 2013; List, 2011). Charitable organizations benefit individuals and communities in distinctive ways: they help to relieve poverty by providing assistance to deprived individuals, they engage in religious activities in order to enrich people's spiritual beliefs and they try to enhance educational attainment through various instructive and didactic events (CRA, 2017a). Charities step in to provide public goods that either the private sector is not able to provide or does not provide enough of. To address this insufficient provision, the government supports charities through preferential tax treatments and direct funding.

The purpose of the first chapter of my dissertation is to examine the impact of charitable services on specific community characteristics. I exploit data sets that provide information both on charitable activities and on community measures of well-being. Specifically, I examine if registered charities that provide goods and services tailored to meet various needs affect Indigenous communities. Over 1.6 million people identify as Indigenous in Canada, representing about 5% of the Canadian population according to the 2016 Census. First Nations, Métis and Inuit are the three groups constitutionally recognized as Indigenous peoples. First Nations represent 58% of the Indigenous population and live both on and off reserves. Métis primarily descend from marriages between European colonizers and First Nations and count for 35% of the Indigenous population. Inuit constitute 4% of the Indigenous population, and live mainly in communities in Nunavut, Northwest Territories, Northern Quebec (Nunavik) and Labrador (Statistics Canada, 2017a).

Millions of dollars are spent annually by charities located in Indigenous communities, on activities presumed to improve the welfare of their people. Starting from the assumption that charities located within the geographical borders of a First Nation reserve or Inuit community, are designed to meet the needs of people who live on the reserve and/or close surroundings, I investigate empirically the link between the presence of charitable organizations and communities' and individuals' outcomes. To measure community 'well-being' I rely on the Community Well-

Being (CWB) Index, a socio-economic score, developed to facilitate comparisons of First Nations reserves and Inuit communities with other Canadian populations and to track them over time. This measure is based on four subindices: education, housing, income and labour force activity. Obviously, this measure is a very narrow definition of ‘well-being’ as it misses some essential elements such as physical and emotional health and it does not capture non-monetizable benefits associated with family, traditions, and community. Individuals’ outcomes take into consideration household incomes, individuals’ total income and wages.

My findings indicate that having access to at least one charity is associated with increases in the CWB measure of 3 points on a 100-point scale, in household income (5.1%) and in individual’s wages (6.9%). When the number of charities increases in a community by one unit, the CWB rises by 1.1 points (on the 100-point scale), household income by 2.7%, individuals’ total income by 1.9% and individuals’ wages by 3.4%.

While chapter one focuses on charities located inside an Indigenous community, the two remaining chapters focus on a broader sample of Indigenous charities, that include charities with an Indigenous reference in its legal name and those that provide benefits almost exclusively to Indigenous peoples. The topic deals with the complex relationship between public funding coming from different levels of government and the charitable sector.

The government is an important funding source for charitable organizations in Canada. Big differences in the rates of public funding can be observed across registered charities that serve Indigenous peoples (56% receive public funds) and all other registered charities (35% receive public funds). In chapter two I investigate these differences between government transfers to Indigenous charities and to charities that serve others. Furthermore, I explore the relationship between the funding across different levels of government: is one level of government funding contingent on other levels? For instance, do Indigenous charities receive more provincial funding if they get already federal funding? Finally, a parallel analysis investigates government support for Indigenous charities off reserves and on reserves to see if this helps shed light on what is going on.

My results point definitively to a higher likelihood of Indigenous charities receiving government support as compared to non-Indigenous charities, with a 24% increase in the predicted probability of funding. Indigenous health and welfare charities manifest the highest increase in the predicted likelihood of funding by 81% and 31% respectively. These finding suggests that Indigenous charities are relying more on government funding because the government is using them more often as a means of providing services to the Indigenous populations than for others.

Indigenous charities on reserve have a predicted probability of receiving government funding that is almost 17% lower than Indigenous charities off reserve. From the exploration of the link between the three levels of Canadian government funding for Indigenous and non-Indigenous charities two major aspects emerge. First, the federal government supports Indigenous charities if these do not get any other public funds, and the provinces supports them if they do not get any municipal funding. Second, Indigenous charities are more likely to get both sources of federal and provincial, and federal and municipal funding than non-Indigenous charities. This suggest that the federal funding attracts funding from the other two levels of government. The comparison between Indigenous charities off reserve and on reserve reveals that charities on reserve are less likely to receive two sources of public funding simultaneously. This is the case for all three combinations of analysis: federal and provincial, federal and municipal, provincial and municipal funding.

While Indigenous charities are more likely to receive government funding, they receive fewer private donations than other registered charities. The third chapter consists largely in studying the causal relationship between public funding and private donations. More specifically it aims at understanding how government funding affects private donations. Do private donations fall (crowding out) with government funding or, do they increase with government funding (crowding in)? I also analyze two additional revenue components: fundraising and gifts from other (registered) charities. The difficulty in identifying a proper crowding in or crowding out effect arises from endogeneity issues. To overcome these problems, I employ a two stage least square regression model with novel instruments. First, I exploit variations in the amount of government funding received over the years and second, I make use of variations in the number of years that a charity was a recipient of government funding.

The main results from the instrumental variable approach indicate a crowding out effect of public funding on private donations for Indigenous charities: a one dollar increase in government funding crowds out seven cents of private contributions. I also find strong evidence that the level of government from which the funding arises, matters: funding from the federal government decreases private donations by 15 cents, from the provincial government by six cents and from the municipal one by 46 cents. Government funding also negatively affects fundraising revenues and gifts from other charities. For every dollar in public support fundraising revenues decreases by one to seven cents and gifts from other charities by three to 12 cents. These reductions imply an economically substantial effect on charities' revenue. Little evidence is found that government grants affect differently Indigenous charities on reserve as opposed to off reserve. The area and

programs in which charities operate matter though. For instance, education charities on reserve experience a crowding in effect of federal funding for all three dependent variables and its magnitude ranges between two and 11 cents for every dollar of funding.

Chapter one: The influence of charitable activity on Indigenous communities' well-being and other socio-economic outcomes

1.1 Introduction

Millions of dollars are spent annually by charities located in First Nation reserves and Inuit communities, on activities presumed to improve the welfare of their people. This amount has almost doubled from 110 million dollars in 2000 to 204 million dollars in 2010 (CPI deflated), representing over \$700,000 per community and \$2,000 per capita in 2010. Despite this, Indigenous peoples still face socio-economic problems - extreme poverty keeping them in vulnerable situations.

The purpose of this chapter is to study the link, if any, between the presence of the charitable sector and Indigenous communities. Specifically, I am investigating whether charitable organizations influence Indigenous communities' well-being as measured by the Community Well-Being (CWB) Index developed by the Aboriginal Affairs and Northern Development Canada (AANDC), as well as on other socio-economic outcomes at the individual level, which I retrieve using Statistics Canada confidential data. Since this is the first research of its kind, it will provide insights on if and how the presence of local charities helps improve the welfare of individuals in First Nation reserves and Inuit communities.¹

Over 1.6 million people identify as Indigenous in Canada, representing about 5% of the Canadian population according to the 2016 Census. First Nations, Métis and Inuit are the three groups constitutionally recognized as Indigenous peoples. First Nations represent 58% of the Indigenous population and live both on and off reserves dispersed throughout the country. The term Métis is used for representing primarily descendants of marriages between European colonizers and First Nations; they count for 35% of the Indigenous population and are scattered across Canada. Accounting for a small 4% of the Indigenous population, the Inuit live mainly in communities in Nunavut, Northwest Territories, Northern Quebec (Nunavik) and Labrador (Statistics Canada, 2017a). Although located in different parts of Canada, First Nations, Métis and Inuit have one thing in common: as the original inhabitants of the country, they share their

¹ I use the terms "Indigenous reserves" and "Indigenous communities" interchangeably to express First Nations reserves or Inuit communities, or the combination of both. In Canada, the term "Indigenous" has replaced "Aboriginal", which will still be used in a historical or institutional context. A more detailed explanation for these terminologies can be retrieved at <https://www.ictinc.ca/blog/indigenous-peoples-terminology-guidelines-for-usage>.

traditions, language usage and spiritual beliefs when compared to other Canadian residents (Government of Canada, 2017; AANDC, 2013).

There is historical evidence of disadvantage between non-Indigenous and Indigenous populations. Despite some improvements in the quality of life in the past decades, data from the AANDC show that 94% of First Nations communities have a below-average community well-being score compared to other Canadian communities.² The notion of “*closing the gap*” has been a matter of concern for governmental authorities and policy makers in Canada.

The philanthropic sector is playing an increasingly important role in helping provide much-needed services and social goods to communities (e.g., Andreoni and Payne, 2013; List, 2011).³ Charitable organizations and institutions benefit communities in distinctive ways: for instance, they help to relieve poverty by providing assistance to deprived individuals, they engage in religious activities in order to enrich people’s spiritual beliefs and they try to enhance educational attainment through various instructive and didactic events (CRA, 2017a). Charities step in to provide public goods that either the private sector is not able to provide or does not provide enough of. To address this insufficient provision, the government supports charities through preferential tax treatments and direct funding.

The charitable sector does not only have an important role in the social environment but serves as a channel in the economic context as well. Although charities are not maximizing profits as firms are, they have from an economic perspective some analogies with firms. They use labour inputs and capital to produce outputs in the form of good and services that are more and more in demand. The charitable segment in Canada is predominantly a service delivery more than a goods-producing sector. As an important source of jobs, where both volunteers and paid employees work towards achieving mission-oriented goals, it contributes to valuable economic activities and to the productivity growth in the economy and can be considered as minor, but not unimportant economic sector that concentrates on public good provision (Emmett and Emmet, 2015).

As a complement and as a substitute to the public sector, charities provide different levels of public goods and services (Harbaugh, 1998; Andreoni, 2006). There is little evidence of the impact

² Calculation made by the author based on data provided by the AANDC. This governmental department responsible for Indigenous issues has been going through various name changes: Indigenous and Northern Affairs Canada (INAC) till 2011, Aboriginal Affairs and Northern Development Canada (AANDC) till 2015, INAC again till 2017. In late 2017 a split of this department into Indigenous Services Canada (ISC) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) took place. I will adopt the most used AANDC acronym.

³ I extracted for instance the following information from the CRA dataset: the number of charitable organizations in Canada increased from 75,776 in 2000 to 84,579 in 2014. The total revenues that charities reported (CPI deflated as per 2014) have almost doubled from 130 billion \$ to 245 billion \$ since 2000. Analogously, total expenditures increased from 125 billion \$ to 234 billion \$ in 2014.

of charitable services on communities in general, and their impact on Indigenous reserves has never been studied. There are several channels through which charitable organizations can foster well-being and affect positively economic outcomes in these communities. First, social service charities provide for the basic needs of Indigenous peoples across Canada. These can range from soup kitchens and food banks to homeless shelters, to name a few. Second, education charities serve learning needs, by supporting children, students, adult learners and teachers of all levels of educational attainment. Third, health charities strive to improve the physical and mental well-being by addressing specific medical care needs, by preventing and curing chronic conditions, by dealing with mental health issues, and by providing health services that address diseases such as diabetes. Finally, religious and benefits to community charities concentrate on spiritual needs and programs aimed at establishing long-lasting benefits through their work. The mechanisms that are at the core of each charity are besides the benefits of the services provided, also the amount of money spent on charitable activity within the community, and the opportunities of employment derived therefrom and their spillover effects. Targeting primarily individual's well-being by ensuring that people get the support they need, all the charities can reach out to the community effortlessly.

Community well-being can be evaluated at the subjective and objective level: life satisfaction, happiness or self-reported health of individuals reflects the former, whereas the latter is nestled in a more tangible framework. Wiseman and Brasher (2008) consider in this respect life expectancy, income, nourishment, employment, years of schooling and democratic participation as the determinants of community prosperity.

In this study I will employ the *CWB Index* established by AANDC using Census of Population and National Household Survey (NHS) variables. This is an objective 'well-being' indicator based on four concrete community attributes: education, income, housing, and labour force activity. I use *household income*, *individuals' total income* and *individuals' wages* variables from the Census of Population and NHS to assess the economic well-being and economic performance at two other levels.

To my knowledge, no work has been carried out examining the role played by the charitable sector on economic outcomes in communities. No doubt this is because of the lack of suitable data. In this chapter, I focus on Indigenous communities and exploit data sets that provide information both on charitable activities and on community measures of well-being. Specifically, I examine if

*registered charities*⁴ that provide goods and services tailored to meet various needs can improve welfare within an Indigenous context, looking in particular at First Nations living on reserve and at Inuit communities.

It is difficult to measure outcomes from the charitable sector and there are clear technical issues associated with doing so, not the least of which arise from the fact that charities might emerge in response to needs - and hence their presence would be positively correlated with needs. Other difficulties arise from data problems and the legitimacy of the CWB Index. This latter has limitations which I discuss later, but since it is an index developed with the purpose of quantifying an albeit extremely restrictive notion of well-being in Indigenous communities, it is arguably the best available data for the purpose of my study.

My main goal is to examine if the charitable sector affects people living in Indigenous communities. I assume that registered charities located within the geographical borders of a reserve, are designed to meet the needs of people who live on the reserve and/or close surroundings.⁵ Since the aim of the study is not only to investigate empirically if there is a link between the presence of registered charities and communities, but also on individual's outcomes, I approach the research question first at the community level and then at the individual level.

My contribution spans different directions. This is the first attempt to assess the impact of the charitable sector on different community outcomes. Focusing on Indigenous communities is important, as these represent particularly disadvantaged populations in Canada, and it adds to the scant literature on the Economics of Indigenous peoples. My findings suggest that there is a positive link between the charitable sector and welfare: charities are beneficial, as they provide needed services, and they are helping to alleviate the socio-economic difficulties experienced by Indigenous peoples. This should raise awareness among policy makers on a potential instrument available for community development.

The results from the main analysis show that the CWB increases by three points (on a 100-point scale) with the presence of at least one registered charity and by 1.1 points when the number of charities increases within a community by one unit. Household income rises by 5.1% in the former case and by 2.7% in the latter case. Individuals' total income increases by 1.9% when the

⁴ Registered charities are legal entities, which register with the CRA and file the annual Form T3010-Registered Charities Information Return. Charities are operating entirely for charitable purposes and differ from non-profit organizations. These latter are not included in the study. More detailed information on registered charities is provided in section 3.

⁵ To strengthen this idea, I drop charities that engage in projects outside of Canada and spend more than 50% of their annual budget (total revenues) on international activities, keeping although charities that spend at least \$2,000 on charitable activities within the country. In total 13 observations are dropped and all of them are identified as being religious charities.

number of charities increases by one unit. Lastly, individuals' wages increase by 6.9% when a community has access to a charity and by 3.4% with an additional charity in the Indigenous community. These findings are confirmed by a Propensity Score Matching model and by a series of robustness checks.

The remainder of the chapter is structured as follows: Section 1.2 discusses the background literature. Section 1.3 introduces the data context. Section 1.4 proposes the empirical approach. Section 1.5 provides the summary statistics and a detailed overview on the difference in the reserves with charities and without charities. Sections 1.6 to 1.8 presents the main findings and robustness checks. The last section concludes.

1.2 Background literature

Several strands of research are linked to my study. First, I look at how empirical economists have used the CWB Index in their studies. Second, I investigate how the government can influence the charitable sector and how charities can be considered as public good providers. Third, as motivation for the study, I briefly review the literature on economic disparities, focusing on income that might negatively influence the welfare of Indigenous peoples versus other Canadian residents.

Cook (2005) reports in depth how the CWB Index was created following the footsteps of the Human Development Index (HDI) used by the United Nations Development Programme to assess the human progress of a country as compared to its merely economic growth. I return to a more detailed explanation of the HDI and especially the CWB Index in the data section, but it is important to mention right away that this latter allows comparisons of Indigenous peoples with other Canadian communities over time, having been developed entirely for this purpose.

Using Census and NHS data covering the period from 1991 to 2011, Pendakur and Pendakur (2015 and 2017) investigate the impact of having -versus not having- different agreements and opt-in legislation arrangements with the federal government on various socio-economic variables and on the CWB Index for people living in Indigenous reserves. The agreements are the Self-Government Agreements (SGA) and Comprehensive Land Claim Agreements (CLCA). The former ones impact the self-determination in governance and the latter ones, considered as modern treaties, deal with claims of land and natural resources that have not been addressed in the past by other treaties. With opt-in legislation, they refer to the First Nations Fiscal Management Act (FNFMA) and the First Nations Land Management Act (FNLMA). Indian reserves can opt out in

some parts of the Indian Act, the controversial set of rules imposed unilaterally by the Canadian government and opt for alternative own legal measures regarding property tax collection and land rights. Using a difference in differences (DID) approach, the authors compare 800 Indigenous communities without an agreement or opt-in legislation to 164 Indigenous communities which signed such arrangements with the federal government, before and after their implementation. In a multi-level analysis, they look at individual, household and community level effects and in a heterogeneity breakdown, the authors make distinctions between male and female and Indigenous identity and non-Indigenous Identity, registered versus non-registered Indigenous peoples. They find a 7% to 26% faster income growth rate for men living in reserves with a FNLMA and a CLCA agreement respectively, relative to the same group of people living in non-signatory communities. For the female population, they find that their income increases up to 38% if the community signed a CLCA. The major effects at the household level are also asserted for reserves with a CLCA, where registered Indigenous males experience a 47% increase in household income. Positive effects of CLCAs on household incomes were also found by Aragón (2015), who analyzed the impact of legal arrangements in Indigenous communities of British Columbia, Yukon and in the Northwest Territories. At the community level Pendakur and Pendakur (2015) found that having a SGA has a positive impact, whereby the CWB total score increases by 5% in that case.

A number of previous studies, analyze community welfare implementing the CWB Index and revealing clear discrepancies between Indigenous and non-Indigenous Canadians. In 1999, Armstrong adopts four Census variables-based indicators, namely employment ratio, average income, education and housing to build a first version of the CWB Index. In a 1986 to 1996 comparison between First Nation and Canadian populations, he reveals a substantial gap in all socio-economic components. Furthermore, on-reserve populations who display the highest levels of CWB share the same rankings with non-Indigenous communities living in the economically weakest areas of Canada.

Following the same underlying philosophy as Armstrong, McHardy and O'Sullivan (2004) refine the index and create its second version.⁶ In their analysis on the well-being distribution of Canadian communities they detect that the segments of Indigenous populations living on reserve have much lower standards of living as what has been suggested so far in previous studies.

⁶ The CWB Index used in this chapter is the third version and it differs from the previous one only in the education well-being calculation, which now takes university studies into consideration.

Subsequently, the same authors, O'Sullivan (2006) and McHardy and O'Sullivan (2008) look at the well-being of reserves that are situated at the bottom of the CWB distribution in 1981, focusing on First Nation groups that realized an improvement from 1981 to 2001. Their regression estimates for score changes based on projections in the future period of 2001 to 2041, are not optimistic, leaving these reserves again behind. Senécal, O'Sullivan, Guimond and Uppal (2008) extend the CWB analysis to Inuit populations in Canada; Beavon and White (2008) are led to conclude that the well-being of Indigenous peoples is a continuing challenge for Canada.

White and Maxim (2008) investigate through a reserve/non-reserve matching analysis how the size in terms of population and the location of Indigenous communities affect the quality of life and living conditions of First Nations. Before anything, an inverse relationship between geography and well-being is clearly highlighted. Then, their research reveals that reserves situated in the proximity of metropolitan spaces share similar characteristics with their non-reserve matched communities. More remote reserves, by contrast, are much different as compared to their matched non-Indigenous communities.

Cooke and O'Sullivan (2015) study the effect of migration on the First Nations CWB Index. People who are more prone to move either into or out of a reserve, have on average a higher level of education and better incomes. Although this influences directly only two of the subcomponents of the CWB, the total score of the CWB Index remains almost unaffected by the migration rate. Merely a weak positive correlation between migration and level of well-being within the community could be assessed through Ordinary Least Square regressions.

The sources of well-being can certainly vary. Higher well-being benefits depend also on the magnitude and the quality of the provision of public goods within a community area. Here, governments are not the only the purveyors of certain goods and services. Charitable organizations can also provide them. The public sector can finance the provision of these goods by charities in two different ways: directly through grants, which can be used for producing local and collective goods and services, and by allowing special tax benefits (Sherlock, 2010). Canadian registered charities enjoy favorable tax treatments, qualifying for tax-exempt status compared to other businesses or corporations. In addition, donors to these organizations receive tax credits.

The charitable sector can substitute for the direct government provision for public goods and services, or it can complement them. The former involves the governmental financing of goods, but delivery occurs only via the charitable sector. In the latter case, local charitable organizations

provide additional services, often because they know better the needs of the people and they can address them more specifically (Young, 2006).

A wide range of socio-economic studies deals with Indigenous versus non-Indigenous disparities, especially in terms of income and earning gaps. In a pioneering work on Indigenous wage differentials, George and Kuhn (1994) are among the first economists to assess the patterns of pronounced variations in income for people living on reserves compared to both Indigenous peoples living off reserve and to white Canadians. The main cause for the income inequality was attributed to a lower return to schooling for Indigenous peoples; the use of their native languages and regional as well as spatial isolation were also found to have an effect, although a less severe one. Maxim, White, Beavon and Whitehead (2001) study not only the Indigenous versus non-Indigenous dispersion of income, but also address intra-Indigenous inequalities. Their findings suggest that Inuit people have major difficulties in assimilating into the Canadian labour market, whereas Métis suffer the least from being part of an Indigenous group.

Since these early studies, there have been improvements in both, data availability and in estimation methodologies, however the poor results concerning Indigenous peoples remain. Indeed, also according to Wilson and Macdonald (2010) Indigenous peoples are positioned in the lowest part of the Canadian income distribution. In 2006 they earned on average 30% less than their non-Indigenous counterparts. Although the income disparity decreased to some degree from 1996 to 2006, the authors state that it would still take Indigenous peoples 63 years to catch up with the general population.

Similar conclusions are drawn by Pendakur and Pendakur (2011), who study the income gap between Canadians with British origins and the Indigenous population. Although these groups share similar demographic characteristics, earning disparities in the amount of 10-20% for the Indigenous females and 20-50% for the Indigenous males exist, when compared to British-origin persons. Feir (2013) asserts that Indigenous earning gaps from 1995 to 2005 are due to an increasing weekly earning penalty for men living on a reserve, whereas a reduced tax burden and government assistance in the form of transfer payments are effective in reducing the income differentials for the female population.

A further nascent literature deals with Indigenous health inequalities, related to topics such as life expectancy differences (Adelson, 2005), social determinants of Indigenous health disparities (Reading and Wien, 2009), higher mortality rates (Akee and Feir, 2016) and avoidable mortality

among Indigenous peoples (Park, 2015). White, Spence and Maxim (2005) analyze social capital disparities; other extensive scientific studies investigate educational attainment divergences (Battiste and Barman, 1995; Lamb, 2014; Jones, 2016; Rice, 2018; Walters, White and Maxim, 2004).

It is clear at first glance that these different dimensions affect negatively Indigenous communities. The main question posed in this chapter is whether charitable services help serve local needs, and, by extension, help improve some measurable aspects of CWB for on-reserve Indigenous population in Canada.

1.3 Data

To investigate whether the presence of one or more registered charities within the borders of a reserve helps to improve community outcomes, I triangulate data from three major sources: administrative data from the Canada Revenue Agency (CRA) on registered charities for the years 2000, 2005 and 2010, confidential data from the 2001 and 2006 Census Surveys and the 2011 National Household Survey and the CWB Index 2001, 2006 and 2011 developed by the AANDC. The central idea is to match through the six-digit postal code the charitable organizations to the census subdivision (CSD) that corresponds to an Indigenous community. This geographic linkage allows me to have fine details on the characteristics of individuals living in different communities and to study empirically the impact of charities developed to improve the welfare of the people living there.

1.3.1 CRA data: T3010 - Registered Charity Information Return

According to Canadian charity law, three different bodies operate charitable activities in the country: public foundations, private foundations, and charitable organizations. The core difference relates mainly to their governance, but since all have exclusively charitable purposes, no strict distinction will be made in this thesis and the terms “charitable organizations” or simply “charities” will be used. Charities must register with the CRA to receive a unique 15-digit business/registration number. This registration is beneficial for income tax exemption purposes, it allows charities to issue tax receipts to donors and to receive grants from other registered charities. Charitable organizations that want to keep their charitable status are obliged, according to the

Income Tax Act, to file at the end of each fiscal period the T3010 - Registered Charity Information Return.⁷

The T3010 dataset at my disposal covers a 15-year period, from 2000 to 2014. To have a match with the 5-year interval of the Census data and the CWB Index, I restrict its use to the years 2000, 2005 and 2010. Charities must file their tax return within six months of their fiscal period end, and they must be operational for at least one year before the tax filing. For instance, in the T3010 dataset for the year 2000, the latest fiscal period end date is December 31st, 2000. This implies that the charity was active starting from January 1st, 2000. In order to avoid inconsistency problems, I use the year prior to the census data collection since the income variables in the Censuses and NHS for the years 2001, 2006 and 2011 refer to the previous calendar year.

The T3010 provides data on charities' identity, their programs and financial activities. For each charity the name and location with address is specified. Figure 1.1A in appendix 1.A shows the locations of charities on a CSD map of Canada. In terms of programs, the CRA differentiates between six different types of charities: *benefits to communities*, *education*, *health*, *religious*, *other* and *welfare* charities.⁸

In total there are 338 different charities located inside the borders of Indigenous communities. This translates in a total of 718 observations, as 151 charities are present in all three time periods, 78 charities in two and 109 charities in one time period. The number of charities increases from 216 in year 2000 to 243 and to 259 in the years 2005 and 2010. I exploit these two different types of variation that arises therefrom as part of the identification strategy. More details on the characteristics of these charities will be provided in appendix 1.B.

The independent variables of interest are derived from this dataset and represent having access to at least one charity (extensive margin) and the number of charities (intensive margin) within the borders of an Indigenous community.

⁷ This dataset is publicly available on request to the CRA: <http://www.cra-arc.gc.ca/chrts-gvng/lstngs/rqstfrm-eng.html>.

⁸ Here are some examples of the types of charities within each program. *Benefits to communities*: libraries, museums, cultural heritage center, child and family center. *Education charities*: Indigenous cultural and educational center, student aid fund, community college, education and training institute, science for youth educators, research projects. *Health charities*: hospice, mental health branch, diabetes working group, birth center, specialized abuse treatment center. *Religious charities*: churches as Roman catholic church or Bishop of the Arctic, Bible holiness movement, Cree gospel chapel, Bible school, pastoral charge. *Other charities*: Rotary club. *Welfare charities*: family care, senior center, first step day care, food bank, transition house society, Alzheimer's caregivers, help line, community support organizations.

1.3.2 Census/NHS datasets

Conducting research on Indigenous communities has sample size limitations; the scientific value of my investigation is enhanced by employing confidential microdata from the long-form Censuses, providing a larger number of observations and providing richer background characteristics by means of a smaller geographical level identifier, namely the CSD.⁹ The Census data collections have a 100% coverage of the long-form questionnaire in Indigenous reserves as compared to a 20% coverage in the rest of Canada and had an overall compliance rate of 94% in 2006. The Census was replaced by the NHS in 2011 and the long form questionnaire was administered on a voluntary basis to 1/3 of Canadians but, again, to the total population in the reserves. Although the global response rate in Canada achieved only a weighted 77%, Indigenous communities - for which a CWB Index is publicly available - have distinguished themselves with an 82% average response rate (AANDC, 2015).¹⁰ First Nation communities recognized as “on-reserve” by the AANDC, and Inuit communities can be tracked both in the Census and NHS via a CSD unique identifying number.

In general, a CSD corresponds to a Canadian municipality. In my context, a CSD can represent one First Nation reserve (e.g., Nekaneet) or a First Nation Band can be split across various CSDs (e.g. Okanagan Part 1 has two different CSD identifying numbers or Makwa Lake 129, Makwa Lake 129 B, Makwa Lake 129 C has three). For Inuit people, the community concept is more straightforward as it follows generally the municipality classification. Another aspect that I consider is the fact that some communities can experience CSDs code changes over time. To address this issue and follow the same reserves over the censuses, I assign the latest 2011 CSD unique identifier to reserves affected by this problem.

There are more than 630 First Nation and 50 Inuit communities in the country (CIRNAC, 2018), however, according to the AANDC, the CSDs which correspond to an Indigenous community are 910 in 2001, 933 in 2006 and 889 in 2011. From a sample totaling 2,732 CSDs, I first drop 915 CSDs that do not have data for the CWB Index. Included in these are 222 First Nations communities with fewer than 10 inhabitants. Further 41 CSDs are excluded as they have a global nonresponse rate of 50% or more. The final CSD dataset is an unbalanced panel consisting of 1,775 observations. In a robustness check exercise, I recalculate the CWB Index for all

⁹ The Public Use Micro Files (PUMF) in comparison provide aggregate information at the provincial or CMA level only.

¹⁰ Further information can be found at <https://www.aadnc-aandc.gc.ca/eng/1345816651029/1345816742083> - chp3 .

communities with at least 10 people; the analysis sample has 2,510 observations, with 950 different CSDs.

For the individual level analysis, I am looking at those individuals who are living in the 950 communities with a population size of at least 10 people. Starting from a sample of 1,050,000 observations, I focus only on individuals aged 25 to 64 (removing 590,000 observations), who live in a household with no more than 12 people¹¹ (removing 3,000 observations), and report at least \$100 in annual total income (removing 11,000 observations) and \$100 in household income (removing 250 observations).¹²

This final repeated cross-sectional dataset remains with almost 450,000 observations. The sample for wages regressions comprises 290,000 observations, as 160,000 individuals report less than \$100 in wages and are dropped. The number of observations for the individuals are only approximated, as the Research Data Centre (RDC) does not disclose the sample counts anymore.

The dependent variables from the Census and NHS datasets are *individuals' total income*, *individuals' wages* and *household income*.

1.3.3 CWB Index

The third major source of data is the CWB Index, a socio-economic score used as a landmark reference on the quality of life and well-being of the Canadian population. It is patterned on something different than a physical, social or subjective well-being, as it acts as an indicator of aggregated individuals' wealth. Starting from 1981 and excluding 1986 when housing information was not collected, this index was developed to facilitate comparisons of First Nations reserves and Inuit communities with other Canadian populations and to track them over time.¹³ A score ranging from 0 to 100 assesses their socio-economic well-being on this front; an increase in this indicator is supposed to reflect an improvement in well-being and a reduction in numerous social issues in their most vulnerable communities. Figure 1.2A in appendix 1.A shows the variation in the CWB score in 2011 for First Nations, Inuit and Non-Indigenous communities.

The CWB Index is an extension of the HDI, one of the most popular well-being indicators, introduced by the United Nations Development Programme in 1990. The HDI builds on three

¹¹ This corresponds to the 99th percentile of the household size.

¹² Restricting the regressions to individuals aged 25 to 64 is in the spirit of Pendakur and Pendakur (2015), as well as excluding individuals with less than \$100 in total income. Regressions' results reported in appendix 1.C will reconsider these restrictions.

¹³ More information can be retrieved at <https://www.aadnc-aandc.gc.ca/eng/1100100016579/1100100016580>

different indices: life expectancy as a physical health dimension, adult literacy rates for the educational attainment and income as a measure of economic well-being. Due to the difficulties to assess longevity for different population groups in the Canadian context, in 2004 the AANDC introduced a four-dimensional CWB Index, a weighted average of its individual component scores: education, housing, income and labour force activity. The CWB Index is not able to capture all the elements needed to assess quality of life - above all because a health element is missing. Although clearly imperfect it acts as a tool for a straightforward comparison of communities in Canada.¹⁴

In order to meet the needs of the labour market in Canada, the *education* indicator uses a 2/3 versus a 1/3 weight of high school completion and university achievement, respectively.¹⁵ The *labour force* component uses an equally weighted ratio of the population, which is either employed or forms part of the labour force in the week prior the census data collection.¹⁶ The *housing* component takes qualitative and a quantitative aspects into consideration: the former captures the condition of dwellings that do not require major repairs, whereas the latter is based on the proportion of the population living in houses which are not overcrowded. The formula for the *income* score considers the income per capita in a given community net of the lowest average income as a ratio of the range of the highest and lowest average income in the CSDs.¹⁷

The CWB Index suffers from additional limitations. First, CWB scores are not available for communities with fewer than 65 inhabitants and for reserves that are considered as incompletely enumerated. The reasons for incomplete enumerations vary from natural events that prevented Statistics Canada's census takers to reach remote communities, to the fact that some Indigenous reserves refused to participate to the data collection as permission to enter the communities was not granted by band chiefs. A second limitation is that subindices of the CWB Index are not obtainable for CSDs with fewer than 40 households or 250 people. Third, since the NHS of 2011 was not mandatory, some reserves had a high global non-response rate of 50% or more. Taking these limitations into account, the final dataset for the CWB subindices decreases from 1,775 to 1,130 observations.

¹⁴ Feir, Gillezeau and Jones (2017) proposes for instance nighttime light density as an alternative and better measure of economic well-being for Indigenous communities.

¹⁵ $Education\ Score = \left[\left(\frac{\%HS_{20-0}}{100-0} \right) \times \frac{2}{3} \right] + \left[\left(\frac{\%UNI_{25-0}}{100-0} \right) \times \frac{1}{3} \right] \times 100$

¹⁶ $Labour\ Force\ Score = \left[\left(\frac{\%LFP_{20-65-0}}{100-0} \right) \right] + \left[\left(\frac{\%EMP_{20-65-0}}{100-0} \right) \right] \times 100$

¹⁷ $Income\ Score = \left(\frac{Log(income\ per\ capita) - Log(\$2,000)}{Log(\$40,000) - Log(\$2,000)} \right) \times 100$

For the robustness analysis, I recalculated the CWB for all reserves with a population of at least 10 people. I was able to get a 95% match with the CWB Index as calculated by the AANDC. Approximately 20 First Nation reserves (e.g., Capilano 5, Kamloops 1, Tsawwassen or Gitsegukla 1) had different subindices values and in these particular cases, I replaced my recalculated values with those of the AANDC. Federal RDCs can have access to datasets with more variables or more observations, hence these inconsistencies might exist. Furthermore, there might be some bias in the calculation for the CWB Index for communities smaller than 65 people. For instance, one more educated or one more employed person can have a much a larger impact on the calculation of the Index in a smaller community than in a bigger community and can hence have a big impact on the total CWB score. These reasons have led me to prefer to use the CWB as provided by the AANDC in the main analysis and to use the recalculated measure only in the robustness checks.

The dependent variables from the CWB Index dataset are: the *CWB Index* as well as the four subcomponents: *education*, *housing*, *income* and *labour force activity*.

1.3.4 Data from minor sources

Due to the complexity of the analysis, data from three minor sources are also required. I use the Postal Code Conversion File (PCCF) from the Canada Post Corporation to match the postal codes of the charities to the Indigenous CSDs. Out of the 1,775 First Nation and Inuit communities that are in my CSD sample, 280 or 15.8% of them have at least one charity within its borders. Figure 1.3A in appendix 1.A provides an example of some Indian reserves' settlements with and without charities. The postal codes of some First Nation reserves identify geographic areas that fall both inside the reserve and in the surroundings of the reserve (e.g., Milbrook Indian Reserve No. 27 and Truro in Nova Scotia). I checked on Google maps the address of the charity as provided in the T3010 Information Return to confirm the location within the borders of a First Nation community and excluded those who were outside. I calculate geographic isolation data using Statistics Canada maps and the *ArcGis* software that gives me the distance between the CSD and the nearest urban core, which is defined as a census agglomeration with a population of at least 10,000 or a CMA with at least 100,000 people.¹⁸ The third minor source of data comes from the AANDC and it is data on Self-Government Agreements and Arrangements with the Federal Government, with focus

¹⁸ In 2017 Statistics Canada released at the CSD level an *Index of remoteness*, based on the proximity to points of economic activity and population size (Statistics Canada, 2017b). Researchers could use this index, but since it is only available, as for now, for the years 2011 and 2016, it is not deemed appropriate in this study that covers a different and wider timeframe.

on *Self-government agreements*, *Comprehensive Land Claim Agreements*, *First Nation Fiscal Management Act* and *First Nation Land Management Act* that have been implemented either by First Nations bands or Inuit communities.

1.3.5 Data issues and limitations

The CWB measure is meant to compare Indigenous populations living in communities to other Canadian communities and to track their development over time, but there are clear problems and inadequacies associated with this score. It describes only a limited definition of socio-economic well-being; it does not capture physical and emotional health or cultural elements of well-being. It excludes several other subjective facets, like happiness, life satisfaction and good social relationship. It fails to incorporate well-being defined as belongingness to nature and there is no link to connections with traditions or culture. According to Cook (2006), environmental conditions related to air and water pollution, or the threat of crime can affect the quality of life. In contrast, Flanagan (2018) defends these purely economic characteristics of the index, stating that “it encompasses other values such as security (housing), intellectual achievement (education) and personal fulfilment (labour force participation)” (p. 12).

Flanagan and Beauregard (2013) address interpretation problems associated with the usage of the CWB measure. As the index is a weighted average of its four subcomponents, education, housing, income, and labour force, it is not straightforward how to interpret an increase in the aggregated total score: an increase in education means more years of schooling whereas an increase in housing means more spacious or better maintained homes. A rise in income and labour force consists of more money and more jobs respectively. Furthermore, they point out that in some Indigenous communities, the non-Indigenous population, which might have different socio-economic characteristics, might bias the outcomes of the CWB measure. Although the index is a restrictive measure and it is limited in scope, it has content validity. It was developed for a specific purpose; it is available and comparable over time.

At the individual level, the variables *total income*, *wages* and *household income* also have some limitations as they do not capture non-monetized labour or market activities. But still, although it is not a perfect measure, it serves as a proxy for individual and household economic well-being.

Another limitation in my analysis is that registered charities count for approximately half of the Canadian total non-profit sector (Khovrenkov, 2017). Other organizations, such as recreational clubs, sports associations or any other non-profit organization cannot be considered in this study, because they are not registered as charities and do not file the T3010 (CRA, 2017b).

1.4 Empirical approach

My analysis consists of detecting if access to charitable services within a reserve affects community outcomes in comparison to a reserve where charities are absent. Furthermore, I want to understand if there is an economic impact of increasing the number of charities within the reserve. In the baseline model I omit religious organizations and consider only *benefits to community, education, health, other* and *welfare* charities. It may be argued that religious charities are more faith-based organizations that try to enhance primarily the subjective and spiritual well-being within the communities, as compared to the more materialistic side of the CWB Index. Then, I add religious organizations that offer a social service. These are easily recognizable in the dataset as charities that get financial contributions from a federal, provincial or municipal government level. Lastly, I include all other religious charities.

The outcome variables are the *CWB Index* as well as its four subindices for *education, income, labour force* and *housing* for the community level analysis, *household income, total income* and *wages* at the individual level (tables 1.5, 1.8, 1.11 and 1.14 present the main results).

For the community level analysis, I consider all CSDs that are labeled as First Nation or Inuit by the AANDC and for which the CWB Index has been calculated and I estimate the following two OLS regression equations:

$$CWB_{ct} = \alpha + \beta Access_{ct} + X'_{ct}\gamma + Iso'_{ct}\eta + \sigma Agree_{ct} + \delta_p + \theta_t + \varepsilon_{ct} \quad (1)$$

$$CWB_{ct} = \kappa + \lambda Number_{ct} + X'_{ct}\chi + Iso'_{ct}\omega + oAgree_{ct} + \tau_p + \pi_t + v_{ct} \quad (2)$$

where CWB_{ct} is the score of the CWB Index and its subindices measured in community c at time t . Since the CWB Index is measured every five years, t corresponds to this time interval. $Access_{ct}$ in equation (1) is a binary variable that takes the value 1 if a community has access to one or more charities in the year prior to time t . $Number_{ct}$ in equation (2) is the number of charities in the

community in the year prior to time t . The access variable is derived from the number of charities variable, i.e., if number of charities is positive, the access variable will take the value 1.

X_{ct} is a vector of community level demographic covariates from the Census and NHS datasets expressed as a ratio of the community's population size: gender, age (young, adult and old), marital status, official language knowledge, Indigenous identity and registration under the Indian Act.¹⁹ Furthermore, I control for the CSDs' population size and for the fact that some First Nation reserves cannot be matched with any postal code. I created a dummy variable *CSDnoPostalCode* that equals 1 for this latter case. A reserve without a postal code will necessarily be a reserve that has no access to charities, as each charity has an address with a postal code. In order to take remoteness into account, I consider in Iso_{ct} four geographic isolation variables that I calculated using the minimum geodesic distance between the CSD and the nearest urban core. I incorporate in the model the following distance bins: 0km, 1-30km, 31-100 km and over 100km distance. Agreements with the government such as the Comprehensive Land Claim Agreement (CLCA), the Self-Government Agreement (SGA), the First Nations Fiscal Management Act (FNFMA) and the First Nations Land Management Act (FNLMA) can have a significant impact on property rights, self-governance, and on fiscal or land competency, as shown by Pendakur and Pendakur (2015). $Agree_{ct}$ is a dichotomous variable that take value 1 if a community has signed one of these agreement prior to time t . Additionally, I control also for the amounts spent by charities in the CSDs on charitable activities, which gives an insight on the size and importance of the charity within an Indigenous community. I use fixed effects in the provincial space dimension and in the year time dimension: In equation (1), δ_p incorporates the unobserved heterogeneity and time-invariant effects in the provinces and θ_t integrates the impact of overall time trends and seasonality. The same effects are captured by τ_p and π_t in equation (2). Ultimately, ε_{ct} and ν_{ct} are the unobserved factors in the two equations. Standard errors are clustered at the CSD level.

For all other regressions, the unit of analysis is the individual who lives in an Indigenous community and these two OLS equations are the baseline specifications:

$$\ln(y)_{ict} = \alpha + \beta Access_{ct} + X'_{ict}\gamma + Iso'_{ct}\eta + \sigma Agree_{ct} + \delta_p + \theta_t + \varepsilon_{ict} \quad (3)$$

¹⁹ Before computing the ratios at the CSD level, variables have been weighted (CompW2) at the individual level.

$$\ln(y)_{ict} = \kappa + \lambda \text{Number}_{ct} + X'_{ict}\chi + \text{Iso}'_{ct}\omega + o\text{Agree}_{ct} + \tau_p + \pi_t + v_{ict} \quad (4)$$

At this level, I consider the effect of the presence of the charitable sector on individuals' *total income*, *household income* and *wages* that are reported from the previous calendar year. The *total income* dependent variable represents all monetary income and consists of salaries and wages or self-employment income, retirement pension, all government transfers as for example child benefits if applicable or benefits from employment insurance, income from savings and investments and all other money income. The variable *household income* sums up the total incomes of each household member, whereas the variable *wages* includes gross wages and salaries, before any income taxes or other deductions (pensions, employment insurance) are applied. The choice of including wages as a measure of economic well-being lies in the fact that charities do not only rely on volunteers, but they have also remunerated positions. It is possible that higher wages in a community arise from the fact that people work for charitable organizations located there. The natural logarithm is then taken of all three dependent variables, which allows me to interpret the coefficients in a percentage form. This transformation also normalizes the distribution of the dependent variable and decreases the effect of outliers, so that the effect on income is not overestimated.

The analysis controls for gender, age groups, marital status, Indigenous identity, registration under the Indian Act, household size, language knowledge, educational attainment, employment status, population size, CSD with agreements and CSD with no postal code, amounts spent by charities in the CSD on charitable activities and distances to a urban core. Standard errors are clustered at the CDS level to account for common unobservable effects within each community.

Major concerns with OLS models arise when there are endogeneity issues. Presumably, charitable organizations are established where needs arise and in places where they will have the most effect. To deal with this endogeneity problem, I tried first an Instrumental Variable (IV) approach. I used several different instruments that were supposed to provide a source of exogenous variation to the model: the lag of the independent variables of interest (*Acces* and *Number*), provincial political representations, variations in charitable donations tax credits and the distance from the closest center of economic activity. The use of lagged explanatory variables is a convenient instrument because it relies on the fact that - and under the assumption that the error terms are not autocorrelated - the instrument is exogenous to the error term in period t . Moreover,

lagged values solve the problem of simultaneity, because current well-being should not affect the past presence of charities. Four political parties swapped their leading roles during the study period: the Liberal Party, the New Democrat Party, the Conservative Party and others (Coalition for the Northwest Territories and Nunavut, Parti Québécois and Saskatchewan Party. Irrespective of which political party is in power, charities may gain. Liberals or democrats are more inclined to allocate funding grants to charitable organizations, which could lead to the creation of new charities. Conservatives might not want to provide directly certain public services but might fund charities to provide those services. Charitable donation tax credit rates are exogenous to the CWB, as they can only influence individuals' donations to the charities. Provinces have increased/decreased their tax credit rate at various times and it should have provided a good source of exogeneity variation to the model. I used the marginal tax credit rates on the first dollar donated. The distance from the nearest economic center is also exogenous to the reserves. For instance, in Manitoba and Saskatchewan, metropolitan areas developed only after main roads were constructed but Indigenous reserves were present before this urbanization process began. The first instrument, the lag of the independent variable gave statistically significant results. However, the last three instruments, the political parties, the marginal tax credit rate, and the distance did not have enough explanatory power, as the first stage F-statistics was below the common threshold of ten and the results were not statistically significant.

I also tried a generalized difference-in-differences (DID) approach to estimate the impact of the presence of charitable organizations on the different outcomes, by replacing the provincial fixed effects with CSD fixed effects. This model looks at differences between CSDs with and without charities, and before and after the implementation of a treatment (having a charity or having one more charity). The time frame from 2000 to 2011 was too short and the variation too small to capture any effect from the creation of charitable organizations aimed at satisfying arising needs or from its closures when needs were already met.²⁰

1.5 Summary statistics and differences in means

Descriptive statistics of the variables used in the CWB Index and subindices regressions are provided in table 1.1; those used for the individual level analysis are in table 1.2. Both tables differentiate between the whole sample and the sample parsed by the presence or not of charities.

²⁰ The results from these regressions are reported in appendix 1.C, table 1.8C.

Tables 1.3 and 1.4 report the differences in means for the main dependent variables for the samples with and without charities.

In Canada, 16% of the communities for which a CWB Index was available and released by the AANDC, have at least one charity within their borders. This number decreases to 9% when religious charities are excluded. The most important measure to bear in mind from table 1.1 is the mean CWB score for First Nations and Inuit communities of 58 points out of 100. Non-Indigenous communities have an upwards of 20 points higher CWB score (Figure 1.4A in appendix 1.A). When considering only the Indigenous CSDs with charities the mean of this score is almost 65; communities without charities have a lower well-being score (56.70). The pattern of a higher score for communities with charities compared to those without, maintains for the subcomponent scores as well. British Columbia is the province with the most Indigenous communities and hence the province of reference. Control variables are applied to all OLS regressions, and I report the summary statistics for the subcomponent regressions and those for the propensity score matching model analysis.

Table 1.2 reports the summary statistics for individuals between 25 and 64 years of age, who live in an Indigenous community with a population of at least 10 inhabitants. Their average total income amounts to \$27,633, whereas their mean household income is \$59,356 (both deflated by the provincial 2014 CPI).²¹ Approximately one third of them have access to at least one charity. In terms of demographic characteristics, the mean age is 41.77 years, and the majority of the population is male (50.7%). The married part of the population (61.6%) dominates over singles or separated, divorced and widowed. Individuals who have reported an Indigenous identity are 85.3% and 73.6% are registered under the Indian Act of Canada. Other remarkable facts are related to education and employment. For the former, 43.6% of the individuals did not complete high school, whereas 14.2% did and 35.4% have some education above high school, as for example a trade or apprenticeship certificate. University degrees are more rarely achieved: 5.7% graduated from university with a bachelor's degree and only 1.2% with a master or doctorate degree. In general, communities that have access to charities are more educated as compared to communities without charities. It might be the case that some charities have, as their goal, to improve the education-literacy of the community - perhaps libraries or other cultural organizations - but the contrary

²¹ All dollar amounts are CPI deflated. I use the provincial Consumer Price Index CPI (2014=100) to be in line with the time span of the CRA dataset 2000-2014.

might also be true, namely that a more educated community is more likely to create and set up new charitable organizations. This brings up a reverse causality problem. Regarding employment, CSDs with charities have more employed people, less unemployed and fewer people are out of the labour force. At the end of the table, I report the summary statistics of the variables used for the PSM model and those of the dependent variable for the wage regressions, whereat mean wages are \$32,018.

Tables 1.3 and 1.4 display the difference in means for all dependent variables, distinguishing between CSDs or individuals living in CSDs with and without charities, with and without agreements and CSDs that are transitioning into/out of having a charity. The pattern is consistent among all tables and all differences in means are statistically significant. With regard to the CWB, having access to charities or agreements implies always a higher score, with differences that reach up to eight points and with the highest score of 67.25 points. Also, CSDs that are transitioning into or out of having a charity, have a higher score as compared to communities that have no charities, or a lower score as compared to CSD that have charities. From the summary statistics for individuals, we can recall that the average total income was \$27,633. For individuals who have access to charitable services and live in a community that has signed an agreement the average income increases to \$43,128. Indigenous peoples living in communities that have access to charities have almost \$10,000 more in total income than those living in a CSD without charities. The differences in means for the household incomes are in line with those of the individuals' total income. The largest difference in means for wages (\$15,812) occurs when people have access to charities and live in a CSD that has signed an agreement in comparison to people who have access to charities but do not live in a CSD with an agreement. For people living in a CSD with an agreement and with access to charitable organizations the difference is amongst the lowest (\$3,815) as compared to people who in a CSD with an agreement, but which has no charities.

1.6 Main findings

The first part of this section presents the community level analysis, with the CWB Index and its four subcomponents as the dependent variable and access to charities or the number of charities as the independent variables of interest. Furthermore, a charity program breakdown is presented. The objective of this latter approach is to see how community prosperity is sensitive to the different types of charitable services: *benefits to community, education, health, religion, welfare, others.*

The other two sections are related to the people living in the Indigenous communities. The structure is similar as in the first part, however here, I include a heterogeneity analysis for different subgroups of people and based on gender, Indigenous identity and registration status.

1.6.1 Community level analysis

The main results for the CWB regressions are reported in table 1.5. I provide the estimation results using as variables of primary interest, both the binary indicator of having access or not to at least one charity within the reserves in *Panel A* and the number of charities located within the same reserves in *Panel B*. The estimated coefficients reflect a positive correlation between CWB and the presence of the charity, when controlling for demographic characteristics, agreements, population size, postal code, amount spent on charitable activity and distance from an urban core and when using provincial and time fixed effects.²² Column (1) shows the results from the baseline model where religious charities are excluded and these can be interpreted as follows: in comparison to a reserve that has no charitable organizations within its borders, a community that has one or more charities is associated with a positive and statistically significant 3 points increase (on a 100 point scale) in the CWB score. This translates in an increase of the average score from 58 to 61. In a similar manner, a one-unit increase in the number of charities is able to enhance the CWB Index by 1.1 points.²³ The significance level is at 1% in both panels. Column 2 includes religious charities which act also as suppliers of social services and column 3 includes all charities. As compared to the baseline model, these results are slightly smaller in magnitude. Having access to a charity is overall essential for the general welfare enrichment within the Indigenous communities but increasing the number of charities within a reserve seems to be of secondary importance. These findings are fully compatible with Pendakur & Pendakur (2015) who reported that having signed an agreement increases the CWB score for Indigenous communities by 5%.

I repeat the analysis separating out the four different dimensions of the CWB Index: *education*, *labour force activity*, *housing* and *income* subindices in table 1.6. The statistical relevance of the access regression estimates relates mainly to the educational component with up

²² Table 1.1C in appendix 1.C reports details on the CWB regressions with number of charities as the independent variable of interest. Column 1 contains only demographic controls related to the population (e.g., ratio of young people, ratio of people with an Indigenous identity), column 2 adds controls for the CSD (e.g., distance from a urban core, population size or agreements) and column 3 includes province and year dummies. The coefficient estimates of interest are all statistically significant at the 1% level and so are those of the majority of the control variables. Adding more controls also increases the adjusted R-squared from 0.61 to 0.67 implying a general improvement in the model, caused by those independent variables that really affect the dependent variable.

²³ If the dependent variable is expressed in standard deviations, the coefficient estimates are 0.30 for the independent variable of interest access and 0.11 for the independent variable of interest number of charities. The first one is a moderate effect, whereas the second one is quite small.

to a 3.2-point increase in columns 1 and 3. Increasing the number of charities by one unit is associated with an increase in the score of the education, housing and labour force activity component, but it is not statistically significant for the income well-being subindex.

Tables 1.7 displays the CWB Index and its four subindices regression results when distinguishing between the different types of charity. Overall, clear discrepancies emerge. First of all, the magnitude of the coefficient estimates of other charities in column 7 is much higher (up to 11 points) as all the coefficients estimates in the other columns. These results have to be taken with a grain of salt, since there are only two charities classified as “*others*” in the sample (one is a Rotary Club and the other one a summer camp, both located in Inuit communities in Nunavut). These two charities are not driving the results though: by excluding the two CSDs in which these two charities are located, the main results of table 1.5 still hold. It must also be remembered that the access variable is derived from the number of charity variable, hence, since there are only two of these charities in two different CSDs the value of the coefficient estimates is the same in *Panel A* and *Panel B* for this column. Second, having only access to health charities has not a significant impact, except for a statistically significant at the 10% level negative result (-2.5 points) for health charities and the income component of well-being. This is somewhat counterintuitive but can possibly be explained by the fact that health charities tend to arise where there are problems like mental health or addictions, problems that are not easily nor quickly resolved (and possibly could lead to the uncovering or acknowledging of these problems by other individuals). Third, having access to religious charities that provide public goods and social services does not increase any well-being score, but when all other religious charities which deal more with the subjective part of the personal well-being are included, their access is correlated with a statistically significant and positive increase of all well-being scores, except for the income well-being in *Panel B* and of the housing well-being. The only statistically significant effect on this latter well-being score is when the number of educational charities increases (*Panel B*, column 2). Fourth, other statistically significant results can be reported in the case where I regress the CWB total score, the education and labour force activity well-being on the number of charities by the following programs: benefits to community, education and religion. Also increasing welfare charities by one unit is associated with an increase of the education and CWB score. Lastly, an intuitive result that is worth mentioning is that having access to an educational charity is associated with a 3.7 point rise in the

education well-being score and that increasing the number of these same charities by one unit increases the index by 2.3 points.

1.6.2 Individual level analysis

Whenever the unit of analysis is the individual, results are to be interpreted in a percentage form due to the use of the logarithmic form. I control for gender, age categories, marital status, Indigenous identity, registration under the Indian Act, language knowledge, education and labour force status, all at the individual level. The other covariates remain the same as those used in the community level analysis. I run all regressions with controls.²⁴

The regression analysis in table 1.8 generates the most important coefficient estimates. When religious charities are excluded, the presence of charitable organizations is associated with a 5.1% increase in household income. This would convert the average household income from \$59,357 to \$62,384. In a similar manner, a one-unit increase in the number of charities can improve household income by 2.1%. The significance level is at 10% in the first and at 1% in the latter case. Including religious charities that offer a social service (column 2) and all other religious charities (column 3) reduces the magnitude of the coefficient estimates slightly. Table 1.9 addresses concerns of heterogeneity within the Indigenous communities. I differentiate between males and females; Indigenous and non-Indigenous identities; registration and non-registration under the Indian Act, and the combinations derived therefrom. The highest increase in total household income is for males who are not registered under the Indian Act (8.5%) for the access regressions and for males who identify themselves as Indigenous (3.2%) for the number of charities regressions. My results are substantially lower than those of Pendakur and Pendakur (2015) who find that a CLCA is associated with a 47% increase in household income for registered Indigenous males. With any agreement they find a 7% increase in household income for Indigenous and a 15% increase in household income for non-Indigenous households (Pendakur and Pendakur, 2017). Table 1.10 presents the charity programs breakdown. For this latter set of regressions, the largest coefficient estimate is for welfare charities in *Panel B* associated with a 6% increase in household income.

²⁴ Table 1.2C in appendix 1.C reports details of the household income regressions, with demographic controls only in column 1, demographic controls and CSD controls in column 2 and, in column 3 provincial and year fixed effect are added.

The regressions with “other” charities have very large coefficient estimates (85.6%), but again as before, they should be interpreted very cautiously.²⁵

The most important results for the total income regressions results are presented in table 1.11.²⁶ The coefficient estimates are only statistically significant for the key variable number of charities in *Panel B*, in which case, total income rises by 1.9%, namely from \$27,633 to \$28,158 if the number of charities increases by one unit within the CSD (column 1). This result holds with the inclusion of faith-based organizations (column 3), however the coefficient estimate decreases to 1.5%. My findings are consistent in sign with Pendakur and Pendakur (2015), however they are smaller in magnitude. From the heterogeneity analysis of table 1.12, when the number of charities increases by one unit, the group that benefits the most and experiences an increase in total income of 2.7% are women who report having an Indigenous identity. When considering the different types of programs, educational and welfare charities have the dominant impact (see table 1.13, *panel B*) on individuals’ total income. The former are associated with a 4.4% increase in total income and the latter with a 4% increase.

The dataset used for the wage regression excludes individuals who report less than \$100 in wages; hence the sample size is smaller, but the controls are the same as before. The baseline equation estimations in table 1.14 show an increase of 6.9% in wages for people living in a CSD that has access to charitable services. Since average wages are \$32,018, this increase would lead to a \$34,228 average annual wage income. Increasing the number of charities by one unit has a minor effect on wages, but it is still associated with a 3.4% rise.²⁷ In the regressions by groups of table 1.15, the access regression estimates show an increase of 15.5% in wages for non-Indigenous males. The number of charities regressions in the same table reports the highest number of statistically significant results as compared to the household income and individuals’ total income analysis, with Indigenous females experiencing the highest increasing effect of wages (4.6%). Table 1.16 focuses again on the programs that charities offer. For the first time, the coefficient estimate for having access to religious charities that offer a social service becomes statistically significant with an 8.5% increase in wages and the same is true for increasing the number of health charities that is associated with a 6.6% increase in wages.

²⁵ Also at the individual level as it was with the community level analysis, the exclusion of the two CSDs in which the “other” charities are located does not change the main results.

²⁶ Table 1.3C in appendix 1.C presents the details of total income and wages regressions.

²⁷ The details for wages regressions and total income are presented in Table 1.3C in appendix 1.C.

For both levels of analysis, I evaluate how the presence of those charities that share the same postal code but are outside the borders of some First Nations reserves affects community well-being inside the reserve. These results are not presented as the main findings, but can be found in appendix 1.C, as are additional regressions with the lag of the amount spent on charitable activities, regressions with the interaction between the independent variable number of charities and the amount spent on charitable activities, regressions with fixed effects at the CSD level, regressions including people between 16 and 24 years old, regressions including individuals who earn less than \$100 in household income, total income and wages; and regressions with endogenous regressors added sequentially.²⁸

To sum up the OLS regression analysis, the signs of the coefficient estimates are mainly positive, implying a constructive association between the presence of charities, the CWB scores and other economic outcomes. One possible reason for this association is the fact that the charities themselves give their employees higher salaries in comparison to other employers in these Indigenous communities.²⁹ Charities might also be efficient in promoting information and training for young people, or they might provide direct help to people to obtain money from governmental sources. In these particular cases, not only the individual or household economic well-being is

²⁸ Table 1.4C in appendix 1.C takes spillover effects into consideration: adding the charities outside the reserve reduces the CWB score inside the reserve from 3 points (table 1.5, *Panel A*, column 1) to 1.3 points (table 1.4C, *Panel A*, column 1), implying that the charities located inside the borders of a reserve matter. However, for the wages regressions, the coefficient estimates of shared postal code and access regressions are for the first time larger in magnitude as compared to the main analysis coefficient estimates of table 1.14, implying that having access to charities outside the reserve is more important when the dependent variable is wages as compared to the other two dependent variables.

Table 1.5C considers instead of the amount of charitable activity, its lagged variable as a control. The coefficient estimates are not larger in magnitude if religious charities are excluded (column 1) or when religious charities with social services are included (column 2), but they are larger, in some instances, when religious charities are added (column 3). Also, excluding completely the amount spent on charitable activity, as this is highly correlated with the independent variables of interest, increases the magnitude of the coefficient estimates. These latter results are not reported here, but available upon request.

Table 1.6C reports the results when interacting the independent variable number of charities with the amount spent on charitable activity, which captures the change in the effect of the independent variable of interest when the amount spent in the CSD increases by 1 unit. The estimated coefficients are very small and always negative, suggesting that the amount spent on charitable activity cannot be considered as a channel through which well-being increases.

Table 1.7C reports the results with the lag of charitable activity for the charity programs breakdown. Controlling for money spent in the past on charitable activities in the fields of benefits to community has a greater effect on well-being than the current spending. Also the money spent in the past on education has a stronger effect on the current education well-being indicator. Money that has been spent by health charities in the previous period, does not have a stronger effect.

Table 1.8C uses fixed effects at the community level as compared to the broader provincial level. This allows to control first for any time invariant CSD characteristics, and second it captures the effect of the change of having charities on the outcome variables over time and within, rather than across CSDs. By exploiting this different variation, which transforms the model also into a difference-in-differences approach, only one single result is statistically significant and negative now, for the combination wages as dependent variable and access to charities, including the religious ones, as the independent variable. The over-time change in wages within these communities is -6.8%. This result might not be as convincing because the number of CSDs that move from not having a charity to having a charity is relatively small. Furthermore, these communities might already be in such a dire situation that the addition of charities does not solve its problems, at least in the short run.

In Table 1.9C, younger people aged 16 to 24 are added to the individual level analysis. This addition has a stronger effect on household income and partially on wages, as compared to the baseline model.

Table 1.10C includes individuals who earn less than \$100 in household income, in total income and in wages. There is no impact on the household income and total income, but there is a clear and stronger impact on wages: adding these individuals which represent one third of the individual sample decreases the averages wages and subsequently increase the regression coefficients.

Tables 1.11C to 1.15C provide further details of the OLS regressions of the baseline model with control variables added sequentially and based on their increasing degree of endogeneity. For the three outcome variables CWB, total income and wages, the magnitude of the coefficient estimates decreases gradually. For the outcome variable household income however, the magnitude of the coefficient estimate fluctuates.

²⁹ An attempt has also been done to see if the amount spent by the charities, rather than simply their presence matters for an Indigenous reserve, but the latter turned out to be the most relevant aspect.

enhanced, but it also affects the CWB Index. In order to look more closely at the associations revealed by the OLS regressions, the next section reports on a Propensity Score Matching model, which provides some nuanced evidence of a causal relationship between the presence of charities and well-being.

1.7 Propensity Score Matching model

The Propensity Score Matching model has become a popular empirical tool to infer a causal relationship between a group of treated units and control units characterized by similar covariate distributions. Rubin and Rosenbaum (1983) first introduced the PSM model as a detector of casual inference in the medical literature. This approach promptly spread out to other fields, including economics, making its use in observational studies to render them comparable to a quasi-randomized experiment, allowing one to exact a causal interpretation.³⁰ The PSM allows me to assess the difference between treated and untreated individuals or communities based on a set of observable characteristics. The aim is to match these units of analysis on an estimated propensity score that is defined by Rubin and Rosenbaum (1983) as “*the conditional probability of assignment to a particular treatment given a vector of observed covariates*” (p. 41).

In a binary setting, I implement first a logit regression to evaluate the odds of having the treatment and then, using the same covariates, I predict the propensity score. Following Dehejia and Wahba (1999) I introduce nonlinearities in the model through higher-order and interactions terms, in order to improve the balancing conditions of the covariates and to achieve hence a suitable specification of the propensity score. The second step involves the choice of a matching algorithm that will fit best the matching partners treated and non-treated. The quality of matching depends on this strategy selection. The third step is to estimate within a counterfactual framework, the effect of having the treatment. I am interested in the average treatment effect on the treated group (ATT), which compares the outcomes of the treated units to those of the comparison group.

The PSM model assumes conditional independence (or unconfoundedness), implying that conditional on the observable characteristics, the differences in outcomes between treated and control group comes purely from the treatment event (Caliendo, 2008). The set of observable characteristics render CSDs with and without access to charities comparable in terms of location,

³⁰ The main difference between randomized controlled trials and observational studies relies in the fact that the latter lacks in randomization, when control and treated units are assigned.

size, agreements, inhabitants of Indigenous identity and gender ratio. Similarly, people living in CSDs with and without access to charities are akin in reference to age, gender, education, Indigenous identity and registration, besides location and agreements of the CSD. The selection of these covariates, detailed in the next two subsections, will affect the statistics on the adequacy of the propensity score. The quality of this selection can be checked by evaluating the balance of confounders between the treated and the control group. More specifically, the assessing of the matching quality is not done directly on the covariates, but rather conditional on the propensity score. Unbiased estimates can be achieved by conditioning on the propensity score under the assumption that there are no unmeasured confounding variables. The matching procedure should then be able to balance well the distribution of the relevant variables in the treatment and the control group. After matching the means of each covariate should not differ between the two groups and an absolute standardized bias below 5% for the matched group is an indicator of successful matching.

In the context of the data at hand, I am equating CSDs and individuals with those baseline variables that result in a common support zone. This includes a common range of propensity scores that allows the assessment of comparable communities or subjects within communities. In other words, all the CSD and individuals of the treated group require a counterpart that is embodied in the non-treated group.

Based on the two assumptions of the model, the selection of the variables to estimate the propensity score is a tradeoff between finding a balanced group and risking a violation of the conditional independence assumption, and reducing the power of the model to infer causality. Including, for instance, too many variables on which to match, could cause a problems for the common support requirements.

Despite its limitations, the PSM approach allows to assess the effect of having a treatment. I want to estimate the parameter that emphasizes the effect of having a charitable organization within the borders of a community (treated group) as compared to a community without a charity (control) and to derive its ATT, using as a basis the combination of common characteristics. The most suitable Stata software package for the implementation of the PSM and hence for the estimation of ATT is in this case *psmatch2*, developed by Leuven and Sianesi (2003).³¹ This particular Stata

³¹ Stuart (2010) provides a considerable list of commands to implement matching models (see also <http://www.biostat.jhsph.edu/~estuart/propensityscoresoftware.html>).

command allows us to choose, beside replacement and without replacement options, certain prespecified caliper distances and bandwidths. I implement four different matching estimators: nearest neighbour matching, radius matching, kernel matching and local linear regression matching.³² The nearest neighbour matching estimator pairs, based on the estimated propensity score, the treated units to the most similar control units and for the radius matching, this happens within a certain distance-weighted radius. For these matching strategies, I choose the option with no replacement as I want to match each treated to only one untreated unit. According to Caliendo (2008) and Austin (2014), this approach without replacement is the most common in applied research settings. Furthermore, the nearest neighbour method, as well as the radius matching, uses calipers, which are maximum distances, measured as a proportion of its standard deviation of the logit of the propensity score. With calipers, bad matches can be avoided whenever the closest match in the comparison group is far away from the most similar observation of the treatment group. The Kernel matching and the local linear regression approach, both nonparametric methods, generate estimates that assert the difference in outcomes between treated and untreated units based on weighted averages. The closer the propensity score between treatment and control observations, the higher the applied weights are. Conversely, lower weights are used for more distant observations. Irrespective of the matching method in use, the key benefit of the analysis with the PSM model is to corroborate the findings of specification (1) at the community level and of specification (3) at the individual level and to draw the attention on a causal effect. The standard errors of the *psmatch2* are not precisely estimated, hence I use a 50-bootstrap replication to address this issue.³³

1.7.1 Community level analysis

The outcome of interest is the CWB Index and its subcomponents, having access to at least one charity is the binary treatment indicator. The control variables are population, distance from an urban core, agreements, Indigenous identity and gender. A second-order polynomial in distance, as well as a second-order and a third-order polynomial in population is included for a good

³² Nearest neighbour matching: caliper(0.2) no replacement / Kernel matching: k(normal) bwidth(0.05) / Radius matching: caliper (0.02) no replacement / Local linear regression: common. Only with the local linear regression I impose a common support that excludes observations in the treatment group with propensity scores higher/less than the maximum/minimum propensity scores of the observations of the control group. No trimming methods were used for propensity score adjustments.

³³ The Stata syntax for this is: bootstrap r(att): psmatch2 \$treatment \$xlist, outcome (\$ylist). The command executes the estimation multiple time by resampling the observations; this method is referred to as nonparametric bootstrap estimation. Without bootstrapping the standard error are 10 to 30 times smaller. A drawback of the estimation command is that it does not consider which matching model is used and this leads to standard errors that are very similar in magnitude, if not identical in some cases.

balancing of the model, as well as interaction terms between agreements and distance. The summary statistics are presented at the end of table 1.1. The aim of using the PSM model is to compare reserves that are as akin as possible. Therefore, the community level dataset contains a few observations from the treated group that have been excluded from the common support requirements. Figure 1.1 shows that the propensity score is well-matched: kernel, radius and local linear regression matchings are an excellent propensity score match, however the nearest neighbour one leaves a bit to be desired. In addition, I test also for covariate imbalance using the Stata command *pstest* that assesses the quality of matching and confirms a well-balanced sample.

The analysis of the propensity score coefficient estimates that represent the ATT for the CWB Index is presented in table 1.17. The estimates are all significant and larger than those of the OLS regressions in table 1.5, *Panel A*. The largest effect that can be reported is a 5 points increase in the score with the nearest neighbour model and when religious charities that provide a social service are included. Results for the subindices education, housing, income and labour force activity are much stronger with the PSM, as they are all statistically significant and they hold without distinction of the matching technique, as compared to the OLS access regressions of table 1.6, where only education was significant, and income and labour force activity with inclusion of religious charities. Table 1.18 shows the charity programs breakdown. Two results are interesting here. First, as compared to the OLS results of table 1.7, *Panel A* the estimates for access to religious services becomes statistically significant and second, the regression of the education well-being on having access to educational charities does not change in magnitude, but the level of significance is only at the 10%.

1.7.2 Individual level analysis

The set of common characteristics used for this set of regressions are age and age square, educational components (none or less than high school, high school certificate, bachelor degree), Indigenous Identity and being male and Indigenous registration and being male, agreements and distance. Descriptive statistics are reported in table 1.2. Figures 1.2 and 1.3 provide an illustration of the matched samples with the best balance: the nearest neighbour matching has superior performance in terms of quality of matching as compared to the other three methods. The PSM results reported in table 1.19 are with only one exception all statistically significant at the 1% level. These can be compared to the OLS results in *Panel A* of tables 1.8, 1.11 and 1.14. For the

household income analysis, the PSM coefficient estimates are larger. If the access regression results for total income were not significant for the OLS analysis, they achieve statistical significance with the PSM model. The re-estimation for the wages regressions indicate much larger increases, of up to 21.2% with the radius model and when religious charities are excluded. For the charity program breakdown, the results were not all statistically significant with the OLS regressions, but they are now with the PSM model and much larger in magnitude.

1.8 Robustness Checks

This section provides a series of robustness tests for the OLS regressions. I use various subsamples and a different clustering approach, which confirm the validity of the results from the main analysis.

1.8.1 OLS Robustness Checks - Community level analysis

Table 1.20 reports regression results differentiating between First Nation and Inuit communities, a two-way clustering analysis and the use of the recalculated version of the CWB Index. The coefficient estimates for the access regressions and First Nations are smaller than those of the Inuit people, but in both cases, they are statistically significant. For the number of charities regressions and Inuit communities the coefficient estimates become significant only when I include religious charities in column 3. When I consider a two-way clustering of the standard errors (by CSD and year) in the spirit of Cameron, Gelbach and Miller (2011), the results are robust, as the standard errors are generally smaller. By clustering the error terms in this way I account not only for spatial correlation across CSDs but also for serial correlation within time periods. For the last robustness check with the recalculated CWB Index, I find that the estimates are larger in magnitude as compared to those of the main analysis in table 1.5. There appears to be an upward bias, possibly due to the application of different weights in the calculation the CWB score in smaller communities. The most striking feature from table 1.21, where I differentiate between CSD with a low (0-53 points), medium (54-63 points) and high CWB (64 points and above) CWB score, each of them corresponding roughly to one third of the observations, is that for the medium CWB score, the coefficient estimates are not statistically significant, but they remain highly significant for the others.

1.8.2 OLS Robustness Checks - individual level analysis

The results for this level of analysis are displayed in tables 1.22 for household income, table 1.23 for individuals' total income and table 1.24 for wages regressions. First, I consider only individuals who lived for at least two periods, hence for more than 5 years in the same CSD. This allows me to reduce potential problems with migration in and out of the reserve. Mobility to and from neighboring cities is quite frequent and by taking this aspect into consideration, I have a demographically more similar community over the different census years. The results for these specification with the reduced mobility are a confirmation of those of the baseline model in tables 1.8, 1.11 and 1.14, however the coefficient estimates are larger for the wages and slightly smaller for the household and individuals' income regressions. The second robustness check verifies the sensitivity of the estimates for individuals who live in a community with at least 65 inhabitants and for which a CWB Index has been calculated and released by the AANDC. There is almost no difference in the coefficient estimates magnitude, hence excluding smaller reserves does not underestimate nor does including them overestimate the results. The third and last robustness check involves the two-way clustering approach on CSD and year. For household income and wages regressions, the results are robust for the number of charity regressions, but there is a loss in statistical significance for the access regressions, as standard errors become larger. Similarly for the total income regressions, the results are insensitive to this alternative clustering, although a small reduction in the level of significance for the number of charities regressions occurs.

1.9 Conclusion

This study is the first to examine the impact of the charitable sector on Indigenous community and economic well-being. There is evidence of a positive correlation between the services provided by the charitable sector and community well-being, as well as all other economic outcomes.

The CWB score is correlated with a three-point rise for CSDs who have access to at least one charity as compared to a community where charitable organizations are absent. The four subindices were not as informative as the whole CBW measure, with the education well-being subcomponent excelling over the others with respect to both magnitude and statistical significance.

Household incomes are associated with a 5% and wages with a 6.9% increase for the access regressions and with a 2.7% and 3.4% increase respectively for the number of charities regressions. Individuals' total income also increases in this latter case, by 1.9%. These results vary for different

subgroups of people living in Indigenous reserves. Does the type of organization matter? Yes, benefits to community and education charities, as well as welfare charities are more important than the others and they matter more for wages than for other outcomes.

My analysis has also, if only to a small degree, the potential of identifying another policy lever when it comes to helping improve Indigenous welfare, namely the encouragement of the charitable sector. More work, of course, is required as to how this encouragement would take place. Certainly, Indigenous peoples need to be part of this conversation.

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Table 1.1: Summary statistics for CWB Index and subindices regressions

	Mean (Std. Dev.) - percentage		
	(1)	(2)	(3)
	Excluding religious charities	Including religious charities with social services	Including religious charities
Independent variables of interest			
Access	0.090	0.101	0.158
Number of charities	0.172 (0.798)	0.194 (0.848)	0.32 (1.12)
Dependent variables			
	All sample	With Charities	Without Charities
CWB	57.97 (10.04)	64.79 (9.31)	56.70 (9.65)
Education_WB (n=1130)	32.68 (11.94)	41.17 (11.23)	30.30 (11.03)
Housing_WB (n=1130)	68.16 (14.65)	75.92 (12.76)	65.99 (14.41)
Income_WB (n=1130)	56.33 (14.16)	67.46 (14.2)	53.22 (12.49)
LFA_WB (n=1130)	69.43 (9.06)	74.68 (8.29)	67.96 (8.71)
Independent variables			
	All sample n=1775	With Charities n=280	Without Charities n=1495
Ratio male	0.511 (0.037)	0.502 (0.03)	0.512 (0.038)
Ratio female	0.487 (0.037)	0.495 (0.036)	0.485 (0.037)
Ratio young (age below 15)	0.332 (0.089)	0.298 (0.091)	0.339 (0.088)
Ratio adults	0.601 (0.071)	0.619 (0.065)	0.597 (0.072)
Ratio old (age above 65)	0.065 (0.064)	0.081 (0.074)	0.062 (0.061)
Ratio single	0.584 (0.099)	0.548 (0.112)	0.59 (0.095)
Ratio married	0.341 (0.079)	0.365 (0.089)	0.336 (0.077)
Ratio separated/ divorced/ widow	0.073 (0.038)	0.085 (0.041)	0.071 (0.037)
Ratio Indigenous Identity	0.916 (0.165)	0.829 (0.236)	0.932 (0.143)
Ratio non-Indigenous Identity	0.082 (0.159)	0.168 (0.23)	0.066 (0.136)
Ratio registered under Indian Act	0.814 (0.297)	0.638 (0.387)	0.846 (0.265)
Ratio not registered under the I. A.	0.184 (0.294)	0.359 (0.382)	0.151 (0.262)
Ratio language English	0.918 (0.194)	0.865 (0.258)	0.928 (0.178)
Ratio language French	0.025 (0.13)	0.055 (0.201)	0.019 (0.112)
Ratio language French and English	0.032 (0.076)	0.051 (0.08)	0.029 (0.075)
Ratio language No F and No E	0.022 (0.053)	0.026 (0.058)	0.021(0.052)
Agreements	0.202	0.429	0.161
Population	608.21 (695.56)	1,198.45 (1,090.3)	498.20 (525.40)
Population (logarithmic)	5.939 (0.971)	6.704 (0.93)	5.796 (0.91)
CSD with no postal code	0.376	0.000	0.445
Amount spent on charitable activity (noR)	173,481.30 (1,706,742)	1,104,311 (4,191,343)	-
Amount spent on charitable activity (Rss)	175,064.1 (1,708,543)	1,114,387 (4,193,772)	-
Amount spent on charitable activity (all)	179,774.9 (1,713,516)	1,144,373 (4,199,891)	-
Distance 0 km from urban core	0.192	0.321	0.167
Distance 1 to 30 km from urban core	0.163	0.161	0.164
Distance 31 to 100 km from urban core	0.268	0.125	0.294
Distance above 100 km from urban core	0.377	0.393	0.375
Newfoundland and Labrador	0.011	0.036	0.007
Prince Edward Island	0.003	0.018	0.003
Nova Scotia	0.023	0.036	0.020
New Brunswick	0.023	0.036	0.020
Quebec	0.079	0.143	0.067
Ontario	0.138	0.107	0.144
Manitoba	0.107	0.964	0.120
Saskatchewan	0.138	0.071	0.151
Alberta	0.096	0.071	0.100
British Columbia	0.279	0.214	0.288
Northwest Territories	0.045	0.089	0.040
Nunavut	0.039	0.089	0.030
Yukon	0.02	0.054	0.013
Year 2001	0.33	0.304	0.334
Year 2006	0.33	0.339	0.328
Year 2011	0.341	0.339	0.338
Other summary statistics:			
Amount spent on charitable activity (noR) including charities that share the postal code	288,201.10 (2,207,745)	1,343,984 (4,393,018)	-

Amount spent on charitable activity (Rss)	292,604.40	1,359,635	-
including charities that share the postal code	(2,215,254)	(4,396,377)	-
Amount spent on charitable activity (all)	309,118.90	1,418,281	-
including charities that share the postal code	(2,240,395)	(4,415,898)	-
Access_B	0.039	0.250	-
Access_E	0.042	0.268	-
Access_H	0.011	0.071	-
Access_R	0.115	0.732	-
Access_Rss	0.020	0.125	-
Access_W	0.031	0.196	-
Access_O	0.001	0.007	-
NCH_B	0.048 (0.257)	0.305 (0.583)	-
NCH_E	0.06 (0.327)	0.389 (0.764)	-
NCH_H	0.013 (0.127)	0.084 (0.314)	-
NCH_R	0.149 (0.47)	0.961 (0.901)	-
NCH_Rss	0.023 (0.159)	0.140 (0.377)	-
NCH_W	0.05 (0.359)	0.319 (0.852)	-
NCH_O	0.001 (0.034)	0.007 (0.836)	-
Amount spent on charitable activity_B	11,393.34 (162,295.90)	72,525.35 (404,633.5)	-
Amount spent on charitable activity_E	86,769.80 (1,068,235.00)	552,341.1 (2,651,016)	-
Amount spent on charitable activity_H	8,179.24 (127,616.40)	52,065.7 (318,890)	-
Amount spent on charitable activity_R	6,293.59 (31,923.71)	40,062.41 (71,758.39)	-
Amount spent on charitable activity_Rss	1,582.84 (15,129.30)	10,075.69 (37,089.01)	-
Amount spent on charitable activity_W	67,006.09 (1,197,870)	426,533.4 (3,001,289)	-
Amount spent on charitable activity_O	132.80 (4,517.87)	845.348 (11,389.4)	-
Summary statistics for subindices regressions:			
CSD Average Household size	5.186 (1.751)	5.153 (2.39)	5.193 (1.605)
Ratio persons with none or less than High School	0.369 (0.1)	0.322 (0.083)	0.378 (0.101)
Ratio persons with High School Certificate	0.1 (0.066)	0.112 (0.065)	0.098 (0.065)
Ratio persons above HS, below bachelor (including trades and apprenticeship certificate)	0.191 (0.099)	0.236 (0.085)	0.183 (0.1)
Ratio persons with bachelor degree	0.022 (0.023)	0.039 (0.032)	0.019 (0.019)
Ratio person with master, doctorate, degree in Medicine	0.004 (0.008)	0.009 (0.013)	0.003 (0.006)
Ratio persons employed	0.281 (0.1)	0.333 (0.101)	0.272 (0.096)
Ratio persons unemployed	0.100 (0.051)	0.094 (0.042)	0.101 (0.053)
Ratio persons not in labour force	0.305 (0.091)	0.292 (0.09)	0.308 (0.091)
Summary statistics for PSM Model			
Distance in km	176.631 (313.44)	259.881 (420.593)	161.116 (286.637)
Distance ²	129,388.1 (439,532.1)	243,802.8 (625,914.6)	108,064.4 (391,815.3)
Agreement*distance	102.219 (317.56)	222.412 (430.271)	79.818 (286.448)
Agreement*distance ²	111,236.5 (440,836.7)	233,936.8 (628,411.5)	88,368.46 (392,256.6)
Population	608.211 (695.558)	1,198.448 (1,090.299)	498.206 (525.398)
Population ²	853,448.7 (2,687,227)	2,620,769 (5,481,357)	524,068.4 (1,514,454)
Population ³	2,170,000,000 (13,400,000,000)	8,610,000,000 (30,600,000,000)	965,000,000 (5,500,000,000)
Ratio male	0.511 (0.037)	0.502 (0.030)	0.512 (0.038)
Ratio Indigenous Identity	0.916 (0.165)	0.829 (0.236)	0.932 (0.143)

The standard deviation (in parenthesis) is not provided for dichotomous variables. The unit of observation is the CSD, however weights have been applied at the individual universe (aweight=compw2) during the calculation of the ratios. LFA_WB stands for labour force activity well-being.

Table 1.2: Summary statistics for Individuals' regressions

	Mean (Std. Dev.) - percentage		
	(1)	(2)	(3)
Independent variables of interest	Excluding religious charities	Including religious charities with social services	Including religious charities
Access	0.229	0.240	0.322
Number of charities	0.678 (1.946)	0.726 (2.036)	1.081 (2.653)
Dependent variables	All sample n=502,235	With Charities n=161,445	Without Charities n=340,790
Total income CPI*	27,633.13 (31,685.25)	34,418.37 (40,193.75)	24,418.65 (26,116.67)
Total income CPI (logarithmic)	9.572 (1.412)	9.804 (1.404)	9.462 (1.402)
Household income CPI*	59,356.78 (55,112.12)	71,637.46 (70,911.72)	53,538.85 (44,595.69)
Household income CPI (logarithmic)	10.58 (1.089)	10.758 (1.097)	10.496 (1.075)
Independent variables	All sample n=502,235	With Charities n=161,445	Without Charities n=340,790
Male	0.507	0.498	0.511
Female	0.493	0.502	0.489
Age*	41.77 (10.837)	42.559 (11.003)	41.397 (10.737)
Age 25 to 30	0.187	0.175	0.193
Age 31 to 35	0.152	0.142	0.157
Age 36 to 40	0.152	0.144	0.156
Age 41 to 45	0.142	0.139	0.144
Age 46 to 50	0.125	0.131	0.123
Age 51 to 55	0.103	0.113	0.099
Age 56 to 60	0.082	0.093	0.077
Age 61 to 64	0.056	0.065	0.052
Single	0.277	0.266	0.282
Married	0.616	0.617	0.615
Separated/ Divorced/ Widow	0.107	0.117	0.103
Indigenous Identity	0.852	0.737	0.906
Non-Indigenous Identity	0.148	0.263	0.094
Registered under the Indian Act	0.736	0.569	0.816
Not registered under the Indian Act	0.264	0.431	0.184
Household size	4.124 (2.255)	3.736 (2.072)	4.307 (2.314)
Language English	0.896	0.862	0.912
Language French	0.038	0.058	0.029
Language French and English	0.055	0.072	0.047
Language No F and No E	0.011	0.009	0.012
None or less than High School	0.436	0.341	0.481
High School Certificate	0.142	0.155	0.136
Above HS, below bachelor (including trades and apprenticeship certificate)	0.354	0.400	0.332
Bachelor degree	0.057	0.083	0.045
Master, doctorate, degree in Medicine	0.012	0.021	0.007
Employed	0.537	0.599	0.508
Unemployed	0.137	0.120	0.145
Not in labour force	0.326	0.281	0.347
Agreements	0.269	0.479	0.169
Population*	1,393,449 (1,340.158)	2,259.575 1,668.304)	983.125 (896.987)
Population (logarithmic)	6.787 (1.040)	7.434 (0.813)	6.48 (0.994)
CSD with no Postal Code	0.259	0.000	0.381
Amount spent on charitable activity (noR)	562,175 (2,623,323)	1,748,834 (4,396,935)	-
Amount spent on charitable activity (Rss)	567,238 (2,627,987)	1,764,585 (4,401,329)	-
Amount spent on charitable activity (all)	584,994 (2,641,982)	1,819,819 (4,412,118)	-
Distance 0 km from urban core	0.247	0.391	0.180
Distance 1 to 30 km from urban core	0.139	0.115	0.151
Distance 31 to 100 km from urban core	0.202	0.105	0.248
Distance above 100 km from urban core	0.411	0.390	0.422
Newfoundland and Labrador	0.013	0.018	0.010
Prince Edward Island	0.001	0.002	0.001

Nova Scotia	0.022	0.042	0.012
New Brunswick	0.021	0.027	0.018
Quebec	0.122	0.146	0.110
Ontario	0.129	0.093	0.147
Manitoba	0.133	0.054	0.171
Saskatchewan	0.112	0.037	0.147
Alberta	0.101	0.104	0.099
British Columbia	0.210	0.232	0.200
Northwest Territories	0.051	0.079	0.038
Nunavut	0.075	0.147	0.041
Yukon	0.010	0.018	0.006
Year 2001	0.303	0.288	0.310
Year 2006	0.333	0.328	0.336
Year 2011	0.364	0.384	0.354
Other summary statistics:			
Amount spent on charitable activity (noR)	645,315	1,902,062	-
including charities that share the postal code	(2,769,873)	(4,475,907)	-
Amount spent on charitable activity (Rss)	653,763	1,922,208	-
including charities that share the postal code	(2,776,209)	(4,479,727)	-
Amount spent on charitable activity (all)	686,129	2,005,887	-
including charities that share the postal code	(2,798,965)	(4,490,428)	-
Access_B	0.100	0.309	-
Access_E	0.131	0.406	-
Access_H	0.041	0.128	-
Access_R	0.236	0.733	-
Access_Rss	0.045	0.134	-
Access_W	0.118	0.368	-
Access_O	0.008	0.258	-
NCH_B	0.138 (0.445)	0.429 (0.702)	-
NCH_E	0.228 (0.703)	0.710 (1.093)	-
NCH_H	0.047(0.235)	0.145 (0.397)	-
NCH_R	0.403 (0.967)	1.255 (1.356)	-
NCH_Rss	0.048 (0.231)	0.150 (0.389)	-
NCH_W	0.257 (0.948)	0.799 (1.537)	-
NCH_O	0.008 (0.091)	0.258 (0.159)	-
Amount spent on charitable activity_B	34,649.44 (222,653.7)	107,788.7 (382,538.7)	-
Amount spent on charitable activity_E	312,762.6 (1,928,563)	972,952.9 (3,305,756)	-
Amount spent on charitable activity_H	24,830.57 (200,372.5)	77,243.82 (347,634)	-
Amount spent on charitable activity_R	22,818.7 (70,711.08)	70,985.23 (110,160.3)	-
Amount spent on charitable activity_Rss	5,063.374 (30,506.3)	15,751.32 (52,217.95)	-
Amount spent on charitable activity_W	189,378.8 (1,616,846)	589,126.2 (2,810,135)	-
Amount spent on charitable activity_O	553.537 (7,068.724)	1,721.964 (12,386.58)	-
Summary statistics for PSM model			
Age	41.77 (10.837)	42.559 (11.003)	41.397 (10.737)
Age ²	1,862.196 (944.381)	1,932.328 (965.742)	1,828.971 (932.252)
None or less than High School	0.436	0.341	0.481
High School Certificate	0.142	0.155	0.136
Bachelor degree	0.057	0.083	0.045
Indigenous Identity*Male	0.431	0.363	0.463
Registered under the Indian Act*Male	0.372	0.280	0.416
Agreements	0.269	0.479	0.169
Distance in km	219.107 (372.079)	289.229 (461.722)	185.887 (315.595)
Dependent variable wages regression			
	All sample n= 330,030	With Charities n=131,485	Without Charities n= 216,545
Wages CPI*	32,017.52 (33,023.22)	38,973.53 (40,022.76)	28,372.01 (27,998.85)
Wages CPI (logarithmic)	9.844 (1.236)	10.038 (1.248)	9.743 (1.218)

The summary statistics are weighted (aweight=compw2) and n=weighted number of observations. The standard deviation (in parenthesis) is not provided for dichotomous variables. *These variables have not been used in the regressions.

Table 1.3: CSD and Individuals- difference in means

	CWB Index			Household income (Refers to individuals living in a CSD)		
	No (=0)	Yes (=1)	difference	No (=0)	Yes (=1)	difference
CSD with charity (all years)	56.70 (0.249) n=1,495	64.79 (0.557) n=280	-8.09*** (0.626)	53,539 (86.65) n=340,790	71,637 (234.00) n=161,445	-18,098*** (249.52)
CSD with charity in 2001	56.12 (0.417) n=500	63.49 (0.953) n=85	-7.37*** (1.075)	51,803 (135.38) n=105,695	64,762 (356.20) n=46,520	-12,958*** (381.06)
CSD with charity in 2006	56.34 (0.439) n=490	64.97 (0.935) n=95	-8.624*** (1.081)	52,618 (136.52) n=114,365	69,741 (358.77) n=52,975	-17,123*** (383.87)
CSD with charity in 2011	57.62 (0.437) n=505	65.77 (0.997) n=95	-8.16*** (1.089)	55,931 (170.36) n=120,730	78,422 (453.61) n=61,950	-22,491*** (484.56)
CSD with agreement	56.46 (0.265) n=1,420	63.95 (0.410) n=360	-7.49*** (0.566)	50,584 (91.21) n=367,320	83,242 (247.13) n=134,915	-32,659*** (263.43)
CSD with charity & agreement (Y/N)	62.96 (0.735) n=160	67.25 (0.805) n=120	-4.30*** (1.100)	55,012 (262.40) n=84,120	89,725 (386.08) n=77,325	-34,713*** (466.81)
CSD without charity & agreement (Y/N)	55.64 (0.275) n=1,260	62.30 (0.429) n=240	-6.67*** (0.658)	49,268 (88.50) n=283,195	74,539 (254.19) n=57,590	-25,270*** (269.16)
CSD with agreement & charity (Y/N)	62.30 (0.429) n=240	67.25 (0.805) n=120	-4.95*** (0.832)	74,539 (254.19) n=57,590	89,725 (386.08) n=77,325	-15,186*** (462.25)
CSD with no agreement & charity (Y/N)	55.64 (0.275) n=1,260	62.96 (0.735) n=160	-7.32*** (0.815)	49,268 (88.50) n=283,195	55,012 (262.40) n=84,120	-5,743*** (276.92)
CSD without charity transitioning in (Y/N) (from not having a charity to having a charity in comparison with CSD without charity)	56.66 (0.252) n=1,465	60.92 (1.354) n=65	-4.25*** (1.238)	53,178 (86.58) n=329,495	64,606 (603.04) n= 23,650	-11,428*** (609.22)
CSD without charity transitioning out (Y/N) (from having a charity to not having a charity in comparison with CSD without charity)	56.64 (0.251) n=1,480	60.13 (1.417) n=40	-3.49** (1.561)	53,373 (86.10) n=333,960	56,950 (547.43) n=13,525	-3,577*** (554.16)
CSD with charity transitioning in (Y/N) (from not having a charity to having a charity in comparison with CSD with charity)	64.98 (0.576) n=245	60.92 (01.354) n=65	4.06*** (1.323)	72,179 (239.67) n=149,090	64,606 (603.04) n= 23,650	7,574*** (648.92)
CSD with charity transitioning out (Y/N) (from having a charity to not having a charity in comparison with CSD with charity)	65.23 (0.574) n=260	60.13 (1.417) n=40	5.10*** (1.578)	72,481 (243.07) n=154,750	56,950 (547.43) n=13,525	15,531*** (598.96)

Standard errors in parentheses. Significance: * p<.10, ** p<.05, *** p<.01
n= number of weighted observations for individuals

Table 1.4: Individuals- difference in means

Refers to individuals living in a:	Total Income			Wages		
	No (=0)	Yes (=1)	difference	No (=0)	Yes (=1)	difference
CSD with charity (all years)	24,419 (51.54) n=340,790	34,419 (138.65) n=161,445	-9,999 *** (147.92)	28,372 (68.28) n= 216,545	38,974 (166.95) n=113,485	-10,602 *** (180.37)
CSD with charity in 2001	24,168 (81.24) n=105,695	31,562 (219.53) n=46,520	-7,394*** (234.08)	26,987 (104.83) n= 68,435	34,624 (268.56) n=33,215	-7,637 *** (288.29)
CSD with charity in 2006	23902 (83.67) n=114,365	33,547 (193.13) n=52,975	-9,645*** (210.47)	27,481 (110.67) n= 75,285	38,234 (236.17) n=37,680	-10,753*** (260.81)
CSD with charity in 2011	25,127 (99.09) n=120,730	37,307 (275.42) n=61,950	-12,180 *** (292.71)	30,595 (135.44) n=72,825	43,020 (331.54) n=42,595	-12,425*** (358.13)
CSD with agreement	23,507 (56.60) n=367,320	38,866 (142.13) n=134,915	-15,358*** (152.98)	27,728 (76.24) n=226,930	41,458 (161.00) n=103,101	-13,730*** (178.14)
CSD with charity & agreement (Y/N)	26,413 (165.65) n=84,120	43,128 (222.18) n=77,325	-16,715*** (277.14)	30,641 (215.81) n=53,680	46,452 (246.65) n=59,805	-15,812*** (327.74)
CSD without charity & agreement (Y/N)	22,644 (54.09) n=283,195	33,143 (143.62) n=57,590	-10,498*** (153.48)	26,826 (73.71) n= 173,250	34,559 (169.16) n= 43,295	-7,733*** (184.52)
CSD with agreement & charity (Y/N)	33,143 (143.63) n=57,590	43,128 (222.18) n=77,325	-9,985*** (264.57)	34,559 (169.16) n=43,295	46,452 (246.65) n=59,805	-11,894*** (299.09)
CSD with no agreement & charity (Y/N)	22,644 (54.09) n=283,195	26,413 (165.65) n=84,120	-3,768*** (174.26)	26,826 (73.71) n=173,250	30,641 (215.82) n=53,680	-3,815*** (228.06)
CSD without charity transitioning in (Y/N) (from not having a charity to having a charity in comparison with CSD without charity)	24,211 (51.03) n=329,495	30,458 (412.83) n=23,650	-6,247*** (415.97)	28,156 (67.82) n=208,785	34,536 (475.13) n=16,090	-6,381*** (479.94)
CSD without charity transitioning out (Y/N) (from having a charity to not having a charity in comparison with CSD without charity)	24,328 (50.93) n=333,960	26,268 (352.55) n=13,525	-1,940*** (356.21)	28,249 (66.99) n=212,055	30,525 (501.97) n=8,800	-2,276*** (506.42)
CSD with charity transitioning in (Y/N) (from not having a charity to having a charity in comparison with CSD with charity)	34,747 (138.97) n=149,090	30,458 (412.83) n=23,650	4,289*** (435.59)	39,299 (169.31) n=105,153	34,536 (475.13) n=16,090	4,763*** (504.39)
CSD with charity transitioning out (Y/N) (from having a charity to not having a charity in comparison with CSD with charity)	34,886 (144.00) n=154,750	26,268 (352.55) n=13,525	8,618*** (380.83)	39,457 (172.69) n=109,175	30,525 (501.97) n=8,800	8,932*** (530.84)

Standard errors in parentheses. Significance: * p<.10, ** p<.05, *** p<.01
n= number of weighted observations for individuals

Table 1.5: CWB regressions

Access regression estimates in <i>Panel A</i>			
Number of charities regression estimates in <i>Panel B</i>			
Dependent variable:			
CWB	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
<i>Independent variable of interest:</i>			
Panel A			
Access to charities	3.008*** (0.620)	2.745*** (0.567)	2.901*** (0.523)
Adjusted R-square	0.670	0.670	0.673
Panel B			
Number of Charities	1.120*** (0.192)	1.087*** (0.183)	0.930*** (0.159)
Adjusted R-square	0.671	0.671	0.672
<i>Controls:</i>			
Demographic characteristics	Y	Y	Y
Agreements	Y	Y	Y
Population	Y	Y	Y
Postal Code	Y	Y	Y
Amount charitable activity	Y	Y	Y
Distance from urban core	Y	Y	Y
Provincial fixed effect	Y	Y	Y
Time fixed effects	Y	Y	Y
Number of clusters	722	722	722
Observations	1,775	1,775	1,775

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.6: CWB subindices regressions

Access regression estimates				Number of charities regression estimates		
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Ex R	Inc Rss	All	Ex R	Inc Rss	All
Education_WB N=1,130	3.206*** (0.867)	2.869*** (0.783)	3.238*** (0.738)	1.040*** (0.255)	0.996*** (0.240)	0.887*** (0.208)
Number of clusters: 451						
Housing_WB N=1,130	1.489 (1.054)	1.187 (0.944)	1.114 (0.915)	0.673** (0.260)	0.637*** (0.241)	0.473** (0.204)
Number of clusters: 451						
Income_WB N=1,130	0.588 (0.651)	0.647 (0.596)	0.939* (0.490)	0.117 (0.182)	0.138 (0.171)	0.206 (0.136)
Number of clusters: 451						
LFA_WB N=1,130	0.905 (0.669)	0.735 (0.627)	1.161** (0.567)	0.403** (0.187)	0.400** (0.172)	0.405*** (0.155)
Number of clusters: 451						

Column 1 and 4: excluding religious charities. Column 2 and 5: including religious charities with social services. Column 3 and 6: including religious charities. Robust standard errors are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.7: CWB regressions - Charity programs breakdown

Panel A: Access regression estimates

	<i>Independent variables:</i>						
Dependent variable:	<i>Access Benefits (1)</i>	<i>Access Education (2)</i>	<i>Access Health (3)</i>	<i>Access Religion (4)</i>	<i>Access Religion Social Services (5)</i>	<i>Access Welfare (6)</i>	<i>Access Others (7)</i>
CWB total score N=1,775 Number of Clusters: 722	4.450*** (0.879)	2.907*** (0.811)	1.954 (1.810)	2.477*** (0.653)	1.126 (1.038)	1.288 (0.835)	10.97*** (1.711)
Education_WB N=1,130 Number of clusters: 451	3.824*** (1.017)	3.702*** (1.044)	1.612 (2.984)	3.136*** (0.902)	1.825 (1.374)	1.227 (1.068)	3.373 (2.361)
Housing_WB N=1,130 Number of clusters: 451	1.918 (1.286)	1.043 (1.326)	1.640 (1.672)	0.806 (1.170)	-0.631 (1.832)	-0.492 (1.641)	1.702 (2.779)
Income_WB N=1,130 Number of clusters: 451	1.251 (0.898)	0.160 (0.863)	- 2.491* (1.426)	1.237** (0.610)	0.0568 (1.116)	-0.811 (1.014)	6.166*** (2.134)
LFA_WB N=1,130 Number of clusters: 451	2.415*** (0.790)	0.659 (0.810)	-1.266 (1.472)	1.028* (0.621)	0.0919 (1.121)	-0.541 (0.913)	8.056*** (2.044)

Panel B: Number of charities regression estimates

	<i>Independent variables:</i>						
Dependent variable:	<i>NCH Benefits (1)</i>	<i>NCH Education (2)</i>	<i>NCH Health (3)</i>	<i>NCH Religion (4)</i>	<i>NCH Religion Social Services (5)</i>	<i>NCH Welfare (6)</i>	<i>NCH Others (7)</i>
CWB total score N=1,775 Number of Clusters: 722	3.336*** (0.729)	2.102*** (0.347)	2.104 (1.622)	1.827*** (0.517)	1.139 (0.984)	1.374*** (0.294)	10.97*** (1.711)
Education_WB N=1,130 Number of clusters: 451	2.952*** (0.801)	2.334*** (0.559)	1.689 (2.609)	2.462*** (0.760)	2.068 (1.303)	0.900** (0.431)	3.373 (2.361)
Housing_WB N=1,130 Number of clusters: 451	1.388 (1.039)	1.310** (0.619)	2.160 (1.475)	-0.0772 (1.042)	-1.174 (1.755)	0.566 (0.564)	1.702 (2.779)
Income_WB N=1,130 Number of clusters: 451	0.737 (0.830)	0.0326 (0.507)	-2.162 (1.388)	0.700 (0.494)	-0.150 (1.013)	0.305 (0.327)	6.166*** (2.134)
LFA_WB N=1,130 Number of clusters: 451	1.592** (0.638)	0.671* (0.371)	-0.824 (1.280)	1.107** (0.489)	0.315 (0.988)	0.461 (0.372)	8.056*** (2.044)

Robust standard errors are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.8: Household income regressions

Access regression estimates in <i>Panel A</i>			
Number of charities regression estimates in <i>Panel B</i>			
Dependent variable: ln(household income)	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
<i>Independent variable of interest:</i>			
Panel A			
Access to charities	0.0509* (0.0292)	0.0507* (0.0279)	0.0498** (0.0237)
Adjusted R-square	0.360	0.360	0.360
Panel B			
Number of Charities	0.0271*** (0.00886)	0.0260*** (0.00854)	0.0203*** (0.00673)
Adjusted R-square	0.361	0.361	0.361
<i>Controls:</i>			
Demographic characteristics	Y	Y	Y
Agreements	Y	Y	Y
Population	Y	Y	Y
Postal Code	Y	Y	Y
Amount charitable activity	Y	Y	Y
Distance from urban core	Y	Y	Y
Provincial fixed effect	Y	Y	Y
Time fixed effects	Y	Y	Y
Number of clusters	949	949	949
Observations	443,960	443,960	443,960

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.9: Household income regressions by groups

	Access regression estimates			Number of charities regression estimates		
Dependent variable: ln(household income)	(1) Ex R	(2) Inc Rss	(3) All	(4) Ex R	(5) Rss	(6) All
Male N=225,015 Number of clusters: 948	0.0540* (0.0321)	0.0554* (0.0307)	0.0501* (0.0266)	0.0282*** (0.00833)	0.0270*** (0.00809)	0.0209*** (0.00653)
Female N=218,945 Number of clusters: 949	0.0458* (0.0271)	0.0441* (0.0259)	0.0475** (0.0216)	0.0258*** (0.00935)	0.0246*** (0.00893)	0.0194*** (0.00688)
Indigenous Identity N=378,245 Number of clusters: 947	0.0427 (0.0321)	0.0459 (0.0304)	0.0519** (0.0251)	0.0312*** (0.00972)	0.0301*** (0.00930)	0.0227*** (0.00744)
Non-Indigenous Identity N=65,715 Number of clusters: 842	0.0380 (0.0464)	0.0281 (0.0446)	0.00235 (0.0434)	0.00440 (0.00809)	0.00412 (0.00762)	0.00194 (0.00509)
Registered under the Indian Act N=326,865 Number of clusters: 937	0.0254 (0.0336)	0.0314 (0.0319)	0.0497* (0.0267)	0.0126 (0.0128)	0.0144 (0.0115)	0.0136** (0.00611)
Not registered under the Indian Act N=117,095 Number of clusters: 876	0.0611 (0.0380)	0.0579 (0.0364)	0.0310 (0.0339)	0.0250*** (0.00806)	0.0241*** (0.00760)	0.0194*** (0.00637)
Indigenous Identity & Male N=191,240 Number of clusters: 943	0.0390 (0.0359)	0.0449 (0.0340)	0.0554** (0.0278)	0.0324*** (0.0100)	0.0314*** (0.00950)	0.0239*** (0.00756)
Indigenous Identity & Female N=187,005 Number of clusters: 946	0.0447 (0.0287)	0.0451* (0.0273)	0.0472** (0.0230)	0.0297*** (0.00940)	0.0285*** (0.00902)	0.0212*** (0.00724)
Non-Indigenous Identity & Male N=33,775 Number of clusters: 780	0.0691 (0.0457)	0.0566 (0.0443)	-0.00511 (0.0548)	0.00803 (0.00621)	0.00753 (0.00591)	0.00414 (0.00442)
Non-Indigenous Identity & Female N=31,940 Number of clusters: 734	0.00176 (0.0500)	-0.00499 (0.0479)	0.00286 (0.0384)	-0.000292 (0.0106)	-0.000277 (0.00992)	-0.000946 (0.00635)
Registered under I.A. & Male N=165,315 Number of clusters: 924	0.0186 (0.0383)	0.0282 (0.0363)	0.0538* (0.0298)	0.0131 (0.0163)	0.0156 (0.0146)	0.0153** (0.00732)
Registered under I.A. & Female N=161,555 Number of clusters: 930	0.0307 (0.0298)	0.0334 (0.0283)	0.0445* (0.0245)	0.0123 (0.0101)	0.0134 (0.00924)	0.0120** (0.00528)
Not registered under I.A. & Male N=59,700 Number of clusters: 835	0.0845** (0.0379)	0.0800** (0.0362)	0.0267 (0.0394)	0.0268*** (0.00716)	0.0257*** (0.00680)	0.0202*** (0.00592)
Not registered under I.A. & Female N=57,390 Number of clusters: 806	0.0334 (0.0407)	0.0320 (0.0388)	0.0312 (0.0315)	0.0229** (0.00901)	0.0221*** (0.00846)	0.0184*** (0.00682)

Column 1 and 4: excluding religious charities. Column 2 and 5: including religious charities with social services. Column 3 and 6: including religious charities. The number of observations are retrieved from the summary statistics. Robust standard errors in parentheses are clustered at the CSD level. Significance: * p<.10, ** p<.05, *** p<.01

Table 1.10: Household income regressions - Charity programs breakdown

Access regression estimates in *Panel A*
Number of charities regression estimates in *Panel B*

Dependent variable: ln(household income)			
<i>Independent variable of interest:</i>		<i>Independent variable of interest:</i>	
Panel A		Panel B	
Access to charities_B	0.113** (0.0513)	Number of Charities_B	0.0602 (0.0442)
Access to charities_E	0.0562 (0.0491)	Number of Charities_E	0.0503** (0.0238)
Access to charities_H	0.0119 (0.0618)	Number of Charities_H	0.0160 (0.0520)
Access to charities_R	0.0292 (0.0281)	Number of Charities_R	0.00999 (0.0104)
Access to charities_Rss	0.0338 (0.0592)	Number of Charities_Rss	-0.0114 (0.0546)
Access to charities_W	0.0170 (0.0470)	Number of Charities_W	0.0600*** (0.0126)
Access to charities_O	0.856*** (0.0689)	Number of Charities_O	0.856*** (0.0689)
Number of clusters	949	Number of clusters	949
Observations	443,960	Observations	443,960

The number of observations are retrieved from the summary statistics.
Robust standard errors in parentheses are clustered at the CSD level.
Significance: * p<.10, ** p<.05, *** p<.01

Table 1.11: Total income regressions

Access regression estimates in <i>Panel A</i>			
Number of charities regression estimates in <i>Panel B</i>			
Dependent variable: ln(total income)	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
<i>Independent variable of interest:</i>			
<i>Panel A</i>			
Access to charities	0.0113 (0.0291)	0.0115 (0.0278)	0.0116 (0.0235)
Adjusted R-square	0.295	0.295	0.295
<i>Panel B</i>			
Number of Charities	0.0193*** (0.00663)	0.0183*** (0.00637)	0.0147*** (0.00472)
Adjusted R-square	0.295	0.295	0.295
<i>Controls:</i>			
Demographic characteristics	Y	Y	Y
Agreements	Y	Y	Y
Population	Y	Y	Y
Postal Code	Y	Y	Y
Amount charitable activity	Y	Y	Y
Distance from urban core	Y	Y	Y
Provincial fixed effect	Y	Y	Y
Time fixed effects	Y	Y	Y
Number of clusters	949	949	949
Observations	443,960	443,960	443,960

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.12: Total income regressions by groups

	Access regression estimates			Number of charities regression estimates		
Dependent variable: ln(total income)	(1) Ex R	(2) Inc Rss	(3) All	(4) Ex R	(5) Inc Rss	(6) All
Male N=225,015 Number of clusters: 948	0.0186 (0.0366)	0.0160 (0.0350)	0.00665 (0.0293)	0.0161** (0.00646)	0.0150** (0.00633)	0.0124*** (0.00463)
Female N=218,945 Number of clusters: 949	-0.00501 (0.0270)	-0.00128 (0.0258)	0.0104 (0.0224)	0.0207*** (0.00759)	0.0200*** (0.00712)	0.0158*** (0.00539)
Indigenous Identity N=378,245 Number of clusters: 947	-0.00155 (0.0329)	0.00300 (0.0311)	0.0142 (0.0254)	0.0226*** (0.00768)	0.0217*** (0.00725)	0.0172*** (0.00518)
Non-Indigenous Identity N=65,715 Number of clusters: 842	0.0225 (0.0370)	0.0142 (0.0360)	-0.0222 (0.0399)	0.000729 (0.00641)	0.000912 (0.00605)	-0.000570 (0.00408)
Registered under the Indian Act N=326,865 Number of clusters: 937	-0.0182 (0.0377)	-0.0116 (0.0357)	0.00797 (0.0286)	0.00662 (0.0170)	0.00825 (0.0152)	0.0107* (0.00642)
Not registered under the Indian Act N=117,095 Number of clusters: 876	0.0327 (0.0279)	0.0304 (0.0269)	0.00450 (0.0295)	0.0145*** (0.00511)	0.0141*** (0.00480)	0.0112*** (0.00400)
Indigenous Identity & Male N=191,240 Number of clusters: 943	-0.0177 (0.0401)	-0.0137 (0.0380)	0.00218 (0.0310)	0.0189** (0.00869)	0.0181** (0.00813)	0.0155*** (0.00534)
Indigenous Identity & Female N=187,005 Number of clusters: 946	0.0134 (0.0297)	0.0187 (0.0282)	0.0244 (0.0231)	0.0274*** (0.00778)	0.0264*** (0.00728)	0.0198*** (0.00580)
Non-Indigenous Identity & Male N=33,775 Number of clusters: 780	0.111** (0.0468)	0.0939** (0.0464)	0.00572 (0.0590)	0.00193 (0.00520)	0.00181 (0.00494)	-0.000242 (0.00378)
Non-Indigenous Identity & Female N=31,940 Number of clusters: 734	-0.0615* (0.0372)	-0.0611* (0.0360)	-0.0410 (0.0366)	-0.000226 (0.00873)	0.000269 (0.00818)	-0.000633 (0.00547)
Registered under I.A. & Male N=165,315 Number of clusters: 924	-0.0334 (0.0468)	-0.0293 (0.0443)	-0.00559 (0.0349)	0.00395 (0.0210)	0.00545 (0.0188)	0.0110 (0.00832)
Registered under I.A. & Female N=161,555 Number of clusters: 930	-0.00684 (0.0319)	0.00325 (0.0305)	0.0190 (0.0253)	0.0102 (0.0148)	0.0120 (0.0133)	0.0113* (0.00587)
Not registered under I.A. & Male N=59,700 Number of clusters: 835	0.0844** (0.0339)	0.0795** (0.0329)	0.0190 (0.0387)	0.0130*** (0.00414)	0.0127*** (0.00399)	0.00975*** (0.00347)
Not registered under I.A. & Female N=57,390 Number of clusters: 806	-0.0283 (0.0314)	-0.0270 (0.0300)	-0.0169 (0.0297)	0.0142** (0.00680)	0.0138** (0.00632)	0.0111** (0.00513)

Column 1 and 4: excluding religious charities. Column 2 and 5: including religious charities with social services. Column 3 and 6: including religious charities. The number of observations are retrieved from the summary statistics. Robust standard errors in parentheses are clustered at the CSD level. Significance: * p<.10, ** p<.05, *** p<.01

Table 1.13: Total income regressions - Charity programs breakdown

Access regression estimates in *Panel A*
Number of charities regression estimates in *Panel B*

Dependent variable: ln(total income)			
<i>Independent variable of interest:</i>		<i>Independent variable of interest:</i>	
Panel A		Panel B	
Access to charities_B	0.0710 (0.0461)	Number of Charities_B	0.0313 (0.0398)
Access to charities_E	0.0397 (0.0433)	Number of Charities_E	0.0444** (0.0187)
Access to charities_H	-0.0263 (0.0743)	Number of Charities_H	-0.00960 (0.0649)
Access to charities_R	0.0206 (0.0268)	Number of Charities_R	0.0127 (0.00852)
Access to charities_Rss	0.0212 (0.0649)	Number of Charities_Rss	-0.0191 (0.0562)
Access to charities_W	-0.0249 (0.0454)	Number of Charities_W	0.0403*** (0.0108)
Access to charities_O	0.702*** (0.0501)	Number of Charities_O	0.702*** (0.0501)
Number of clusters	949	Number of clusters	949
Observations	443,960	Observations	443,960

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.14: Wages regressions

Access regression estimates in <i>Panel A</i>			
Number of charities regression estimates in <i>Panel B</i>			
Dependent variable: ln(wages)	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
<i>Independent variable of interest:</i>			
Panel A			
Access to charities	0.0689** (0.0271)	0.0653** (0.0260)	0.0341 (0.0225)
Adjusted R-square	0.252	0.252	0.252
Panel B			
Number of Charities	0.0337*** (0.00800)	0.0328*** (0.00769)	0.0238*** (0.00638)
Adjusted R-square	0.254	0.254	0.254
<i>Controls:</i>			
Demographic characteristics	Y	Y	Y
Agreements	Y	Y	Y
Population	Y	Y	Y
Postal Code	Y	Y	Y
Amount charitable activity	Y	Y	Y
Distance from urban core	Y	Y	Y
Provincial fixed effect	Y	Y	Y
Time fixed effects	Y	Y	Y
Number of clusters	943	943	943
Observations	292,535	292,535	292,535

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.15: Wages regressions by groups

	Access regression estimates			Number of charities regression estimates		
Dependent variable: ln(wages)	(1) Ex R	(2) Inc Rss	(3) All	(4) Ex R	(5) Inc Rss	(6) All
Male N=152,550 Number of clusters: 938	0.0865*** (0.0282)	0.0846*** (0.0271)	0.0465** (0.0233)	0.0292*** (0.00655)	0.0284*** (0.00637)	0.0207*** (0.00538)
Female N=139,985 Number of clusters: 932	0.0461 (0.0318)	0.0413 (0.0303)	0.0191 (0.0266)	0.0372*** (0.00986)	0.0361*** (0.00941)	0.0259*** (0.00767)
Indigenous Identity N=241,945 Number of clusters: 940	0.0636** (0.0274)	0.0603** (0.0260)	0.0384* (0.0205)	0.0403*** (0.0104)	0.0394*** (0.00992)	0.0272*** (0.00836)
Non-Indigenous Identity N=50,590 Number of clusters: 812	0.0505 (0.0492)	0.0418 (0.0481)	-0.0270 (0.0542)	0.0100 (0.00632)	0.00948 (0.00617)	0.00520 (0.00435)
Registered under the Indian Act N=202,930 Number of clusters: 928	0.0187 (0.0252)	0.0194 (0.0239)	0.0107 (0.0190)	0.0175** (0.00709)	0.0195*** (0.00625)	0.0110** (0.00534)
Not registered under the Indian Act N=89,605 Number of clusters: 849	0.0996** (0.0401)	0.0922** (0.0383)	0.0439 (0.0414)	0.0307*** (0.00801)	0.0296*** (0.00762)	0.0232*** (0.00653)
Indigenous Identity & Male N=126,015 Number of clusters: 934	0.0532* (0.0297)	0.0542* (0.0282)	0.0389* (0.0233)	0.0335*** (0.00798)	0.0331*** (0.00763)	0.0236*** (0.00669)
Indigenous Identity & Female N=115,930 Number of clusters: 927	0.0739** (0.0301)	0.0664** (0.0287)	0.0389* (0.0226)	0.0461*** (0.0130)	0.0447*** (0.0124)	0.0301*** (0.0101)
Non-Indigenous Identity & Male N=26,535 Number of clusters: 747	0.155*** (0.0500)	0.142*** (0.0497)	0.0328 (0.0500)	0.0109** (0.00516)	0.0101** (0.00505)	0.00453 (0.00349)
Non-Indigenous Identity & Female N=24,050 Number of clusters: 695	-0.0588 (0.0584)	-0.0632 (0.0566)	-0.0849 (0.0688)	0.00897 (0.00910)	0.00858 (0.00874)	0.00592 (0.00629)
Registered under I.A. & Male N=105,830 Number of clusters: 910	0.0185 (0.0321)	0.0209 (0.0303)	0.0123 (0.0236)	0.0174** (0.00866)	0.0200*** (0.00757)	0.0121** (0.00603)
Registered under I.A. & Female N=97,100 Number of clusters: 909	0.0183 (0.0232)	0.0176 (0.0224)	0.0102 (0.0194)	0.0174*** (0.00667)	0.0189*** (0.00608)	0.00986* (0.00533)
Not registered under I.A. & Male N=46,725 Number of clusters: 804	0.150*** (0.0376)	0.144*** (0.0360)	0.0773** (0.0384)	0.0268*** (0.00640)	0.0258*** (0.00608)	0.0197*** (0.00531)
Not registered under I.A. & Female N=42,880 Number of clusters: 761	0.0371 (0.0513)	0.0300 (0.0487)	0.00465 (0.0516)	0.0329*** (0.0101)	0.0317*** (0.00960)	0.0251*** (0.00807)

Column 1 and 4: excluding religious charities. Column 2 and 5: including religious charities with social services. Column 3 and 6: including religious charities. The number of observations are retrieved from the summary statistics. Robust standard errors in parentheses are clustered at the CSD level. Significance: * p<.10, ** p<.05, *** p<.01

Table 1.16: Wages regressions - Charity programs breakdown

Access regression estimates in *Panel A*
Number of charities regression estimates in *Panel B*

Dependent variable: ln(wages)			
<i>Independent variable of interest:</i>		<i>Independent variable of interest:</i>	
Panel A		Panel B	
Access to charities_B	0.134*** (0.0408)	Number of Charities_B	0.0792*** (0.0301)
Access to charities_E	0.120*** (0.0441)	Number of Charities_E	0.0717*** (0.0221)
Access to charities_H	0.0537 (0.0462)	Number of Charities_H	0.0665* (0.0402)
Access to charities_R	0.000640 (0.0271)	Number of Charities_R	-0.00922 (0.0126)
Access to charities_Rss	0.0848** (0.0408)	Number of Charities_Rss	0.0485 (0.0410)
Access to charities_W	0.0838** (0.0412)	Number of Charities_W	0.0710*** (0.00972)
Access to charities_O	0.714*** (0.0792)	Number of Charities_O	0.714*** (0.0792)
Number of clusters	943	Number of clusters	943
Observations	292,535	Observations	292,535

The number of observations are retrieved from the summary statistics.
Robust standard errors in parentheses are clustered at the CSD level.
Significance: * p<.10, ** p<.05, *** p<.01

Table 1.17: PSM model CWB Analysis

Average treatment effect on the treated (ATT)				
Matching algorithms				
<i>Panel A: Excluding religious charities</i>				
Dependent variable:	Nearest Neighbour	Kernel	Radius	Local Linear Regr.
CWB	4.248*** (1.470) n=1,750	4.651*** (1.470) n=1,775	4.588*** (1.470) n=1,765	4.420*** (1.470) n=1,775
Education_WB	5.070*** (1.648) n=1,105	6.903*** (1.648) n=1,130	6.117*** (1.648) n=1,125	6.583*** (1.648) n=1,130
Housing_WB	5.175*** (2.736) n=1,105	4.319*** (2.736) n=1,130	3.947** (2.736) n=1,125	3.974* (2.736) 1,130
Income_WB	6.851*** (1.787) n=1,105	6.574*** (1.787) n=1,130	5.360*** (1.787) n=1,125	5.974*** (1.787) n=1,130
LFA_WB	3.623*** (1.105) n=1,125	2.858*** (1.105) n=1,130	2.132* (1.105) n=1,125	2.649* (1.105) n=1,130
<i>Panel B: Including religious charities with social services</i>				
Dependent variable:	Nearest Neighbour	Kernel	Radius	Local Linear Regr.
CWB	4.994*** (1.251) n=1,750	4.754*** (1.251) n=1,775	4.178*** (1.251) n=1,775	4.404*** (1.251) n=1,775
Education_WB	5.637*** (1.586) n=1,105	7.065*** (1.586) n=1,130	6.127*** (1.586) n=1,125	6.626*** (1.586) n=1,130
Housing_WB	5.319*** (1.966) n=1,105	4.871*** (1.966) n=1,130	4.010*** (1.966) n=1,125	4.320* (1.966) n=1,130
Income_WB	6.541*** (1.581) n=1,105	6.521*** (1.581) n=1,130	5.818 *** (1.581) n=1,125	5.774*** (1.581) n=1,130
LFA_WB	4.052*** (1.033) n=1,105	3.056*** (1.033) n=1,130	2.883*** (1.033) n=1,125	2.798** (1.033) n=1,130
<i>Panel C: Including religious charities</i>				
Dependent variable:	Nearest Neighbour	Kernel	Radius	Local Linear Regr.
CWB	4.803*** (1.054) n=1,735	4.968*** (1.054) n=1,775	4.867*** (1.054) n=1,770	4.777*** (1.054) n=1,770
Education_WB	6.604*** (1.239) n=1,090	6.881*** (1.239) n=1,130	5.763 *** (1.239) n=1,120	6.779*** (1.239) n=1,125
Housing_WB	6.116*** (1.797) n=1,090	5.905*** (1.797) n=1,130	5.519*** (1.797) n=1,120	5.759*** (1.797) n=1,125
Income_WB	6.783*** (1.504) n=1,090	6.746*** (1.504) n=1,130	5.743*** (1.504) n=1,120	6.204*** (1.504) n=1,125
LFA_WB	3.773*** (0.876) n=1,090	3.588*** (0.876) n=1,130	3.353*** (0.876) n=1,120	3.305*** (0.876) n=1,125

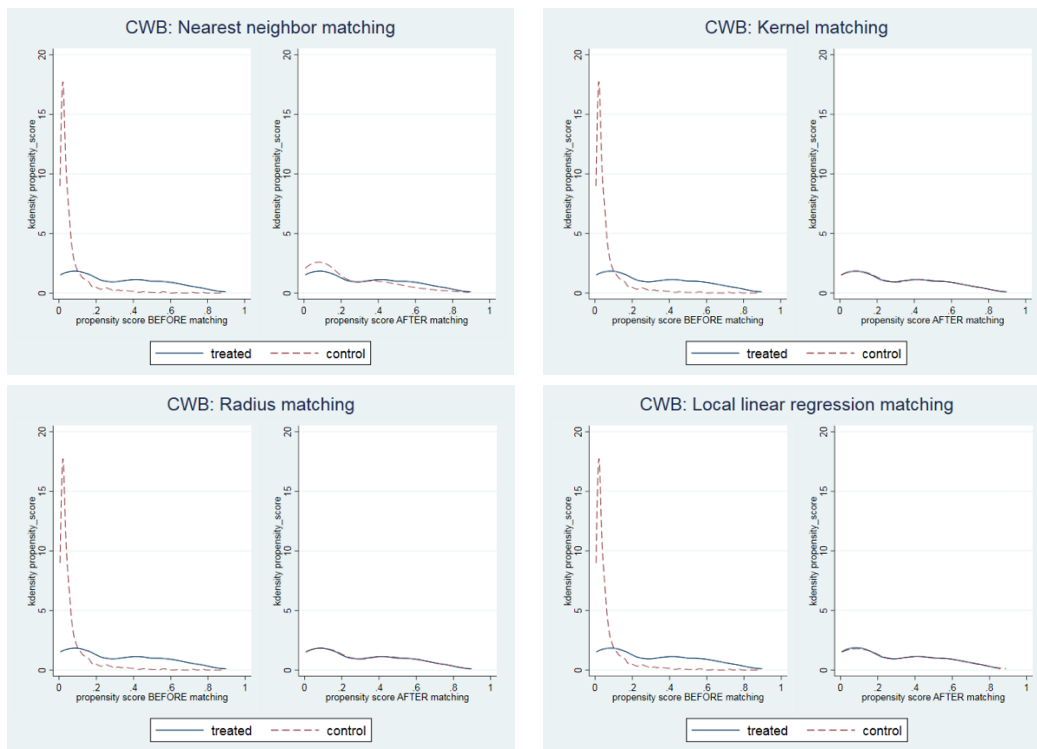
Number of observations is based on the common support sample. The standard errors in parenthesis are bootstrapped.
Significance: * p<.10, ** p<.05, *** p<.01

Table 1.18: PSM model CWB Analysis - Charity programs breakdown

Average treatment effect on the treated (ATT)							
Matching algorithm: Nearest Neighbour							
Dependent variable:	Independent variables						
	Access Benefits (1)	Access Education (2)	Access Health (3)	Access Religion (4)	Access Religion Social Serv. (5)	Access Welfare (6)	Access Others (7)
CWB	8.03*** (1.753) n= 1,775	1.626 (1.749) n= 1,775	4.10 (2.549) n=1,775	5.756*** (1.378) n= 1,770	7.676*** (2.478) n=1,775	3.089 (2.571) n=1,765	n.a. ¹²
Education_WB	11.379*** (2.570) n=1,130	3.727* (2.296) n=1,130	3.65 (4.315) n=1,130	5.045*** (1.434) n= 1,125	6.030** (3.503) n=1,130	4.513 (3.117) n=1,120	n.a. ¹²
Housing_WB	8.828*** (3.070) n=1,130	0.50 (3.419) n=1,130	4.15 (4.042) n=1,130	7.067*** (2.013) n=1,125	8.576*** (4.010) n=1,130	5.231* (3.584) n=1,120	n.a. ¹²
Income_WB	9.00*** (2.343) n=1,130	2.439 (2.481) n=1,130	6.20 (4.088) n=1,130	7.844*** (1.597) n=1,125	8.818** (3.741) n=1,130	0.128 (3.815) n=1,120	n.a. ¹²
LFA_WB	6.259*** (1.434) n=1,130	2.00 (1.566) n=1,130	4.35 (2.401) n=1,130	4.536*** (1.067) n=1,125	6.212*** (2.706) n=1,130	-0.0769 (2.501) n=1,120	n.a. ¹²

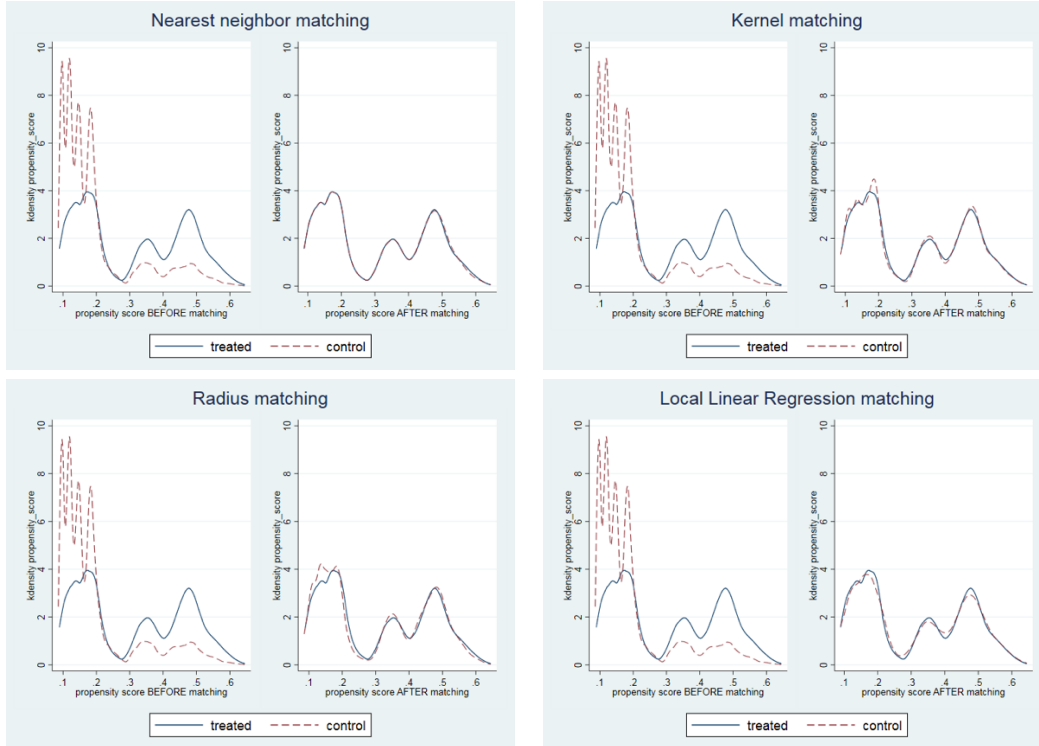
Number of observations is based on the common support sample. The standard errors in parenthesis are bootstrapped.
¹²Results in column 7 are not available, as the CSDs with these charities are in the off support zone, hence there are no observations for these regressions. Significance: * p<.10, ** p<.05, *** p<.01.

Figure 1.1: Propensity score of CWB Index before and after matching



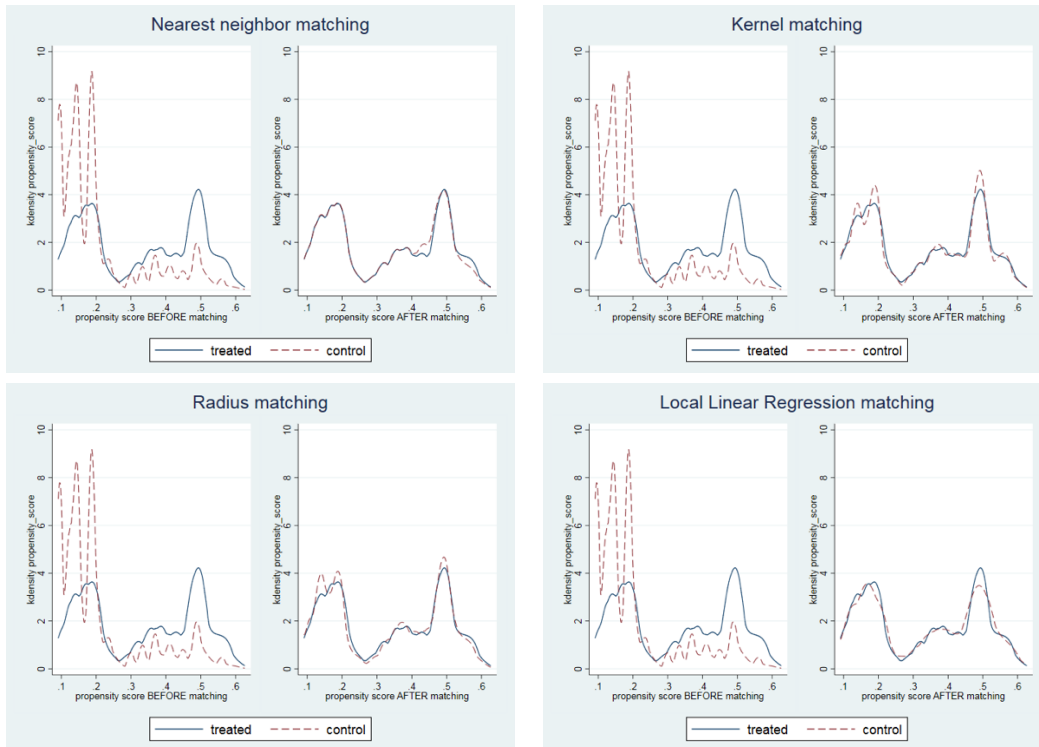
Treatment-group observations are reserves/communities with charitable organizations
Control-group observations are reserves/communities without charitable organizations

Figure 1.2: Propensity score of *Household Income* and *Total Income* before and after matching



Treatment-group observations are reserves/communities with charitable organizations
Control-group observations are reserves/communities without charitable organizations

Figure 1.3: Propensity score of *Wages* before and after matching



Treatment-group observations are reserves/communities with charitable organizations
Control-group observations are reserves/communities without charitable organizations

Table 1.19: PSM model Individual level Analysis

Average treatment effect on the treated (ATT)							
Dependent variable:	Nearest Neighbour	Kernel	Radius	Local Linear Regr.			
Panel A: Excluding religious charities							
Ln(household income)	0.0695*** (0.0177) n=n.r.	0.0649*** (0.0177) n=n.r.	0.078*** (0.0177) n=n.r.	0.0613*** (0.0177) n=n.r.			
Panel B: Including religious charities with social services							
Ln(household income)	0.0658*** (0.0160) n=n.r.	0.0662*** (0.0160) n=n.r.	0.0784*** (0.0192) n=n.r.	0.0611*** (0.0192) n=n.r.			
Panel C: Including religious charities							
Ln(household income)	0.0773*** (0.0174) n=n.r.	0.0798*** (0.0197) n=n.r.	0.0846*** (0.0197) n=n.r.	0.0786*** (0.0197) n=n.r.			
Panel A: Excluding religious charities							
Ln(total income)	0.0643*** (0.0220) n=n.r.	0.0653*** (0.0220) n=n.r.	0.0892*** (0.0220) n=n.r.	0.0609** (0.0220) n=n.r.			
Panel B: Including religious charities with social services							
Ln(total income)	0.0761*** (0.0207) n=n.r.	0.0737*** (0.0250) n=n.r.	0.0971*** (0.0237) n=n.r.	0.0672*** (0.0250) n=n.r.			
Panel C: Including religious charities							
Ln(total income)	0.0795*** (0.0196) n=n.r.	0.0928*** (0.0210) n=n.r.	0.0994*** (0.0218) n=n.r.	0.0980*** (0.0201) n=n.r.			
Panel A: Excluding religious charities							
Ln(wages)	0.2036*** (0.0236) n=n.r.	0.1997*** (0.0236) n=n.r.	0.2124*** (0.0236) n=n.r.	0.1643*** (0.0236) n=n.r.			
Panel B: Including religious charities with social services							
Ln(wages)	0.1883*** (0.0199) n=n.r.	0.1896*** (0.0199) n=n.r.	0.2072*** (0.0199) n=n.r.	0.1576*** (0.0195) n=n.r.			
Panel C: Including religious charities							
Ln(wages)	0.1430*** (0.0187) n=n.r.	0.1595*** (0.0187) n=n.r.	0.1701*** (0.0187) n=n.r.	0.1611*** (0.0190) n=n.r.			
Panel D: Charity programs breakdown							
Matching algorithm: Nearest Neighbour							
	Independent variables						
	Access	Access	Access	Access	Access	Access	Access
Dependent variable:	Benefits (1)	Education (2)	Health (3)	Religion (4)	Religion Social Serv. (5)	Welfare (6)	Others (7)
Ln(household income)	0.1579*** (0.0200) n=n.r.	0.1124*** (0.0170) n=n.r.	0.1852*** (0.0411) n=n.r.	0.1697*** (0.0186) n=n.r.	0.1826*** (0.0195) n=n.r.	0.0544*** ((0.0205) n=n.r.	0.3678*** (0.0891) n=n.r.
Ln(total income)	0.2147*** (0.0265) n=n.r.	0.1527*** (0.0240) n=n.r.	0.1881*** (0.0582) n=n.r.	0.1999*** (0.0200) n=n.r.	0.2318*** (0.0292) n=n.r.	0.0200*** (0.0281) n=n.r.	0.3707*** (0.1229) n=n.r.
Ln(wages)	0.2955*** (0.0255) n=n.r.	0.2925*** (0.0186) n=n.r.	0.1674*** (0.0387) n=n.r.	0.2225*** (0.0197) n=n.r.	0.2433*** (0.0331) n=n.r.	0.2197*** (0.0259) n=n.r.	0.5712*** (0.1228) n=n.r.

The standard errors in parenthesis are bootstrapped. Significance: * p<.10, ** p<.05, *** p<.01
Number of observations has not been released by the RDC.

Table 1.20: CWB regressions - Robustness check

Access regression estimates in <i>Panel A</i> - Number of charities regression estimates in <i>Panel B</i>			
Dependent variable:			
CWB	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
1a) First Nation CSDs			
<i>Independent variable of interest:</i>			
Panel A			
Access to charities	2.884*** (0.674)	2.803*** (0.624)	2.973*** (0.580)
Adjusted R-square	0.674	0.674	0.676
Panel B			
Number of Charities	1.561*** (0.362)	1.571*** (0.324)	1.223*** (0.237)
Adjusted R-square	0.673	0.674	0.675
Number of clusters First Nations	671	671	671
Observations First Nation	1,630	1,630	1,630
1b) Inuit CSDs			
Panel A			
Access to charities	3.210*** (0.998)	2.038** (0.775)	2.164*** (0.640)
Adjusted R-square	0.783	0.776	0.782
Panel B			
Number of Charities	0.559 (0.385)	0.550 (0.370)	0.712** (0.314)
Adjusted R-square	0.770	0.770	0.778
Number of clusters Inuit	51	51	51
Observations Inuit	145	145	145
2) Two-way clustering			
Panel A			
Access to charities	3.008*** (0.453)	2.745*** (0.554)	2.901*** (0.568)
Adjusted R-square	0.676	0.676	0.679
Panel B			
Number of Charities	1.120*** (0.137)	1.087*** (0.153)	0.930*** (0.124)
Adjusted R-square	0.677	0.677	0.678
Number of clusters - CSD	722	722	722
Number of clusters - year	3	3	3
Observations	1,775	1,775	1,775
3) CWB recalculated regressions			
Panel A			
Access to charities	3.621*** (0.690)	3.417*** (0.624)	3.273*** (0.556)
Adjusted R-square	0.486	0.486	0.488
Panel B			
Number of Charities	1.294*** (0.214)	1.273*** (0.209)	1.007*** (0.160)
Adjusted R-square	0.486	0.487	0.487
Number of clusters	950	950	950
Observations	2,510	2,510	2,510

Robust standard errors in parentheses are clustered at the CSD level, and at the at the CSD and year level for the two-way clustering. Significance: * p<.10, ** p<.05, *** p<.01

Table 1.21: CWB regressions - Robustness check
Low / High/ Medium CWB

Access regression estimates in <i>Panel A</i>			
Number of charities regression estimates in <i>Panel B</i>			
Dependent variable: CWB	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
CWB: Low (0 - 53)			
<i>Independent variable of interest:</i>			
<i>Panel A</i>			
Access to charities	1.577** (0.754)	1.813** (0.707)	1.930*** (0.672)
Adjusted R-square	0.197	0.199	0.203
<i>Panel B</i>			
Number of Charities	1.115*** (0.380)	1.176*** (0.366)	1.219*** (0.286)
Adjusted R-square	0.198	0.199	0.205
Number of clusters	288	288	288
Observations	605	605	605
CWB: Medium (54 - 63)			
<i>Panel A</i>			
Access to charities	0.122 (0.477)	0.270 (0.406)	0.496 (0.384)
Adjusted R-square	0.136	0.136	0.139
<i>Panel B</i>			
Number of Charities	0.0304 (0.313)	0.109 (0.270)	0.116 (0.236)
Adjusted R-square	0.136	0.136	0.136
Number of clusters	351	351	351
Observations	555	555	555
CWB: High (64-100)			
<i>Panel A</i>			
Access to charities	1.936*** (0.533)	1.707*** (0.475)	1.156** (0.459)
Adjusted R-square	0.578	0.577	0.572
<i>Panel B</i>			
Number of Charities	0.729*** (0.119)	0.711*** (0.105)	0.511*** (0.0967)
Adjusted R-square	0.585	0.586	0.582
Number of clusters	326	326	326
Observations	620	620	620

Robust standard errors in parentheses are clustered at the CSD level.
Significance: * p<.10, ** p<.05, *** p<.01

Table 1.22: Household income regressions - Robustness check

Dependent variable: ln(household income)	Access regression estimates in <i>Panel A</i>		
	Number of charities regression estimates in <i>Panel B</i>		
	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
Only individuals who lived at least for two periods in the same CSD			
<i>Independent variable of interest:</i>			
Panel A			
Access to charities	0.0505* (0.0299)	0.0505* (0.0285)	0.0521** (0.0243)
Adjusted R-square	0.360	0.360	0.361
Panel B			
Number of Charities	0.0310*** (0.00921)	0.0297*** (0.00884)	0.0225*** (0.00714)
Adjusted R-square	0.362	0.362	0.362
Number of clusters	946	946	946
Observations	380,610	380,610	380,610
Only individuals living in a community for which a CWB Index has been calculated			
Panel A			
Access to charities	0.0498* (0.0294)	0.0490* (0.0280)	0.0493** (0.0241)
Adjusted R-square	0.365	0.365	0.365
Panel B			
Number of Charities	0.0272*** (0.00888)	0.0259*** (0.00859)	0.0205*** (0.00675)
Adjusted R-square	0.366	0.366	0.366
Number of clusters	727	727	727
Observations	416,010	416,010	416,010
Two-way clustering: CSD and year			
Panel A			
Access to charities	0.0509 (0.0319)	0.0507* (0.0278)	0.0498 (0.0311)
Adjusted R-square	0.360	0.360	0.360
Panel B			
Number of Charities	0.0271*** (0.00605)	0.0260*** (0.00525)	0.0203*** (0.00590)
Adjusted R-square	0.361	0.361	0.361
Number of clusters - CSD	949	949	949
Number of clusters - year	3	3	3
Observations	443,960	443,960	443,960

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.23: Total income regressions - Robustness check

Dependent variable: ln(total income)	Access regression estimates in <i>Panel A</i>		
	Number of charities regression estimates in <i>Panel B</i>		
	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
Only individuals who lived at least for two periods in the same CSD			
<i>Independent variable of interest:</i>			
<i>Panel A</i>			
Access to charities	0.00554 (0.0302)	0.00668 (0.0288)	0.0100 (0.0245)
Adjusted R-square	0.290	0.290	0.290
<i>Panel B</i>			
Number of Charities	0.0228*** (0.00702)	0.0217*** (0.00669)	0.0172*** (0.00494)
Adjusted R-square	0.290	0.290	0.290
Number of clusters	946	946	946
Observations	380,610	380,610	380,610
Only individuals living in a community for which a CWB Index has been calculated			
<i>Panel A</i>			
Access to charities	0.0137 (0.0292)	0.0138 (0.0279)	0.0148 (0.0238)
Adjusted R-square	0.299	0.299	0.299
<i>Panel B</i>			
Number of Charities	0.0202*** (0.00663)	0.0191*** (0.00641)	0.0156*** (0.00476)
Adjusted R-square	0.299	0.299	0.299
Number of clusters	727	727	727
Observations	416,010	416,010	416,010
Two-way clustering: CSD and year			
<i>Panel A</i>			
Access to charities	0.0113 (0.0423)	0.0115 (0.0380)	0.0116 (0.0369)
Adjusted R-square	0.294	0.295	0.295
<i>Panel B</i>			
Number of Charities	0.0193** (0.00955)	0.0183*** (0.00815)	0.0147* (0.00867)
Adjusted R-square	0.295	0.295	0.295
Number of clusters - CSD	949	949	949
Number of clusters - year	3	3	3
Observations	443,960	443,960	443,960

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

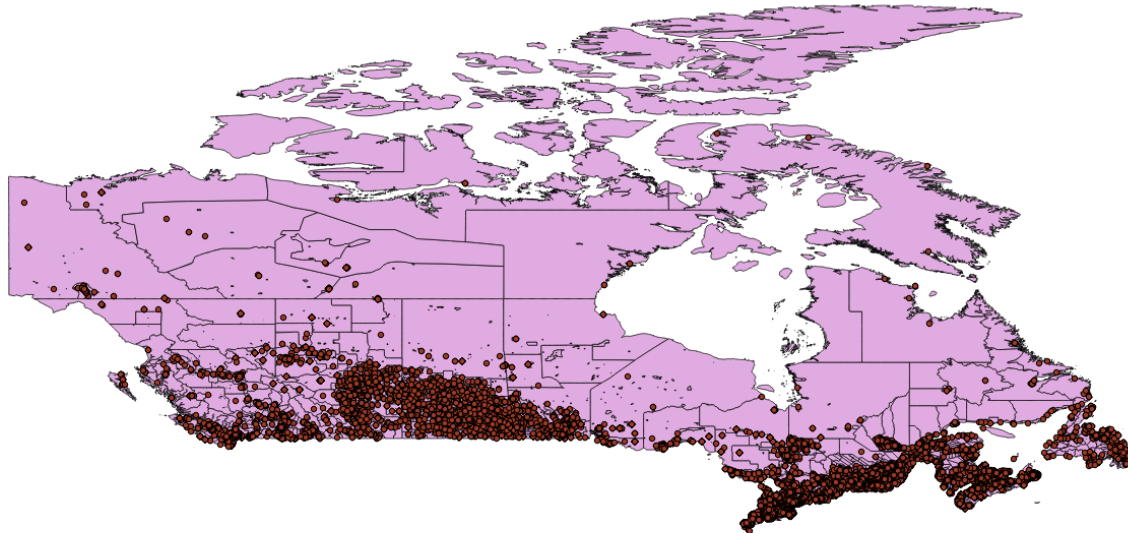
Table 1.24: Wages regressions - Robustness check

Dependent variable: ln(wages)	Access regression estimates in <i>Panel A</i> Number of charities regression estimates in <i>Panel B</i>		
	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
Only individuals who lived at least for two periods in the same CSD			
<i>Independent variable of interest:</i>			
Panel A			
Access to charities	0.0779*** (0.0269)	0.0736*** (0.0258)	0.0459** (0.0217)
Adjusted R-square	0.242	0.242	0.242
Panel B			
Number of Charities	0.0407*** (0.00929)	0.0396*** (0.00885)	0.0284*** (0.00743)
Adjusted R-square	0.244	0.244	0.244
Number of clusters	937	937	937
Observations	246,545	246,545	246,545
Only individuals living in a community for which a CWB Index has been calculated			
Panel A			
Access to charities	0.0678** (0.0267)	0.0650** (0.0256)	0.0376* (0.0214)
Adjusted R-square	0.257	0.257	0.257
Panel B			
Number of Charities	0.0333*** (0.00793)	0.0324*** (0.00763)	0.0237*** (0.00630)
Adjusted R-square	0.259	0.259	0.259
Number of clusters	727	727	727
Observations	273,855	273,855	273,855
Two-way clustering: CSD and year			
Panel A			
Access to charities	0.0689 (0.0498)	0.0653 (0.0462)	0.0341 (0.0262)
Adjusted R-square	0.252	0.252	0.252
Panel B			
Number of Charities	0.0337*** (0.00957)	0.0328*** (0.00823)	0.0238*** (0.00736)
Adjusted R-square	0.254	0.254	0.254
Number of clusters - CSD	943	943	943
Number of clusters - year	3	3	3
Observations	292,535	292,535	292,535

The number of observations are retrieved from the summary statistics.
Robust standard errors in parentheses are clustered at the CSD level.
Significance: * p<.10, ** p<.05, *** p<.01

Appendix 1.A: Figures

Figure 1.1A: Charitable organizations in Canada 2011

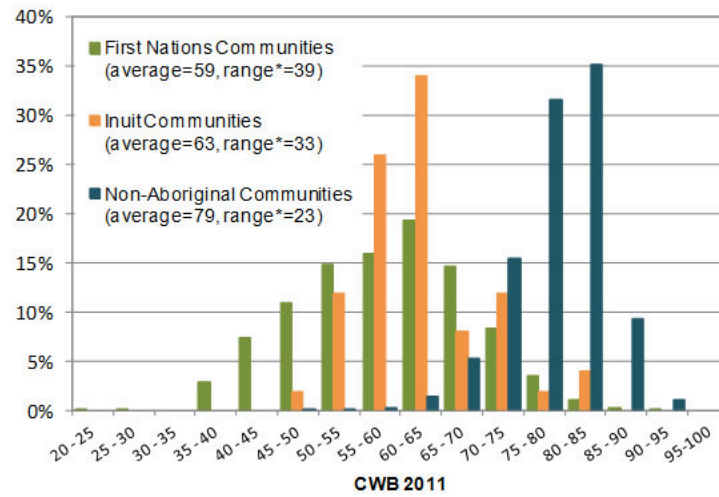


Scale: 1:7,756,283

Map produced in QGis with sources from Statistics Canada and CRA

Charities are located in every province and territories. The highest concentration of charitable organizations can be found in the Province of Ontario (35%), followed by Québec (19%), British Columbia (14%) and Alberta (11%). The lowest concentration, with less than 1% is in Prince Edward Island, and in the three territories: Northwest Territories, Nunavut and Yukon.

Figure 1.2A: Variation in CWB score in 2011³⁴

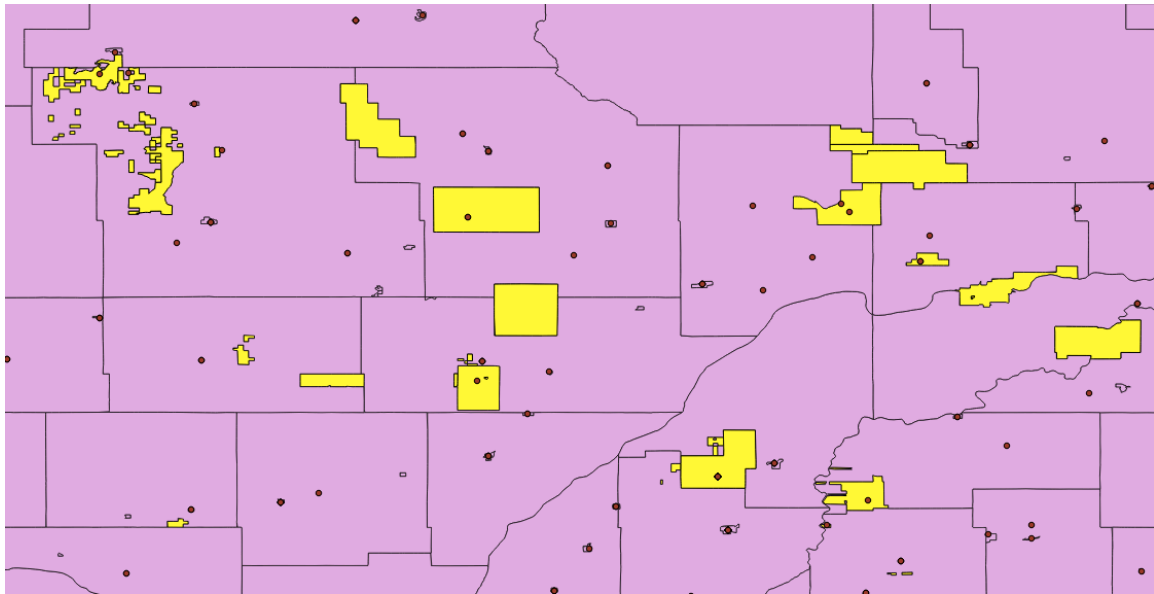


**Excludes outliers in the extreme top and bottom 2.5% of the range.*

Source: Statistics Canada and NHS 2011

³⁴ Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1419864229405/1419864303946-chp4>.

Figure 1.3A: Indian Reserve Settlements in Saskatchewan – 2011

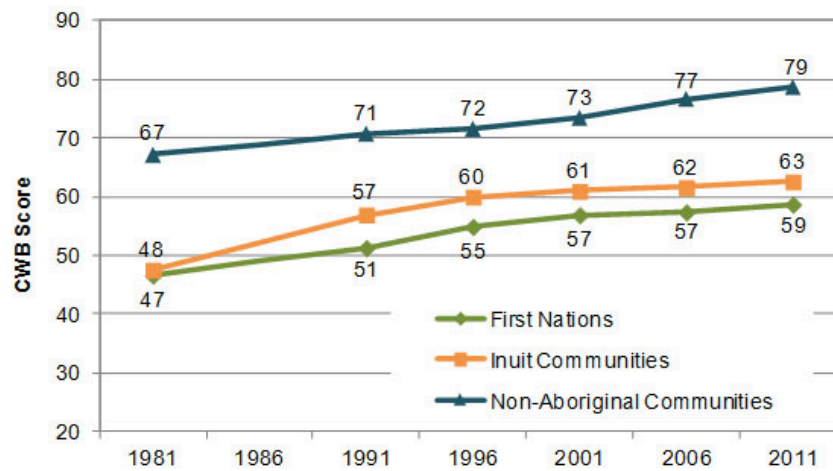


Scale: 1:303,133

Map produced in QGIS with sources from Statistics Canada and CRA.

The yellow polygons represent some Indian Reserve Settlements (IRS) in Saskatchewan and the red dots are the location of one, or more charities if they share the same postal code.

Figure 1.4A: Average CWB score, First Nations, Inuit and non-Indigenous communities, 1981-2011³⁵



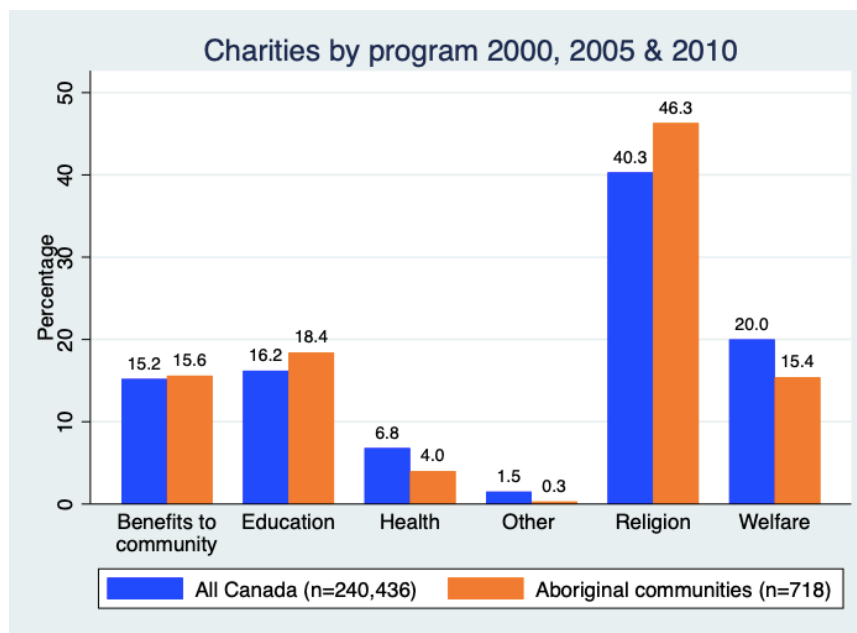
Source: Statistics Canada, Censuses of Population, 1981-2006 and NHS, 2011

³⁵ Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1419864229405/1419864303946>.

Appendix 1.B: Description of charities located in the Indigenous communities

338 charities are located within the borders of an Indigenous community. Since some of them are present in more periods, the total number of observations reaches 718. The following analysis will be based on this last number.

Figure 1.1B



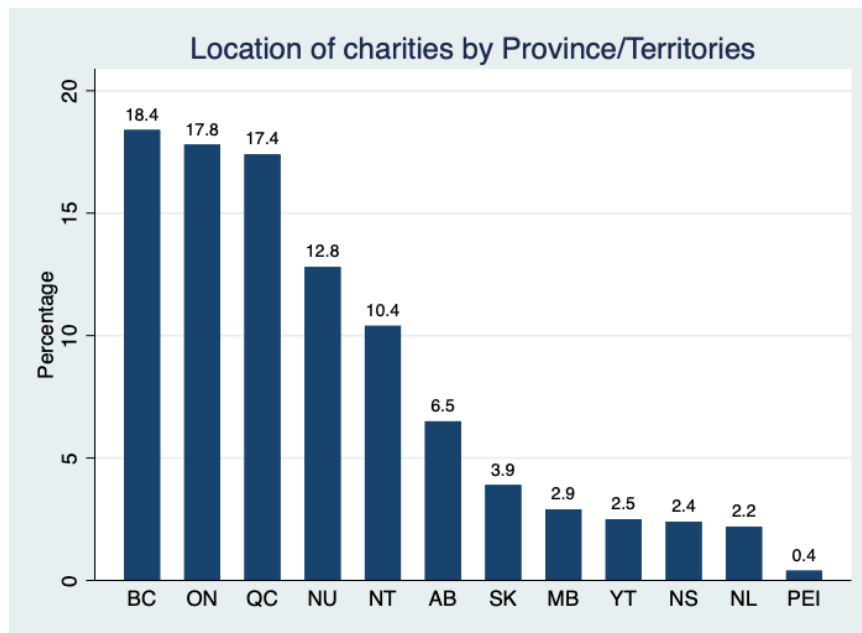
Source: CRA - T3010

In the First Nation reserves and Inuit communities of this study, 15.6% of the registered charities have a *benefits to communities* program, 18.4% pursue an *educational* purpose, 4% deal with *health* related issues, 0.3% serve *other* beneficial purposes to the communities, 46.3% are *religious* and 15.4% have a *welfare* program. The first four programs are in line with the proportion of charities by program when considering all charities across Canada for the same three years, however, there are more religious and less welfare charities in comparison to the Canadian context (Figure 1.1B).

The overall increase in the number of charities over the period from 2000 to 2010 is 20.4%. Welfare charities increased by 43.3%, health charities by 57.1%, education charities by 33.3% and benefits to community charities increase by 40%. There is no increase in the category religion and other charities. Out of the 718 registered charities, 94.43% are designated as a charitable organization, 3.06% as a public and 2.51% as a private foundation.

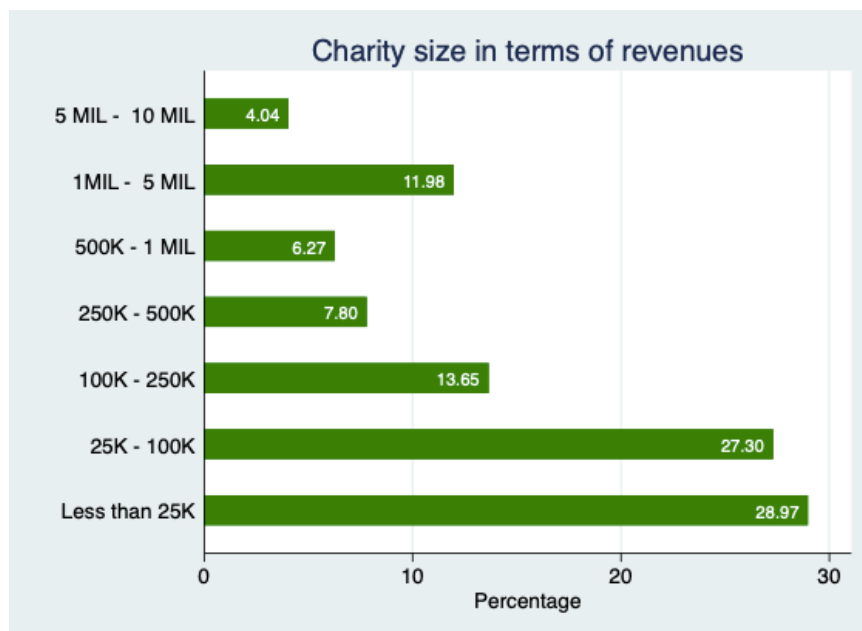
76.88% of the registered charities are located in a rural and 23.12% in an urban area. The provinces with the highest number of charities are British Columbia, followed by Ontario, and Quebec. Prince Edward Island is the province with the least charities (Figure 1.2B).

Figure 1.2B



Source: CRA - T3010

Figure 1.3B



Source: CRA - T3010

Figure 1.3B represent the size of charities in terms of their total revenues. 28.97% are considered as small charities, other 27.3% are between \$25,000 and \$100,000 and the others are above \$100,000.

Are charities located in an Indigenous community a substitute or a complement to the public sector? To tackle this question I start by categorizing charities into core and non-core charities. On the one hand, core charities are not directly controlled by the government and constitute a complement to the public sector. On the other hand, non-core charities are an extension of the government and constitute a substitute for it; hospitals or institutions of learning are an example for this. 93.45% of the charities can be categorized as core charities and 6.55% are non-core charities. This implies that the charitable sector is complementing the provision of public goods and services in Indigenous communities. To strengthen the idea that the charitable sector acts as a complement is the fact that the majority of them (63.93%) is not government funded. The rest, 36.07% receive at least one dollar from any source of governmental level (federal, provincial or municipal).

The amount of money that the charities in these reserves spend on charitable activities is 424 million dollars. Table 1.1B shows how the money is spent, by province/territories and by category.

Table 1.1B: Amount spent on charitable activity by charities located inside Indigenous reserves

By Province/Territories		By Category	
AB	\$ 18,313,666.00	Benefits to community	\$ 38,852,092.00
BC	\$ 41,598,180.00	Education	\$ 212,254,608.00
MB	\$ 31,489,274.00	Health	\$ 15,846,421.00
NB	\$ 1,631,956.75	Other	\$ 233,465.98
NL	\$ 1,551,787.38	Religion	\$ 12,865,413.00
NS	\$ 30,274,874.00	Welfare	\$ 144,313,952.00
NT	\$ 117,188,224.00	Total:	\$ 424,365,951.98
NU	\$ 27,396,352.00		
ON	\$ 117,300,904.00		
PE	\$ 17,208.36		
QC	\$ 36,197,204.00		
SK	\$ 1,310,659.50		
YT	\$ 95,670.47		
Total:	\$ 424,365,960.46		

Besides charitable activity expenditures, charities have also compensation expenses. Payments to employees is a possible cause for the enhanced well-being in the reserve, although it cannot be taken for granted that their employees are all living within the communities. This is above all true for First Nation reserves as they are more scattered across the country as compare to Inuit communities located usually in the North of Canada.

The T3010 provides the number of, and for some years, on the amounts spent for compensated positions. Due to differences in the Schedule on Compensation the analysis has to be done year by year. The only information available for the year 2000 is that 123 charities had 1,631 compensated positions during the fiscal period. In 2005, 117 charities had 1,770 permanent, full-time compensated positions and there were additional 1,601 part-time or part-year compensated employees for 96 charities. Of course, some of those charities have both, full-time and part-time positions. For these latter, the total expenditure on compensation was 9,891,258\$. For the permanent, full-time positions the charities had only to declare the category for the five highest compensated positions, hence it was not possible to determine an exact amount. In 2010, 116 charities compensated 2,113 permanent and full-time employees, whereas 96 charities had 1,818 part-time or seasonal employees. The total expenditure on compensation for part-time or part-year employees was \$13,867,250 and the total expenditure on all compensation (including the previous amount) was \$134,053,264.

Table 1.2B provides a detailed description of the programs that the charities provide. As expected, since there are many religious charities within the Indigenous communities, places of worship, congregations, parishes, dioceses are placed upfront, and services for Aboriginal people take the second most important place.

Table 1.2B: Detailed description of programs in terms of frequency of the program provided

E1	Places of worship, congregations, parishes, dioceses, etc.
A9	Services for Aboriginal peoples
I1	Other
E2	Missionary organizations, evangelism
C1	Scholarships, bursaries, awards
E5	Social outreach, religious fellowship, & auxiliary orgs.
C9	Cultural programs, including heritage languages
D4	Cultural centres and associations
A11	Family and crisis counselling, financial counselling
A2	Food or clothing banks, soup kitchens, hostels

C2	Support of schools and education (parent-teacher groups)
A8	Children and youth services/housing
D1	Museums, galleries, concert halls, etc.
C6	Nursery programs/schools (excluding daycare)
H9	Day care/after-school care
C5	Independent schools and boards
D5	Historical sites, heritage societies
A10	Emergency shelter
F8	Promotion and protection of health
C4	Public schools and boards
C3	Universities and colleges
E3	Religious publishing and broadcasting
D3	Arts schools, grants and awards for artists
A13	Rehabilitation of offenders
A6	Seniors' services
D2	Festivals, performing groups, musical ensembles
E4	Seminaries and other religious colleges
F5	Mental-health services and support groups
C10	Cultural programs, including heritage languages
C11	Research (scientific, medical, environmental, etc)
H8	Summer camps
A7	Services for the physically or mentally challenged
H12	Human rights
H11	Ambulance, fire, rescue, and other emergency services
F2	Nursing homes, hospices
F6	Addiction services and support groups
H6	Libraries
F1	Hospitals
C8	Literacy programs
A5	Other services for low-income people
C7	Vocational and technical training
B5	Literacy/education/training programs
F9	Specialized health organizations
H5	Community halls
H7	Cemeteries
F4	Services for the sick
A3	Employment preparation and training
B1	Social services
H4	Community recreation facilities, trails, etc.
A4	Legal assistance and services
G1	Nature, habitat-conservation groups
F7	Other mutual-support groups (e.g., cancer patients)
H1	Agricultural and horticultural societies
F3	Clinics
B4	Medical services
C13	Youth groups (Girl Guides, cadets, 4-H clubs, etc.)
A1	Housing for seniors, low-income, & those with disabilities
A14	Disaster relief

The CRA determines services for Aboriginal peoples (A9) as follows: “*shelters for youth or victims of abuse; family counselling services; suicide prevention lines and rape crisis center; counselling center for alcoholism and/or substance abuse; organizations focusing on medical conditions that have a particular pattern in Aboriginal communities; youth groups and community centers; drop-in center and seniors' recreational associations; organizations that facilitate industry, commerce, agriculture, or craftsmanship and organizations providing legal services.*”³⁶ Charities have spent over 90 million dollars for these particular services. Other amounts spent by those charities are presented in table 1.3B. The total amount does not sum up to the 424 million dollars spent in Indigenous reserves, as not every charity reports the detailed description of the program.

Table 1.3B: Amount spent on charitable activity by charities located inside Indigenous reserves by program

Program	Amount by Program	%	Description
A9	\$ 92,297,848.00	26.51	Services for Aboriginal peoples
C4	\$ 49,001,464.00	14.08	Public schools and boards
A8	\$ 35,438,144.00	10.18	Children and youth services/housing
C2	\$ 26,842,672.00	7.71	Support of schools and education (parent-teacher groups)
C1	\$ 24,969,108.00	7.17	Scholarships, bursaries, awards
C5	\$ 14,604,572.00	4.2	Independent schools and boards
C3	\$ 9,989,990.00	2.87	Universities and colleges
F3	\$ 9,355,378.00	2.69	Clinics
C6	\$ 9,131,037.00	2.62	Nursery programs/schools (excluding daycare)
E1	\$ 9,071,164.00	2.61	Places of worship, congregations, parishes, dioceses, etc
I1	\$ 8,994,425.00	2.58	Other
D5	\$ 8,192,057.50	2.35	Historical sites, heritage societies
A6	\$ 5,822,524.50	1.67	Seniors' services
C9	\$ 5,264,859.50	1.51	Cultural programs, including heritage languages
D4	\$ 5,081,925.50	1.46	Cultural centers and associations
A13	\$ 3,834,717.25	1.1	Rehabilitation of offenders
A10	\$ 3,795,548.50	1.09	Emergency shelter
H9	\$ 2,820,717.00	0.81	Day care/after-school care
A2	\$ 2,721,698.50	0.78	Food or clothing banks, soup kitchens, hostels
H12	\$ 2,597,947.50	0.75	Human rights
F2	\$ 2,343,897.00	0.67	Nursing homes, hospices
D1	\$ 1,955,300.88	0.56	Museums, galleries, concert halls, etc
A11	\$ 1,900,570.50	0.55	Family and crisis counselling, financial counselling

³⁶ Retrieved from <https://www.canada.ca/en/revenue-agency/services/charities-giving/charities/policies-guidance/policy-statement-012-benefits-aboriginal-peoples-canada.html>

F8	\$ 1,409,855.88	0.40	Promotion and protection of health
A3	\$ 878,358.12	0.25	Employment preparation and training
H5	\$ 839,414.81	0.24	Community halls
H8	\$ 738,579.56	0.21	Summer camps
A4	\$ 733,127.56	0.21	Legal assistance and services
C10	\$ 714,807.19	0.21	Cultural programs, including heritage languages
F5	\$ 651,644.56	0.19	Mental-health services and support groups
E5	\$ 638,647.25	0.18	Social outreach, religious fellowship, & auxiliary orgs.
E2	\$ 594,715.75	0.17	Missionary organizations, evangelism
A7	\$ 539,620.19	0.16	Services for the physically or mentally challenged
F6	\$ 533,099.81	0.15	Addiction services and support groups
B5	\$ 524,092.31	0.15	Literacy/education/training programs
D2	\$ 449,231.69	0.13	Festivals, performing groups, musical ensembles
C7	\$ 395,134.56	0.11	Vocational and technical training (see guide)
A5	\$ 381,276.53	0.11	Other services for low-income people
D3	\$ 331,953.06	0.10	Arts schools, grants and awards for artists
B1	\$ 317,145.69	0.09	Social services
H4	\$ 282,923.56	0.08	Community recreation facilities, trails, etc.
C11	\$ 187,363.50	0.05	Research (scientific, medical, environmental, etc.)
G1	\$ 166,529.41	0.05	Nature, habitat-conservation groups
E3	\$ 127,161.35	0.04	Religious publishing and broadcasting
C8	\$ 122,742.32	0.04	Literacy programs
H7	\$ 116,653.97	0.03	Cemeteries
E4	\$ 105,716.98	0.03	Seminaries and other religious colleges
A1	\$ 104,904.83	0.03	Housing for seniors, low-income, & those with disabilities
F9	\$ 68,254.00	0.02	Specialized health organizations
H6	\$ 66,626.38	0.02	Libraries
C13	\$ 26,569.73	0.01	Youth groups (Girl Guides, cadets, 4-H clubs, etc.)
F4	\$ 19,865.36	0.01	Services for the sick
F1	\$ 11,145.45	0.00	Hospitals
H11	\$ 9,691.73	0.00	Ambulance, fire, rescue, and other emergency services
H1	\$ 4,612.23	0.00	Agricultural and horticultural societies
B4	\$ 2,716.61	0.00	Medical services
A14	\$ 1,629.73	0.00	Disaster relief
F7	\$ 559.45	0.00	Other mutual-support groups (e.g., cancer patients)
	\$ 348,123,937.24		

Appendix 1.C: Tables

Table 1.1C: Details of *CWB* OLS regressions - baseline model

Number of charities regression estimates			
Dependent variable:	CWB (1)	CWB (2)	CWB (3)
<i>Independent variables:</i>			
NCH	1.105*** (0.179)	1.249*** (0.204)	1.120*** (0.192)
<i>Reference: Ratio female</i>			
Ratio male	4.414 (6.741)	2.950 (6.787)	4.257 (6.066)
<i>Reference: Ratio adults</i>			
Ratio young (age: below 15)	-41.65*** (3.835)	-35.36*** (3.852)	-29.15*** (4.511)
Ratio old (age: above 65)	-40.06*** (5.501)	-36.70*** (5.920)	-33.01*** (5.935)
<i>Reference: Ratio Married</i>			
Ratio Single	-24.53*** (4.056)	-25.95*** (4.017)	-23.54*** (4.323)
Ratio Separated/ Divorced/ Widow	48.10*** (7.589)	38.79*** (7.563)	32.65*** (7.271)
<i>Reference: Ratio Indigenous Identity</i>			
Ratio Non-Indigenous Identity	6.820*** (2.418)	8.984*** (2.436)	14.27*** (2.602)
<i>Reference: Ratio Registered under Ind. Act</i>			
Ratio not registered under the Indian Act	7.769*** (0.962)	5.131*** (0.966)	2.385* (1.330)
<i>Reference: Ratio Language English</i>			
Ratio Language French	-0.875 (1.747)	0.694 (1.883)	-6.856*** (2.202)
Ratio Language French and English	19.66*** (3.447)	18.13*** (3.240)	3.854 (2.578)
Ratio Language No F and No E	-9.546* (4.883)	-9.793** (4.489)	-21.70*** (4.803)
Agreements		4.077*** (0.521)	2.949*** (0.533)
Population (logarithmic)		-0.845*** (0.255)	-0.669*** (0.258)
CSD with no Postal Code		0.717 (0.481)	0.909* (0.463)
Amount spent in CSD on charitable activities		1.16e-07 (1.08e-07)	4.86e-08 (8.79e-08)
<i>Reference: Distance 0 km</i>			
Distance 1 to 30 km from urban core		-0.913 (0.708)	-1.581** (0.668)
Distance 31 to 100 km from urban core		-0.780 (0.634)	-1.058* (0.622)
Distance above 100 km from urban core		-1.548** (0.655)	-2.495*** (0.708)
<i>Reference: British Columbia</i>			
Newfoundland and Labrador			4.607** (1.987)
Prince Edward Island			5.415*** (2.016)
Nova Scotia			1.584 (1.266)
New Brunswick			3.403*** (1.079)
Quebec			8.525***

			(1.511)
Ontario			3.739***
			(0.675)
Manitoba			-3.218***
			(0.846)
Saskatchewan			-0.890
			(0.815)
Alberta			-1.094
			(1.005)
Northwest Territories			5.598***
			(0.880)
Nunavut			5.294***
			(1.529)
Yukon			3.767**
			(1.507)
<i>Reference: Year 2001</i>			
Year 2006			-0.538**
			(0.272)
Year 2011			-0.216
			(0.377)
Constant	80.36***	85.46***	81.11***
	(4.331)	(4.566)	(4.204)
Adjusted R-square	0.606	0.628	0.671
Number of Clusters	722	722	722
Observations	1,775	1,775	1,775

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.2C: Details of household income OLS regressions - baseline model

Dependent variable:	Number of charities regression estimates		
	ln(household income) (1)	ln(household income) (2)	ln(household income) (3)
<i>Independent variables:</i>			
NCH	0.0499*** (0.00559)	0.0360*** (0.00713)	0.0271*** (0.00886)
<i>Reference: female</i>			
Male	-0.0492*** (0.00453)	-0.0500*** (0.00468)	-0.0474*** (0.00453)
<i>Reference age: 25 to 30</i>			
Age 31 to 35	-0.0325*** (0.00467)	-0.0286*** (0.00464)	-0.0284*** (0.00459)
Age 36 to 40	-0.0308*** (0.00568)	-0.0235*** (0.00569)	-0.0251*** (0.00552)
Age 41 to 45	0.000487 (0.00685)	0.0103 (0.00684)	0.00837 (0.00668)
Age 46 to 50	0.0395*** (0.00960)	0.0486*** (0.00988)	0.0448*** (0.00960)
Age 51 to 55	0.0838*** (0.00977)	0.0932*** (0.00991)	0.0870*** (0.00948)
Age 56 to 60	0.119*** (0.00913)	0.126*** (0.00925)	0.119*** (0.00917)
Age 61 to 64	0.243*** (0.0127)	0.253*** (0.0128)	0.243*** (0.0127)
<i>Reference: married</i>			
Single	-0.242*** (0.0110)	-0.240*** (0.0101)	-0.242*** (0.00961)
Separated/ Divorced/ Widow	-0.355*** (0.0106)	-0.352*** (0.0101)	-0.336*** (0.00964)
<i>Reference: Indigenous Identity</i>			
Non-Indigenous Identity	0.151*** (0.0293)	0.290*** (0.0307)	0.381*** (0.0228)
<i>Reference: Registered under Ind. Act</i>			
Not registered under the Indian Act	0.361*** (0.0257)	0.168*** (0.0393)	0.0440* (0.0226)
Household size	0.180*** (0.00315)	0.179*** (0.00282)	0.184*** (0.00269)
<i>Reference: Language English</i>			
Language French	0.196*** (0.0273)	0.235*** (0.0360)	-0.113** (0.0464)
Language French and English	0.217*** (0.0311)	0.164*** (0.0206)	0.00115 (0.0169)
Language No F and No E	0.0434 (0.0330)	-0.0319 (0.0275)	-0.0947*** (0.0239)
<i>Reference: None or less than HS</i>			
High School Certificate	0.156*** (0.00937)	0.171*** (0.00866)	0.175*** (0.00769)
Above HS, below bachelor (including trades and apprenticeship certificate)	0.217*** (0.00851)	0.231*** (0.00768)	0.217*** (0.00633)
Bachelor degree	0.510*** (0.0224)	0.509*** (0.0217)	0.524*** (0.0215)
Master, doctorate, degree in Medicine	0.589*** (0.0549)	0.578*** (0.0538)	0.574*** (0.0526)
<i>Reference: Employed</i>			
Not in labour force	-0.659*** (0.0128)	-0.637*** (0.0123)	-0.607*** (0.0116)
Unemployed	-0.430*** (0.0109)	-0.415*** (0.0110)	-0.406*** (0.0100)
Agreements		0.222*** (0.0418)	0.123*** (0.0233)

Population (logarithmic)	-0.0308**	-0.0160	
	(0.0138)	(0.0101)	
CSD with no Postal Code	0.0156	0.0197	
	(0.0303)	(0.0214)	
Amount spent in CSD on charitable activities	1.17e-08*	5.96e-09*	
	(6.61e-09)	(3.12e-09)	
<i>Reference: Distance 0 km</i>			
Distance 1 to 30 km from urban core	-0.114***	-0.102***	
	(0.0393)	(0.0329)	
Distance 31 to 100 km from urban core	-0.0939**	-0.0702***	
	(0.0389)	(0.0271)	
Distance above 100 km from urban core	0.0941**	0.0440*	
	(0.0372)	(0.0260)	
<i>Reference: British Columbia</i>			
Newfoundland and Labrador		0.278***	
		(0.0387)	
Prince Edward Island		0.140	
		(0.0900)	
Nova Scotia		-0.300***	
		(0.0796)	
New Brunswick		-0.0958**	
		(0.0430)	
Quebec		0.327***	
		(0.0418)	
Ontario		0.115***	
		(0.0260)	
Manitoba		-0.205***	
		(0.0362)	
Saskatchewan		-0.161***	
		(0.0284)	
Alberta		0.00711	
		(0.0430)	
Northwest Territories		0.425***	
		(0.0489)	
Nunavut		0.236***	
		(0.0506)	
Yukon		0.289***	
		(0.0405)	
<i>Reference: Year 2001</i>			
Year 2006		-0.0396***	
		(0.0130)	
Year 2011		0.0104	
		(0.0174)	
Constant	9.907***	10.07***	9.991***
	(0.0212)	(0.0920)	(0.0683)
Adjusted R-square	0.328	0.341	0.361
Number of Clusters	949	949	949
Observations	443,960	443,960	443,960

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.3C: Details of *total income* and *wages* OLS regressions - baseline model

Dependent variable:	Number of charities regression estimates					
	ln(total income)			ln(wages)		
	(1)	(2)	(3)	(1)	(2)	(3)
<i>Independent variables:</i>						
NCH	0.0415*** (0.00632)	0.0268*** (0.00697)	0.0193*** (0.00663)	0.0560*** (0.00513)	0.0392*** (0.00625)	0.0337*** (0.00800)
<i>Reference: female</i>						
Male	-0.167*** (0.0167)	-0.169*** (0.0164)	-0.168*** (0.0162)	0.216*** (0.0115)	0.214*** (0.0113)	0.215*** (0.0111)
<i>Reference age: 25 to 30</i>						
Age 31 to 35	0.182*** (0.00656)	0.186*** (0.00652)	0.187*** (0.00649)	0.182*** (0.00816)	0.186*** (0.00816)	0.187*** (0.00801)
Age 36 to 40	0.202*** (0.00774)	0.211*** (0.00780)	0.212*** (0.00758)	0.293*** (0.00855)	0.300*** (0.00863)	0.300*** (0.00839)
Age 41 to 45	0.160*** (0.00807)	0.172*** (0.00830)	0.178*** (0.00779)	0.372*** (0.0102)	0.382*** (0.0103)	0.378*** (0.0102)
Age 46 to 50	0.116*** (0.0116)	0.129*** (0.0118)	0.137*** (0.0110)	0.430*** (0.0111)	0.440*** (0.0113)	0.434*** (0.0110)
Age 51 to 55	0.104*** (0.0126)	0.118*** (0.0127)	0.125*** (0.0118)	0.455*** (0.0131)	0.466*** (0.0131)	0.456*** (0.0128)
Age 56 to 60	0.123*** (0.0142)	0.136*** (0.0145)	0.145*** (0.0141)	0.433*** (0.0166)	0.442*** (0.0165)	0.432*** (0.0160)
Age 61 to 64	0.348*** (0.0154)	0.366*** (0.0152)	0.376*** (0.0155)	0.285*** (0.0302)	0.298*** (0.0299)	0.289*** (0.0295)
<i>Reference: married</i>						
Single	-0.328*** (0.0103)	-0.324*** (0.00962)	-0.321*** (0.00901)	-0.174*** (0.00818)	-0.174*** (0.00793)	-0.182*** (0.00796)
Separated/ Divorced/ Widow	-0.0495*** (0.0111)	-0.0426*** (0.0107)	-0.0290*** (0.0104)	-0.0978*** (0.0104)	-0.0935*** (0.0104)	-0.0804*** (0.0101)
<i>Reference: Indigenous Identity</i>						
Non-Indigenous Identity	0.0299 (0.0291)	0.196*** (0.0266)	0.318*** (0.0199)	0.0383 (0.0321)	0.142*** (0.0310)	0.231*** (0.0237)
<i>Reference: Registered under Ind. Act</i>						
Not registered under the Indian Act	0.383*** (0.0264)	0.184*** (0.0332)	0.0543*** (0.0187)	0.170*** (0.0240)	0.0314 (0.0289)	-0.0391 (0.0256)
Household size	0.0372*** (0.00273)	0.0350*** (0.00253)	0.0390*** (0.00238)	-0.00769*** (0.00251)	-0.0126*** (0.00208)	-0.0131*** (0.00190)
<i>Reference: Language English</i>						
Language French	0.219*** (0.0342)	0.267*** (0.0401)	-0.0909** (0.0399)	-0.00332 (0.0250)	0.0183 (0.0336)	-0.181*** (0.0382)
Language French and English	0.244*** (0.0292)	0.184*** (0.0222)	0.0113 (0.0148)	0.128*** (0.0308)	0.0773*** (0.0197)	-0.0146 (0.0151)
Language No F and No E	-0.0650** (0.0287)	-0.150*** (0.0255)	-0.243*** (0.0238)	-0.208*** (0.0386)	-0.269*** (0.0368)	-0.278*** (0.0364)
<i>Reference: None or less than HS</i>						
High School Certificate	0.158*** (0.0112)	0.182*** (0.0108)	0.200*** (0.0102)	0.216*** (0.0117)	0.240*** (0.0119)	0.242*** (0.0113)
Above HS, below bachelor (including trades and apprenticeship certificate)	0.299*** (0.00990)	0.321*** (0.00906)	0.301*** (0.00797)	0.297*** (0.0112)	0.319*** (0.0105)	0.321*** (0.0101)
Bachelor degree	0.646*** (0.0222)	0.645*** (0.0205)	0.651*** (0.0188)	0.798*** (0.0228)	0.799*** (0.0221)	0.798*** (0.0211)
Master, doctorate, degree in Medicine	0.769*** (0.0585)	0.760*** (0.0567)	0.755*** (0.0541)	0.822*** (0.0434)	0.818*** (0.0429)	0.801*** (0.0414)
<i>Reference: Employed</i>						
Not in labour force	-1.155*** (0.0150)	-1.132*** (0.0142)	-1.106*** (0.0141)	-0.983*** (0.0164)	-0.980*** (0.0159)	-0.970*** (0.0159)
Unemployed	-0.742***	-0.727***	-0.717***	-0.732***	-0.722***	-0.712***

	(0.0150)	(0.0150)	(0.0144)	(0.0130)	(0.0127)	(0.0129)
Agreements		0.204***	0.124***		0.121***	0.0664***
		(0.0350)	(0.0204)		(0.0267)	(0.0233)
Population (logarithmic)		-0.0316**	-0.0259***		0.0232*	0.00602
		(0.0138)	(0.00916)		(0.0119)	(0.00839)
CSD with no Postal Code		-0.0105	-0.000266		0.0286	0.0271
		(0.0303)	(0.0200)		(0.0280)	(0.0176)
Amount spent in CSD on charitable activities		1.18e-08**	7.06e-09**		4.79e-09	-6.17e-10
		(5.69e-09)	(2.77e-09)		(5.88e-09)	(3.42e-09)
<i>Reference: Distance 0 km</i>						
Distance 1 to 30 km from urban core		-0.0500	-0.0661**		-0.0561*	-0.0748***
		(0.0364)	(0.0299)		(0.0305)	(0.0218)
Distance 31 to 100 km from urban core		-0.0230	-0.0291		-0.00925	-0.0500**
		(0.0389)	(0.0278)		(0.0310)	(0.0234)
Distance above 100 km from urban core		0.172***	0.0844***		0.144***	0.0418*
		(0.0355)	(0.0253)		(0.0314)	(0.0250)
<i>Reference: British Columbia</i>						
Newfoundland and Labrador			0.326***			0.129**
			(0.0424)			(0.0581)
Prince Edward Island			0.289***			0.0980*
			(0.0548)			(0.0537)
Nova Scotia			-0.139*			-0.116***
			(0.0709)			(0.0317)
New Brunswick			0.0386			-0.0320
			(0.0408)			(0.0358)
Quebec			0.418***			0.313***
			(0.0327)			(0.0374)
Ontario			0.212***			0.166***
			(0.0245)			(0.0229)
Manitoba			-0.0948***			0.0770**
			(0.0350)			(0.0300)
Saskatchewan			-0.0144			0.0595**
			(0.0260)			(0.0288)
Alberta			0.0747*			0.223***
			(0.0419)			(0.0345)
Northwest Territories			0.455***			0.432***
			(0.0455)			(0.0506)
Nunavut			0.346***			0.321***
			(0.0411)			(0.0501)
Yukon			0.324***			0.237***
			(0.0360)			(0.0406)
<i>Reference: Year 2001</i>						
Year 2006			-0.116***			0.0362***
			(0.0145)			(0.0114)
Year 2011			-0.0718***			0.106***
			(0.0200)			(0.0121)
Constant	9.613***	9.729***	9.706***	9.439***	9.219***	9.229***
	(0.0202)	(0.0929)	(0.0655)	(0.0178)	(0.0768)	(0.0560)
Adjusted R-square	0.276	0.284	0.295	0.239	0.245	0.254
Number of Clusters	949	949	949	943	943	943
Observations	443,960	443,960	443,960	292,535	292,535	292,535

The number of observations are retrieved from the summary statistics.

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.4C: Shared Postal Code
Access regression estimates in *Panel A*
Number of charities regression estimates in *Panel B*

	<u>Excluding</u> religious charities (1)	Including religious charities with social services (2)	<u>Including</u> religious charities (3)
Dependent variable: CWB			
Panel A			
Access to charities	1.305** (0.589)	1.219** (0.547)	1.460*** (0.521)
Adjusted R-square	0.667	0.667	0.668
Panel B			
Number of Charities	0.451*** (0.119)	0.386*** (0.112)	0.188** (0.0855)
Adjusted R-square	0.669	0.668	0.667
Number of clusters	722	722	722
Observations	1,775	1,775	1,775
Dependent variable: ln(household income)			
Panel A			
Access to charities	0.0469* (0.0247)	0.0387 (0.0235)	0.0320 (0.0222)
Adjusted R-square	0.360	0.360	0.360
Panel B			
Number of Charities	0.0219*** (0.00668)	0.0219*** (0.00627)	0.0107** (0.00440)
Adjusted R-square	0.361	0.361	0.360
Number of clusters	949	949	949
Observations	443,960	443,960	443,960
Dependent variable: ln(total income)			
Panel A			
Access to charities	0.00864 (0.0242)	0.00149 (0.0231)	0.00383 (0.0211)
Adjusted R-square	0.295	0.295	0.295
Panel B			
Number of Charities	0.0165*** (0.00506)	0.0144*** (0.00476)	0.00789** (0.00330)
Adjusted R-square	0.295	0.295	0.295
Number of clusters	949	949	949
Observations	443,960	443,960	443,960
Dependent variable: ln(wages)			
Panel A			
Access to charities	0.0713*** (0.0234)	0.0676*** (0.0223)	0.0479** (0.0199)
Adjusted R-square	0.252	0.252	0.252
Panel B			
Number of Charities	0.0262*** (0.00617)	0.0247*** (0.00574)	0.0137*** (0.00422)
Adjusted R-square	0.254	0.254	0.253
Number of clusters	943	943	943
Observations	292,535	292,535	292,535

Robust standard errors in parentheses are clustered at the CSD level.
Significance: * p<.10, ** p<.05, *** p<.01

Table 1.5C: Lag of charitable activityAccess regression estimates in *Panel A* & Number of charities regression estimates in *Panel B*

	Excluding religious charities (1)	Including religious charities with social services (2)	Including religious charities (3)
Dependent variable: CWB			
Panel A			
Access to charities	2.685*** (0.751)	2.722*** (0.713)	2.985*** (0.616)
Adjusted R-square	0.700	0.701	0.704
Panel B			
Number of Charities	0.943*** (0.182)	0.954*** (0.181)	0.833*** (0.161)
Adjusted R-square	0.701	0.701	0.703
Number of clusters	619	619	619
Observations	1,055	1,055	1,055
Dependent variable: ln(household income)			
Panel A			
Access to charities	0.0274 (0.0381)	0.0301 (0.0372)	0.0258 (0.0302)
Adjusted R-square	0.376	0.376	0.376
Panel B			
Number of Charities	0.0236** (0.0100)	0.0232** (0.00941)	0.0204*** (0.00766)
Adjusted R-square	0.377	0.377	0.377
Number of clusters	619	619	619
Observations	n=n.r.	n=n.r.	n=n.r.
Dependent variable: ln(total income)			
Panel A			
Access to charities	-0.000804 (0.0393)	0.00217 (0.0383)	-0.00310 (0.0305)
Adjusted R-square	0.317	0.317	0.317
Panel B			
Number of Charities	0.0158* (0.00816)	0.0155** (0.00762)	0.0140** (0.00606)
Adjusted R-square	0.317	0.317	0.317
Number of clusters	619	619	619
Observations	n=n.r.	n=n.r.	n=n.r.
Dependent variable: ln(wages)			
Panel A			
Access to charities	0.0788** (0.0307)	0.0737** (0.0300)	0.0440* (0.0240)
Adjusted R-square	0.266	0.266	0.266
Panel B			
Number of Charities	0.0323*** (0.00766)	0.0320*** (0.00720)	0.0252*** (0.00620)
Adjusted R-square	0.268	0.268	0.268
Number of clusters	619	619	619
Observations	n=n.r.	n=n.r.	n=n.r.

Robust standard errors in parentheses are clustered at the CSD level. Significance: * p<.10, ** p<.05, *** p<.01. Number of observations has not been released by the RDC. The coefficient estimates in bold are larger in magnitude than the coefficient estimates reported in tables 1.5, 1.8, 1.11 and 1.14.

Table 1.6C: Interaction charitable activity & number of charities
Access regression estimates in *Panel A* & Number of charities regression estimates in *Panel B*

	<u>Excluding</u> religious charities (1)	Including religious charities with social services (2)	<u>Including</u> religious charities (3)
Dependent variable: CWB			
Panel B			
Number of Charities	1.209*** (0.195)	1.167*** (0.184)	1.004*** (0.157)
Amount spent in CSD on charitable activities	0.000000233 (0.000000168)	0.000000219 (0.000000160)	0.000000251 (0.000000170)
Number of Charities * Amount spent on charitable activities	-4.64e-08* (2.43e-08)	-4.28e-08* (2.30e-08)	-4.05e-08** (1.94e-08)
Adjusted R-square	0.671	0.671	0.673
Number of clusters	722	722	722
Observations	1,775	1,775	1,775
Dependent variable: ln(household income)			
Panel B			
Number of Charities	0.0296*** (0.00905)	0.0281*** (0.00865)	0.0251*** (0.00694)
Amount spent in CSD on charitable activities	9.28e-09** (3.82e-09)	8.96e-09** (3.88e-09)	1.24e-08*** (4.08e-09)
Number of Charities * Amount spent on charitable activities	-9.97e-10 (7.85e-10)	-8.72e-10 (8.17e-10)	-1.49e-09** (6.83e-10)
Adjusted R-square	0.361	0.361	0.361
Number of clusters	949	949	949
Observations	443,960	443,960	443,960
Dependent variable: ln(total income)			
Panel B			
Number of Charities	0.0194*** (0.00703)	0.0181*** (0.00678)	0.0162*** (0.00515)
Amount spent in CSD on charitable activities	7.28e-09* (4.27e-09)	6.83e-09 (4.36e-09)	8.63e-09* (4.47e-09)
Number of Charities * Amount spent on charitable activities	-6.78e-11 (9.29e-10)	7.77e-11 (9.78e-10)	-4.49e-10 (6.48e-10)
Adjusted R-square	0.295	0.295	0.295
Number of clusters	949	949	949
Observations	443,960	443,960	443,960
Dependent variable: ln(wages)			
Panel B			
Number of Charities	0.0374*** (0.00805)	0.0361*** (0.00765)	0.0287*** (0.00667)
Amount spent in CSD on charitable activities	4.07e-09 (3.30e-09)	3.57e-09 (3.33e-09)	6.24e-09* (3.41e-09)
Number of Charities * Amount spent on charitable activities	-1.46e-09*** (5.22e-10)	-1.31e-09** (5.32e-10)	-1.55e-09*** (6.06e-10)
Adjusted R-square	0.254	0.254	0.254
Number of clusters	943	943	943
Observations	292,535	292,535	292,535

Robust standard errors in parentheses are clustered at the CSD level. Significance: * p<.10, ** p<.05, *** p<.01. Number of observations has not been released by the RDC. The coefficient estimates in bold are larger in magnitude than the coefficient estimates reported in tables 1.5, 1.8, 1.11 and 1.14.

Table 1.7C: CWB regressions - Charity programs breakdown - Lag of charitable activity

Panel A: Access regression estimates

	<i>Independent variables:</i>						
Dependent variable:	<i>Access Benefits (1)</i>	<i>Access Education (2)</i>	<i>Access Health (3)</i>	<i>Access Religion (4)</i>	<i>Access Religion Social Services (5)</i>	<i>Access Welfare (6)</i>	<i>Access Others (7)</i>
CWB total score n=1,055 Number of Clusters:619	4.775*** (0.955)	2.427** (1.077)	1.512 (1.347)	2.419*** (0.740)	3.206** (1.375)	0.535 (0.960)	7.355*** (1.415)
Education_WB n= 710 Number of clusters: 405	3.913*** (1.193)	4.271*** (1.390)	1.462 (2.449)	3.191*** (0.966)	1.820 (1.758)	0.394 (1.148)	4.530** (1.953)
Housing_WB n= 710 Number of clusters: 405	4.461*** (1.458)	-0.499 (1.695)	0.654 (2.249)	1.249 (1.348)	1.606 (1.930)	-1.310 (2.229)	1.990 (2.366)
Income_WB n= 710 Number of clusters: 405	2.00** (0.961)	-0.0782 (1.126)	-2.201 (1.606)	0.997 (0.742)	1.468* (0.796)	-1.920 (1.233)	2.240 (1.697)
LFA_WB n= 710 Number of clusters: 405	2.246** (1.002)	-0.760 (0.813)	-1.573 (1.432)	1.114 (0.685)	1.778 (1.518)	-1.577 (1.002)	3.604** (1.574)

Panel B: Number of charities regression estimates

	<i>Independent variables:</i>						
Dependent variable:	<i>NCH Benefits (1)</i>	<i>NCH Education (2)</i>	<i>NCH Health (3)</i>	<i>NCH Religion (4)</i>	<i>NCH Religion Social Services (5)</i>	<i>NCH Welfare (6)</i>	<i>NCH Others (7)</i>
CWB total score n=1,055 Number of Clusters:619	3.160*** (0.799)	1.839*** (0.383)	1.439 (1.197)	1.384** (0.586)	2.249* (1.313)	1.126*** (0.312)	7.355*** (1.415)
Education_WB n= 710 Number of clusters: 405	2.790*** (0.930)	2.505*** (0.535)	1.181 (2.052)	1.598* (0.921)	1.344 (1.351)	0.754* (0.422)	4.530** (1.953)
Housing_WB n= 710 Number of clusters: 405	2.708** (1.167)	0.917 (0.815)	0.922 (2.091)	0.0703 (1.128)	0.328 (1.911)	0.639 (0.678)	1.990 (2.366)
Income_WB n= 710 Number of clusters: 405	0.953 (0.821)	-0.228 (0.525)	-2.262* (1.319)	0.362 (0.549)	1.231** (0.604)	0.114 (0.345)	2.240 (1.697)
LFA_WB n= 710 Number of clusters: 405	1.525** (0.686)	0.197 (0.375)	-0.766 (1.180)	1.204** (0.471)	1.101 (1.225)	0.196 (0.351)	3.604** (1.574)

Robust standard errors are clustered at the census subdivision level. Significance: * p<.10, ** p<.05, *** p<.01
The coefficient estimates in bold are larger in magnitude than the coefficient estimates reported in table 1.7.

Table 1.8C: CSD fixed effects
Access regression estimates in *Panel A*
Number of charities regression estimates in *Panel B*

	<u>Excluding</u> religious charities (1)	Including religious charities with social services (2)	<u>Including</u> religious charities (3)
Dependent variable: CWB			
Panel A			
Access to charities	0.977 (0.817)	0.475 (0.680)	1.143 (0.866)
Adjusted R-square	0.883	0.883	0.884
Panel B			
Number of Charities	0.359 (0.347)	0.307 (0.330)	0.458 (0.310)
Adjusted R-square	0.883	0.883	0.883
Number of clusters	722	722	722
Observations	1,775	1,775	1,775
Dependent variable: ln(household income)			
Panel A			
Access to charities	-0.0256 (0.0364)	-0.0224 (0.0309)	-0.0283 (0.0444)
Adjusted R-square	0.386	0.386	0.386
Panel B			
Number of Charities	0.0197 (0.0244)	0.0168 (0.0285)	0.0197 (0.0232)
Adjusted R-square	0.386	0.386	0.386
Number of clusters	949	949	949
Observations	443,960	443,960	443,960
Dependent variable: ln(total income)			
Panel A			
Access to charities	-0.0230 (0.0499)	-0.0330 (0.0422)	-0.0452 (0.0515)
Adjusted R-square	0.307	0.307	0.307
Panel B			
Number of Charities	0.0304 (0.0260)	0.0244 (0.0315)	0.0269 (0.0250)
Adjusted R-square	0.307	0.307	0.307
Number of clusters	949	949	949
Observations	443,960	443,960	443,960
Dependent variable: ln(wages)			
Panel A			
Access to charities	-0.0492 (0.0391)	-0.0401 (0.0325)	-0.0681* (0.0395)
Adjusted R-square	0.268	0.268	0.268
Panel B			
Number of Charities	0.00224 (0.0163)	0.00663 (0.0195)	0.00494 (0.0151)
Adjusted R-square	0.268	0.268	0.268
Number of clusters	943	943	943
Observations	292,535	292,535	292,535

Robust standard errors in parentheses are clustered at the CSD level.
Significance: * p<.10, ** p<.05, *** p<.01

Table 1.9C: Including individuals aged 16 to 24
Access regression estimates in *Panel A*
Number of charities regression estimates in *Panel B*

	<u>Excluding</u> religious charities (1)	Including religious charities with social services (2)	<u>Including</u> religious charities (3)
Dependent variable: ln(household income)			
Panel A			
Access to charities	0.0554* (0.0298)	0.0554* (0.0284)	0.0572** (0.0239)
Adjusted R-square	0.344	0.344	0.344
Panel B			
Number of Charities	0.0275*** (0.00888)	0.0263*** (0.00853)	0.0207*** (0.00679)
Adjusted R-square	0.345	0.345	0.345
Number of clusters	949	949	949
Observations	n=n.r.	n=n.r.	n=n.r.
Dependent variable: ln(total income)			
Panel A			
Access to charities	0.00189 (0.0286)	0.00283 (0.0273)	0.00488 (0.0233)
Adjusted R-square	0.352	0.352	0.352
Panel B			
Number of Charities	0.0193*** (0.00690)	0.0184*** (0.00658)	0.0144*** (0.00502)
Adjusted R-square	0.353	0.353	0.353
Number of clusters	949	949	949
Observations	n=n.r.	n=n.r.	n=n.r.
Dependent variable: ln(wages)			
Panel A			
Access to charities	0.0603** (0.0275)	0.0569** (0.0263)	0.0258 (0.0224)
Adjusted R-square	0.349	0.349	0.348
Panel B			
Number of Charities	0.0345*** (0.00858)	0.0336*** (0.00823)	0.0244*** (0.00684)
Adjusted R-square	0.350	0.350	0.350
Number of clusters	943	943	943
Observations	n=n.r.	n=n.r.	n=n.r.

Robust standard errors in parentheses are clustered at the CSD level. Significance: * p<.10, ** p<.05, *** p<.01. Number of observations has not been released by the RDC. The coefficient estimates in bold are larger in magnitude than the coefficient estimates reported in tables 1.8, 1.11 and 1.14.

Table 1.10C: Including individuals earning less than \$100Access regression estimates in *Panel A*Number of charities regression estimates in *Panel B*

	<u>Excluding</u> religious charities (1)	Including religious charities with social services (2)	<u>Including</u> religious charities (3)
Dependent variable: ln(household income)			
Panel A			
Access to charities	0.0490 (0.0301)	0.0491* (0.0287)	0.0488** (0.0243)
Adjusted R-square	0.359	0.359	0.359
Panel B			
Number of Charities	0.0268*** (0.00895)	0.0256*** (0.00861)	0.0201*** (0.00674)
Adjusted R-square	0.360	0.360	0.360
Number of clusters	949	949	949
Observations	n=n.r.	n=n.r.	n=n.r.
Dependent variable: ln(total income)			
Panel A			
Access to charities	0.00882 (0.0323)	0.0111 (0.0308)	0.0125 (0.0258)
Adjusted R-square	0.281	0.281	0.281
Panel B			
Number of Charities	0.0183*** (0.0692)	0.0176*** (0.00660)	0.0146*** (0.00471)
Adjusted R-square	0.281	0.281	0.281
Number of clusters	949	949	949
Observations	n=n.r.	n=n.r.	n=n.r.
Dependent variable: ln(wages)			
Panel A			
Access to charities	0.0845*** (0.0271)	0.0797*** (0.0260)	0.0453* (0.0233)
Adjusted R-square	0.236	0.236	0.236
Panel B			
Number of Charities	0.0348*** (0.0813)	0.0340*** (0.00780)	0.0247*** (0.00647)
Adjusted R-square	0.237	0.237	0.237
Number of clusters	943	943	943
Observations	n=n.r.	n=n.r.	n=n.r.

Robust standard errors in parentheses are clustered at the CSD level. Significance: * p<.10, ** p<.05, *** p<.01. Number of observations has not been released by the RDC. The coefficient estimates in bold are larger in magnitude than the coefficient estimates reported in tables 1.8, 1.11 and 1.14.

Table 1.11C: Details of CWB OLS regressions - baseline model
Endogenous regressors added sequentially

Dependent variable:	Number of charities regression estimates						
	CWB						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NCH	2.062*** (0.232)	1.620*** (0.209)	1.547*** (0.187)	1.210*** (0.189)	1.205*** (0.191)	1.164*** (0.188)	1.120*** (0.192)
Ratio male	-5.549 (7.926)	-4.400 (6.556)	4.924 (6.593)	3.333 (6.028)	3.709 (6.080)	3.729 (6.081)	4.257 (6.066)
Ratio young (age: below 15)	-73.80*** (4.037)	-52.63*** (4.673)	-27.66*** (4.707)	-29.06*** (4.546)	-28.77*** (4.537)	-28.75*** (4.538)	-29.15*** (4.511)
Ratio old (age: above 65)	-0.194 (6.090)	9.018 (6.571)	-17.81*** (6.647)	-35.55*** (5.756)	-34.34*** (5.846)	-34.36*** (5.849)	-33.01*** (5.935)
Year 2006	-1.434*** (0.291)	-1.335*** (0.277)	-0.424 (0.274)	-0.363 (0.270)	-0.378 (0.270)	-0.378 (0.270)	-0.538** (0.272)
Year 2011	-2.087*** (0.349)	-1.450*** (0.340)	0.202 (0.374)	0.351 (0.364)	0.305 (0.364)	0.299 (0.364)	-0.216 (0.377)
Ratio Language French		-9.391*** (2.311)	-10.51*** (2.260)	-10.88*** (2.126)	-9.330*** (2.236)	-9.312*** (2.239)	-6.856*** (2.202)
Ratio Language French and English		13.38*** (4.221)	7.004** (3.518)	1.899 (2.831)	2.804 (2.802)	2.817 (2.804)	3.854 (2.578)
Ratio Language No F and No E		-16.20*** (5.336)	-11.71** (5.212)	-15.52*** (4.671)	-19.66*** (4.846)	-19.71*** (4.850)	-21.70*** (4.803)
Population (logarithmic)		-0.520* (0.297)	-0.391 (0.279)	-0.751*** (0.258)	-0.661** (0.261)	-0.664** (0.261)	-0.669*** (0.258)
CSD with no Postal Code		0.341 (0.518)	0.605 (0.487)	0.717 (0.468)	0.720 (0.464)	0.722 (0.465)	0.909* (0.463)
Distance 1 to 30 km from urban core		-2.358*** (0.736)	-1.929*** (0.697)	-1.630** (0.692)	-1.586** (0.684)	-1.585** (0.685)	-1.581** (0.668)
Distance 31 to 100 km from urban core		-2.573*** (0.719)	-1.661** (0.679)	-1.197* (0.641)	-1.137* (0.638)	-1.134* (0.639)	-1.058* (0.622)
Distance above 100 km from urban core		-3.748*** (0.792)	-3.156*** (0.751)	-2.628*** (0.722)	-2.622*** (0.716)	-2.614*** (0.718)	-2.495*** (0.708)
Newfoundland and Labrador		7.121*** (1.381)	6.613*** (1.261)	6.993*** (1.202)	4.716** (1.852)	4.712** (1.853)	4.607** (1.987)
Prince Edward Island		6.180** (2.771)	5.061*** (1.873)	4.671** (2.049)	4.801** (1.998)	4.801** (1.998)	5.415*** (2.016)
Nova Scotia		4.452*** (1.081)	4.066*** (1.088)	3.260*** (1.210)	3.286*** (1.214)	3.263*** (1.221)	1.584 (1.266)
New Brunswick		3.032** (1.352)	2.802** (1.119)	3.329*** (1.124)	3.200*** (1.141)	3.206*** (1.142)	3.403*** (1.079)
Quebec		7.764*** (1.973)	9.737*** (1.811)	11.11*** (1.566)	9.962*** (1.633)	9.961*** (1.633)	8.525*** (1.511)
Ontario		3.253*** (0.757)	2.692*** (0.693)	3.384*** (0.680)	3.403*** (0.674)	3.396*** (0.675)	3.739*** (0.675)
Manitoba		-3.826*** (0.968)	-3.749*** (0.904)	-3.493*** (0.868)	-3.496*** (0.860)	-3.500*** (0.860)	-3.218*** (0.846)
Saskatchewan		-1.889** (0.910)	-0.950 (0.862)	-1.115 (0.833)	-1.144 (0.829)	-1.141 (0.830)	-0.890 (0.815)
Alberta		-2.646** (1.115)	-1.471 (1.046)	-1.400 (1.006)	-1.500 (1.002)	-1.497 (1.002)	-1.094 (1.005)
Northwest Territories		5.837*** (0.980)	7.047*** (0.947)	7.144*** (0.846)	6.484*** (0.865)	6.442*** (0.862)	5.598*** (0.880)
Nunavut		9.752*** (1.274)	9.489*** (1.255)	9.246*** (1.120)	6.422*** (1.526)	6.431*** (1.524)	5.294*** (1.529)
Yukon		7.223*** (1.959)	6.611*** (1.861)	4.820*** (1.593)	4.889*** (1.587)	4.881*** (1.588)	3.767** (1.507)
Ratio Single			-35.08*** (4.502)	-22.82*** (4.353)	-23.70*** (4.367)	-23.73*** (4.369)	-23.54*** (4.323)
Ratio Separated/ Divorced/ Widow			39.71*** (7.471)	35.41*** (7.273)	34.75*** (7.263)	34.78*** (7.265)	32.65*** (7.271)
Ratio Non-Indigenous Identity				18.37*** (1.994)	13.77*** (2.587)	13.78*** (2.586)	14.27*** (2.602)
Ratio not registered under the Indian Act					3.658*** (1.319)	3.674*** (1.318)	2.385* (1.330)
Amount spent in CSD on charitable activities Agreement						5.09e-08 (8.97e-08)	4.86e-08 (8.79e-08) 2.949*** (0.533)

Constant	86.16*** (4.601)	82.16*** (4.067)	85.96*** (4.574)	81.83*** (4.198)	81.49*** (4.220)	81.50*** (4.221)	81.11*** (4.204)
Adjusted R-square	0.464	0.593	0.634	0.662	0.664	0.664	0.671
Number of Clusters	722	722	722	722	722	722	722
Observations	1,775	1,775	1,775	1,775	1,775	1,775	1,775

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.12C: Details of *household income* OLS regressions - baseline model
Endogenous regressors added sequentially

Dependent variable:	Number of charities regression estimates						
	ln(household income)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NCH	0.0889*** (0.00912)	0.0313*** (0.00770)	0.0272*** (0.00969)	0.0497*** (0.0113)	0.0405*** (0.00894)	0.0405*** (0.00889)	0.0271*** (0.00886)
Male	-0.0764*** (0.00660)	-0.0797*** (0.00669)	-0.0791*** (0.00668)	-0.0551*** (0.00483)	-0.0570*** (0.00453)	-0.0570*** (0.00453)	-0.0474*** (0.00453)
Age 31 to 35	0.0406*** (0.00615)	0.0450*** (0.00604)	0.0454*** (0.00601)	0.0101** (0.00516)	0.0139*** (0.00498)	0.0139*** (0.00497)	-0.0284*** (0.00459)
Age 36 to 40	0.0554*** (0.00773)	0.0669*** (0.00726)	0.0685*** (0.00719)	0.0313*** (0.00676)	0.0362*** (0.00634)	0.0362*** (0.00634)	-0.0251*** (0.00552)
Age 41 to 45	0.0570*** (0.00972)	0.0751*** (0.00856)	0.0773*** (0.00847)	0.0648*** (0.00841)	0.0717*** (0.00782)	0.0717*** (0.00782)	0.00837 (0.00668)
Age 46 to 50	0.0395*** (0.0127)	0.0596*** (0.0121)	0.0599*** (0.0122)	0.101*** (0.0119)	0.103*** (0.0108)	0.103*** (0.0108)	0.0448*** (0.00960)
Age 51 to 55	0.0154 (0.0145)	0.0352*** (0.0131)	0.0351*** (0.0129)	0.125*** (0.0125)	0.121*** (0.0113)	0.121*** (0.0113)	0.0870*** (0.00948)
Age 56 to 60	-0.0581*** (0.0142)	-0.0377*** (0.0131)	-0.0394*** (0.0130)	0.0991*** (0.0116)	0.0833*** (0.00993)	0.0833*** (0.00991)	0.119*** (0.00917)
Age 61 to 64	-0.0877*** (0.0183)	-0.0587*** (0.0160)	-0.0608*** (0.0158)	0.111*** (0.0164)	0.0803*** (0.0143)	0.0803*** (0.0143)	0.243*** (0.0127)
Year 2006	-0.0519*** (0.0183)	-0.0397*** (0.0149)	-0.0535*** (0.0156)	-0.0526*** (0.0155)	-0.0396*** (0.0143)	-0.0396*** (0.0143)	-0.0396*** (0.0130)
Year 2011	-0.0192 (0.0233)	-0.00530 (0.0187)	-0.0402** (0.0202)	-0.0257 (0.0197)	-0.00127 (0.0188)	-0.00133 (0.0186)	0.0104 (0.0174)
Language French		-0.312*** (0.0790)	-0.148* (0.0767)	-0.133** (0.0575)	-0.196*** (0.0525)	-0.197*** (0.0530)	-0.113** (0.0464)
Language French and English		0.123*** (0.0316)	0.144*** (0.0275)	0.255*** (0.0269)	0.0818*** (0.0187)	0.0816*** (0.0193)	0.00115 (0.0169)
Language No F and No E		-0.232*** (0.0308)	-0.233*** (0.0295)	-0.325*** (0.0286)	-0.286*** (0.0262)	-0.286*** (0.0259)	-0.0947*** (0.0239)
Population (logarithmic)		0.0355** (0.0144)	0.0282** (0.0137)	0.00558 (0.0142)	-0.0248** (0.0120)	-0.0248** (0.0120)	-0.0160 (0.0101)
CSD with no Postal Code		-0.00633 (0.0289)	0.0195 (0.0293)	0.0298 (0.0282)	0.0376 (0.0254)	0.0376 (0.0254)	0.0197 (0.0214)
Distance 1 to 30 km from urban core		-0.151*** (0.0464)	-0.160*** (0.0446)	-0.194*** (0.0444)	-0.123*** (0.0390)	-0.123*** (0.0389)	-0.102*** (0.0329)
Distance 31 to 100 km from urban core		-0.0962** (0.0439)	-0.0982** (0.0406)	-0.171*** (0.0381)	-0.0882*** (0.0325)	-0.0883*** (0.0325)	-0.0702*** (0.0271)
Distance above 100 km from urban core		0.0825* (0.0452)	0.0648 (0.0404)	-0.0589 (0.0384)	0.00936 (0.0322)	0.00931 (0.0321)	0.0440* (0.0260)
Newfoundland and Labrador		0.293*** (0.0551)	0.283 (0.0510)	0.263*** (0.0521)	0.357*** (0.0434)	0.359*** (0.0441)	0.278*** (0.0387)
Prince Edward Island		0.174 (0.106)	0.227** (0.111)	0.193 (0.122)	0.227** (0.105)	0.227** (0.105)	0.140 (0.0900)
Nova Scotia		-0.341*** (0.0992)	-0.472*** (0.112)	-0.484*** (0.132)	-0.296*** (0.0932)	-0.297*** (0.0932)	-0.300*** (0.0796)
New Brunswick		-0.287*** (0.0632)	-0.258*** (0.0720)	-0.208*** (0.0545)	-0.0814* (0.0447)	-0.0815* (0.0446)	-0.0958** (0.0430)
Quebec		0.405*** (0.0788)	0.304*** (0.0708)	0.192*** (0.0569)	0.399*** (0.0493)	0.400*** (0.0500)	0.327*** (0.0418)
Ontario		-0.0152 (0.0390)	0.0332 (0.0343)	0.0344 (0.0369)	0.153*** (0.0290)	0.153*** (0.0290)	0.115*** (0.0260)
Manitoba		-0.321*** (0.0556)	-0.262*** (0.0510)	-0.370*** (0.0485)	-0.239*** (0.0422)	-0.239*** (0.0422)	-0.205*** (0.0362)
Saskatchewan		-0.196*** (0.0396)	-0.147*** (0.0362)	-0.283*** (0.0388)	-0.179*** (0.0328)	-0.179*** (0.0328)	-0.161*** (0.0284)
Alberta		-0.0518 (0.0607)	0.0100 (0.0587)	-0.139** (0.0613)	0.000159 (0.0501)	0.000120 (0.0501)	0.00711 (0.0430)
Northwest Territories		0.502*** (0.0662)	0.449*** (0.0741)	0.455*** (0.0804)	0.506*** (0.0625)	0.506*** (0.0613)	0.425*** (0.0489)
Nunavut		0.419*** (0.0545)	0.285*** (0.0627)	0.196*** (0.0651)	0.312*** (0.0546)	0.314*** (0.0586)	0.236*** (0.0506)
Yukon		0.358*** (0.0985)	0.256 (0.0840)	0.410*** (0.0721)	0.362*** (0.0555)	0.362*** (0.0555)	0.289*** (0.0405)
Agreements			0.229*** (0.0365)	0.225*** (0.0336)	0.165*** (0.0282)	0.165*** (0.0284)	0.123*** (0.0233)

Amount spent in CSD on charitable activities	3.01e-09 (3.74e-09)	1.81e-09 (4.21e-09)	5.63e-09 (3.83e-09)	5.62e-09 (3.83e-09)	5.96e-09*	
Single		-0.395*** (0.0132)	-0.341*** (0.0110)	-0.341*** (0.0109)	-0.242*** (0.00961)	
Separated/ Divorced/ Widow		-0.416*** (0.0122)	-0.382*** (0.0106)	-0.382*** (0.0106)	-0.336*** (0.00964)	
Household size		0.150*** (0.00376)	0.167*** (0.00292)	0.167*** (0.00292)	0.184*** (0.00269)	
Non-Indigenous Identity			0.593*** (0.0260)	0.596*** (0.0328)	0.381*** (0.0228)	
Not registered under the Indian Act				-0.00271 (0.0290)	0.0440* (0.0226)	
High School Certificate					0.175*** (0.00769)	
Above HS, below bachelor (including trades and apprenticeship certificate)					0.217*** (0.00633)	
Bachelor degree					0.524*** (0.0215)	
Master, doctorate, degree in Medicine					0.574*** (0.0526)	
Not in labour force					-0.607*** (0.0116)	
Unemployed					-0.406*** (0.0100)	
Constant	10.56*** (0.0227)	10.33*** (0.0999)	10.33*** (0.0959)	10.09*** (0.0886)	9.981*** (0.0802)	9.981*** (0.0799)
Adjusted R-square	0.028	0.099	0.103	0.244	0.271	0.271
Number of clusters	949	949	949	949	949	949
Observations	443,960	443,960	443,960	443,960	443,960	443,960

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.13C: Details of *total income* OLS regressions - baseline model
Endogenous regressors added sequentially

Dependent variable:	Number of charities regression estimates						
	ln(total income)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NCH	0.111*** (0.00797)	0.0533*** (0.00732)	0.0493*** (0.00897)	0.0503*** (0.00927)	0.0406*** (0.00688)	0.0405*** (0.00674)	0.0193*** (0.00663)
Male	-0.182*** (0.0176)	-0.188*** (0.0182)	-0.187*** (0.0182)	-0.168*** (0.0179)	-0.170*** (0.0175)	-0.170*** (0.0175)	-0.168*** (0.0162)
Age 31 to 35	0.316*** (0.00785)	0.319*** (0.00753)	0.319*** (0.00748)	0.256*** (0.00725)	0.260*** (0.00714)	0.260*** (0.00714)	0.187*** (0.00649)
Age 36 to 40	0.392*** (0.00963)	0.401*** (0.00935)	0.403*** (0.00930)	0.315*** (0.00874)	0.321*** (0.00837)	0.321*** (0.00836)	0.212*** (0.00758)
Age 41 to 45	0.375*** (0.0113)	0.388*** (0.0106)	0.391*** (0.0105)	0.284*** (0.00998)	0.291*** (0.00948)	0.291*** (0.00947)	0.178*** (0.00779)
Age 46 to 50	0.350*** (0.0146)	0.362*** (0.0143)	0.363*** (0.0145)	0.240*** (0.0142)	0.242*** (0.0130)	0.242*** (0.0130)	0.137*** (0.0110)
Age 51 to 55	0.319*** (0.0163)	0.331*** (0.0156)	0.331*** (0.0154)	0.191*** (0.0159)	0.187*** (0.0148)	0.187*** (0.0148)	0.125*** (0.0118)
Age 56 to 60	0.237*** (0.0184)	0.255*** (0.0168)	0.253*** (0.0167)	0.101*** (0.0158)	0.0849*** (0.0143)	0.0848*** (0.0143)	0.145*** (0.0141)
Age 61 to 64	0.263*** (0.0232)	0.296*** (0.0194)	0.294*** (0.0190)	0.129*** (0.0194)	0.0967*** (0.0182)	0.0967*** (0.0182)	0.376*** (0.0155)
Year 2006	-0.147*** (0.0205)	-0.140*** (0.0170)	-0.156*** (0.0178)	-0.132*** (0.0172)	-0.118*** (0.0164)	-0.118*** (0.0163)	-0.116*** (0.0145)
Year 2011	-0.141*** (0.0269)	-0.129*** (0.0217)	-0.169*** (0.0229)	-0.124*** (0.0221)	-0.0986*** (0.0216)	-0.0989*** (0.0215)	-0.0718*** (0.0200)
Language French		-0.350*** (0.0708)	-0.162** (0.0652)	-0.164*** (0.0571)	-0.231*** (0.0521)	-0.233*** (0.0519)	-0.0909** (0.0399)
Language French and English		0.306*** (0.0318)	0.331*** (0.0282)	0.310*** (0.0286)	0.128*** (0.0177)	0.127*** (0.0181)	0.0113 (0.0148)
Language No F and No E		-0.652*** (0.0365)	-0.653*** (0.0347)	-0.600*** (0.0329)	-0.559*** (0.0311)	-0.558*** (0.0311)	-0.243*** (0.0238)
Population (logarithmic)		0.00197 (0.0181)	-0.00632 (0.0162)	-0.0102 (0.0150)	-0.0421*** (0.0120)	-0.0422*** (0.0120)	-0.0259*** (0.00916)
CSD with no Postal Code		-0.0119 (0.0310)	0.0173 (0.0312)	0.0201 (0.0291)	0.0284 (0.0259)	0.0282 (0.0259)	-0.000266 (0.0200)
Distance 1 to 30 km from urban core		-0.173*** (0.0498)	-0.183*** (0.0481)	-0.177*** (0.0447)	-0.102*** (0.0386)	-0.103*** (0.0385)	-0.0661** (0.0299)
Distance 31 to 100 km from urban core		-0.150*** (0.0459)	-0.152*** (0.0435)	-0.145*** (0.0413)	-0.0573 (0.0354)	-0.0580 (0.0355)	-0.0291 (0.0278)
Distance above 100 km from urban core		0.00243 (0.0481)	-0.0184 (0.0448)	-0.0367 (0.0416)	0.0353 (0.0346)	0.0351 (0.0346)	0.0844*** (0.0253)
Newfoundland and Labrador		0.383*** (0.0600)	0.372*** (0.0667)	0.344*** (0.0602)	0.444*** (0.0493)	0.449*** (0.0492)	0.326*** (0.0424)
Prince Edward Island		0.392*** (0.0988)	0.453*** (0.103)	0.400*** (0.1000)	0.436*** (0.0808)	0.436*** (0.0810)	0.289*** (0.0548)
Nova Scotia		-0.234* (0.131)	-0.384*** (0.146)	-0.346** (0.135)	-0.148 (0.0942)	-0.150 (0.0944)	-0.139* (0.0709)
New Brunswick		-0.124** (0.0560)	-0.0921* (0.0528)	-0.0798 (0.0491)	0.0533 (0.0436)	0.0529 (0.0436)	0.0386 (0.0408)
Quebec		0.419*** (0.0717)	0.303*** (0.0613)	0.326*** (0.0565)	0.544*** (0.0470)	0.546*** (0.0470)	0.418*** (0.0327)
Ontario		0.0949** (0.0471)	0.152*** (0.0408)	0.149*** (0.0379)	0.274*** (0.0298)	0.274*** (0.0299)	0.212*** (0.0245)
Manitoba		-0.364*** (0.0603)	-0.295*** (0.0532)	-0.295*** (0.0509)	-0.157*** (0.0431)	-0.158*** (0.0431)	-0.0948*** (0.0350)
Saskatchewan		-0.234*** (0.0480)	-0.178*** (0.0429)	-0.165*** (0.0403)	-0.0555* (0.0330)	-0.0557* (0.0330)	-0.0144 (0.0260)
Alberta		-0.174** (0.0759)	-0.102 (0.0711)	-0.0847 (0.0670)	0.0621 (0.0524)	0.0619 (0.0525)	0.0747* (0.0419)
Northwest Territories		0.585*** (0.0782)	0.527*** (0.0929)	0.537*** (0.0882)	0.590*** (0.0687)	0.593*** (0.0676)	0.455*** (0.0455)
Nunavut		0.503*** (0.0614)	0.348*** (0.0674)	0.343*** (0.0637)	0.466*** (0.0518)	0.475*** (0.0552)	0.346*** (0.0411)
Yukon		0.591*** (0.105)	0.473*** (0.0896)	0.497*** (0.0793)	0.447*** (0.0607)	0.446*** (0.0608)	0.324*** (0.0360)
Agreements			0.264*** (0.0367)	0.253*** (0.0340)	0.191*** (0.0269)	0.192*** (0.0270)	0.124*** (0.0204)

Amount spent in CSD on charitable activities	1.94e-09 (4.33e-09)	2.48e-09 (4.25e-09)	6.50e-09 (3.97e-09)	6.44e-09 (3.95e-09)	7.06e-09** (2.77e-09)		
Single		-0.549*** (0.0116)	-0.493*** (0.0110)	-0.493*** (0.0110)	-0.321*** (0.00901)		
Separated/ Divorced/ Widow		-0.146*** (0.0149)	-0.110*** (0.0139)	-0.110*** (0.0139)	-0.0290*** (0.0104)		
Household size		-0.00543 (0.00403)	0.0126*** (0.00293)	0.0126*** (0.00293)	0.0390*** (0.00238)		
Non-Indigenous Identity			0.625*** (0.0268)	0.637*** (0.0330)	0.318*** (0.0199)		
Not registered under the Indian Act				-0.0141 (0.0301)	0.0543*** (0.0187)		
High School Certificate					0.200*** (0.0102)		
Above HS, below bachelor (including trades and apprenticeship certificate)					0.301*** (0.00797)		
Bachelor degree					0.651*** (0.0188)		
Master, doctorate, degree in Medicine					0.755*** (0.0541)		
Not in labour force					-1.106*** (0.0141)		
Unemployed					-0.717*** (0.0144)		
Constant	9.417*** (0.0222)	9.448*** (0.109)	9.451*** (0.101)	9.723*** (0.0921)	9.607*** (0.0800)	9.609*** (0.0800)	9.706*** (0.0655)
Adjusted R-square	0.038	0.093	0.096	0.123	0.140	0.140	0.295
Number of clusters	949	949	949	949	949	949	949
Observations	443,960	443,960	443,960	443,960	443,960	443,960	443,960

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 1.14C: Details of *wages* OLS regressions - baseline model
Endogenous regressors added sequentially

Dependent variable:	Number of charities regression estimates						
	ln(wages)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NCH	0.0986*** (0.00666)	0.0613*** (0.00929)	0.0611*** (0.0112)	0.0561*** (0.0108)	0.0494*** (0.00924)	0.0486*** (0.00840)	0.0337*** (0.00800)
Male	0.131*** (0.0126)	0.131*** (0.0126)	0.132*** (0.0126)	0.130*** (0.0129)	0.127*** (0.0128)	0.127*** (0.0128)	0.215*** (0.0111)
Age 31 to 35	0.257*** (0.00918)	0.264*** (0.00890)	0.265*** (0.00894)	0.237*** (0.00878)	0.242*** (0.00861)	0.242*** (0.00861)	0.187*** (0.00801)
Age 36 to 40	0.401*** (0.0109)	0.416*** (0.0108)	0.418*** (0.0108)	0.381*** (0.0107)	0.387*** (0.0104)	0.386*** (0.0104)	0.300*** (0.00839)
Age 41 to 45	0.502*** (0.0131)	0.521*** (0.0133)	0.523*** (0.0133)	0.470*** (0.0135)	0.477*** (0.0131)	0.476*** (0.0131)	0.378*** (0.0102)
Age 46 to 50	0.591*** (0.0143)	0.612*** (0.0146)	0.613*** (0.0148)	0.536*** (0.0153)	0.539*** (0.0147)	0.538*** (0.0148)	0.434*** (0.0110)
Age 51 to 55	0.639*** (0.0164)	0.658*** (0.0171)	0.659*** (0.0169)	0.557*** (0.0181)	0.555*** (0.0175)	0.554*** (0.0176)	0.456*** (0.0128)
Age 56 to 60	0.591*** (0.0203)	0.613*** (0.0226)	0.612*** (0.0226)	0.493*** (0.0243)	0.481*** (0.0233)	0.480*** (0.0233)	0.432*** (0.0160)
Age 61 to 64	0.357*** (0.0352)	0.388*** (0.0392)	0.385*** (0.0389)	0.253*** (0.0410)	0.233*** (0.0402)	0.233*** (0.0401)	0.289*** (0.0295)
Year 2006	-0.0172 (0.0175)	-0.0156 (0.0124)	-0.0248* (0.0132)	-0.00812 (0.0129)	0.00328 (0.0123)	0.00222 (0.0124)	0.0362*** (0.0114)
Year 2011	0.0694*** (0.0220)	0.0665*** (0.0142)	0.0460*** (0.0148)	0.0677*** (0.0143)	0.0886*** (0.0129)	0.0865*** (0.0130)	0.106*** (0.0121)
Language French		-0.293*** (0.0580)	-0.194*** (0.0574)	-0.207*** (0.0548)	-0.256*** (0.0520)	-0.274*** (0.0522)	-0.181*** (0.0382)
Language French and English		0.265*** (0.0294)	0.277*** (0.0285)	0.235*** (0.0268)	0.104*** (0.0197)	0.0945*** (0.0197)	-0.0146 (0.0151)
Language No F and No E		-0.574*** (0.0473)	-0.577*** (0.0467)	-0.515*** (0.0455)	-0.480*** (0.0424)	-0.467*** (0.0417)	-0.278*** (0.0364)
Population (logarithmic)		0.0354*** (0.0113)	0.0315*** (0.0117)	0.0333*** (0.0118)	0.00787 (0.0121)	0.00690 (0.0118)	0.00602 (0.00839)
CSD with no Postal Code		0.0286 (0.0254)	0.0439* (0.0256)	0.0428* (0.0244)	0.0477** (0.0216)	0.0466** (0.0218)	0.0271 (0.0176)
Distance 1 to 30 km from urban core		-0.159*** (0.0353)	-0.164*** (0.0344)	-0.150*** (0.0319)	-0.0920*** (0.0282)	-0.0976*** (0.0283)	-0.0748*** (0.0218)
Distance 31 to 100 km from urban core		-0.166*** (0.0370)	-0.167*** (0.0353)	-0.144*** (0.0337)	-0.0787*** (0.0285)	-0.0856*** (0.0286)	-0.0500** (0.0234)
Distance above 100 km from urban core		-0.0855** (0.0422)	-0.0996** (0.0398)	-0.0776** (0.0379)	-0.0269 (0.0322)	-0.0290 (0.0328)	0.0418* (0.0250)
Newfoundland and Labrador		0.0723 (0.0588)	0.0698 (0.0543)	0.0515 (0.0592)	0.125** (0.0559)	0.166*** (0.0640)	0.129** (0.0581)
Prince Edward Island		0.104 (0.107)	0.136 (0.109)	0.117 (0.106)	0.143* (0.0852)	0.141 (0.0878)	0.0980* (0.0537)
Nova Scotia		-0.157*** (0.0530)	-0.229*** (0.0627)	-0.197*** (0.0550)	-0.0574 (0.0455)	-0.0739 (0.0453)	-0.116*** (0.0317)
New Brunswick		-0.160*** (0.0596)	-0.143** (0.0590)	-0.142** (0.0557)	-0.0446 (0.0524)	-0.0483 (0.0520)	-0.0320 (0.0358)
Quebec		0.223*** (0.0609)	0.161*** (0.0570)	0.209*** (0.0574)	0.367*** (0.0542)	0.381*** (0.0546)	0.313*** (0.0374)
Ontario		0.124*** (0.0398)	0.157*** (0.0369)	0.156*** (0.0350)	0.247*** (0.0295)	0.243*** (0.0293)	0.166*** (0.0229)
Manitoba		-0.0475 (0.0452)	-0.0101 (0.0438)	0.0170 (0.0428)	0.116*** (0.0384)	0.112*** (0.0380)	0.0770** (0.0300)
Saskatchewan		-0.0277 (0.0426)	0.000837 (0.0418)	0.0449 (0.0393)	0.121*** (0.0339)	0.120*** (0.0339)	0.0595** (0.0288)
Alberta		0.0991** (0.0493)	0.137*** (0.0486)	0.186*** (0.0455)	0.286*** (0.0374)	0.284*** (0.0374)	0.223*** (0.0345)
Northwest Territories		0.470*** (0.0717)	0.452*** (0.0834)	0.454*** (0.0794)	0.491*** (0.0672)	0.511*** (0.0670)	0.432*** (0.0506)
Nunavut		0.340*** (0.0625)	0.260*** (0.0705)	0.277*** (0.0685)	0.358*** (0.0626)	0.420*** (0.0657)	0.321*** (0.0501)
Yukon		0.416*** (0.0843)	0.352*** (0.0783)	0.325*** (0.0750)	0.294*** (0.0637)	0.289*** (0.0641)	0.237*** (0.0406)
Agreements			0.139*** (0.0333)	0.136*** (0.0337)	0.0925*** (0.0322)	0.108*** (0.0326)	0.0664*** (0.0233)

Amount spent in CSD on charitable activities	-3.97e-09 (5.28e-09)	-3.27e-09 (5.01e-09)	-5.35e-10 (4.73e-09)	-1.04e-09 (4.47e-09)	-6.17e-10 (3.42e-09)		
Single		-0.292*** (0.0107)	-0.253*** (0.00934)	-0.254*** (0.00933)	-0.182*** (0.00796)		
Separated/ Divorced/ Widow		-0.131*** (0.0124)	-0.108*** (0.0119)	-0.109*** (0.0118)	-0.0804*** (0.0101)		
Household size		-0.0507*** (0.00324)	-0.0344*** (0.00218)	-0.0343*** (0.00221)	-0.0131*** (0.00190)		
Non-Indigenous Identity			0.444*** (0.0324)	0.524*** (0.0352)	0.231*** (0.0237)		
Not registered under the Indian Act				-0.106*** (0.0343)	-0.0391 (0.0256)		
High School Certificate					0.242*** (0.0113)		
Above HS, below bachelor (including trades and apprenticeship certificate)					0.321*** (0.0101)		
Bachelor degree					0.798*** (0.0211)		
Master, doctorate, degree in Medicine					0.801*** (0.0414)		
Not in labour force					-0.970*** (0.0159)		
Unemployed					-0.712*** (0.0129)		
Constant	9.295*** (0.0240)	9.041*** (0.0734)	9.039*** (0.0735)	9.328*** (0.0725)	9.243*** (0.0747)	9.263*** (0.0730)	9.229*** (0.0560)
Adjusted R-square	0.065	0.090	0.091	0.103	0.116	0.117	0.254
Number of clusters	943	943	943	943	943	943	943
Observations	292,535	292,535	292,535	292,535	292,535	292,535	292,535

Robust standard errors in parentheses are clustered at the CSD level.

Significance: * p<.10, ** p<.05, *** p<.01

Chapter two: Government funding to Indigenous charities

2.1 Introduction

The government is a funding source for charitable organizations in Canada. Big differences in the rates of public funding can be observed across registered charities that serve Indigenous peoples, hereafter referred to as Indigenous charities, and all other registered charities: 56% of Indigenous charities receive a portion of their revenue from government sources, by contrast, only 35% of all other registered charities receive public funds. Charities that provide services to the Indigenous population are not only more likely to get public funding, but the proportion of revenues received from the government is also larger for Indigenous charities. For these latter charities, 41% of revenues come from government sources as compared to 28% for the other charities.

The aim of this research is to investigate government-funding patterns specifically for those charities that serve the Indigenous peoples. No one has looked so far at the factors affecting the public funding in these charities. Using charitable organizations' tax returns, the T3010 *Registered Charity Information Return* for the years 2003 to 2017, I examine a number of factors in order to develop a better understanding of how they are related to government funding. At the present time, Indigenous peoples still face high levels of poverty and inequality, and charities are often used as service delivery partners by all levels of government in Canada. I explore the extent to which the charitable sector may be one tool with which to address some of these difficulties.

The interaction of charities with the government and the collaboration of government agencies with the charitable sector, is complex; it changes over time, and it can vary across different program areas. Young (2006) suggests that these relationships can be complementary, supplementary or adversarial. These roles are not mutually exclusive but can overlap and exist simultaneously. The charitable sector acts as a complementary partner with the government when charities produce specific services financed by the public sector through contractual relationships. In this complementary view, the government is still the main provider of the services but uses charities as the vehicle for delivering them. Charities act also as private providers of public services that supplement the services of government agencies. Health and education charities are such substitutes that represent an extension of the government. These are able to satisfy the demand for public goods when the government cannot meet it or where preferences are too heterogeneous. There is also a more dynamic view of the relationship between government and charities, and that is the adversarial one, where both sides promote reciprocal changes in behaviour. On the one hand,

charitable organizations advocate for government actions designed to be more responsive and on the other hand the government introduces stricter regulations for the charitable delivery of public welfare.

Two main research objectives emerge. The first one investigates government transfers from different levels of government to Indigenous charities and to charities that serve others. The second objective explores the relationship, if any, between the funding across different levels of government: is one level of government funding contingent on other levels? For instance, do Indigenous charities receive more provincial funding if they get already federal funding? Finally, a parallel analysis will investigate government support for Indigenous charities off reserves and on reserves to see if this helps shed light on what is going on.

This chapter contributes to the literature in several ways. This is a pioneering study on the financing of Indigenous charities. It adds not only to research on Indigenous issues, but also to the scant literature on government funding decisions. As the first researcher to conduct this type of study, I demonstrate how Indigenous charities differ from other charities in terms of their government funding patterns. My work reveals insights into the role given to charities by governments when it comes to providing services to Indigenous peoples - and provides empirical evidence useful for public policy geared towards helping the dire situations in many Indigenous communities. I also examine the public funding of charities by the three levels of government. No one has looked at this; existing work on government funding of charities relies on information on one level of government. It would not be possible to conduct this study in the US context, as data on public sources of funds are not disaggregated at the federal, state and local level.

My results point definitively to a higher likelihood of Indigenous charities receiving government support as compared to non-Indigenous charities, with a 24% increase in the predicted probability of funding. Indigenous health and welfare charities manifest the highest increase in the predicted likelihood of funding by 81% and 31% respectively. To the contrary, Indigenous charities on reserve have a predicted probability of receiving government funding that is almost 17% lower than Indigenous charities off reserve. From the exploration of the link between the three levels of Canadian government funding for Indigenous and non-Indigenous charities two major aspects emerge. First, the federal government supports Indigenous charities if these do not get any other public funds, and the provinces supports them if they do not get any municipal funding. Second, Indigenous charities are more likely to get both sources of federal and provincial, and federal and municipal funding than non-Indigenous charities. This suggest that the federal funding attracts

funding from the other two levels of government. The comparison between Indigenous charities off reserve and on reserve reveals that charities on reserve are less likely to receive two sources of public funding simultaneously. This is the case for all three combinations of analysis: federal and provincial, federal and municipal, provincial and municipal funding.

The rest of the chapter is organized as follows: Section 2.2 reviews the literature associated with the chapter. Section 2.3 describes the data and section 2.4 introduces the hypotheses. Section 2.5 presents the methodology. Sections 2.6 and 2.7 report the descriptive statistics and the results. Section 2.8 concludes.

2.2 Related literature

The body of literature that employs the T3010 dataset to analyze the government funding of charities is largely descriptive; none of the studies relies on econometric techniques. Sharpe (1994) is the first to give a portrait of Canada's charities regarding their structure and financing profiles. He finds that the amount of government revenue received by registered charities in Canada varies by charity type, where a very small number of charities, namely hospital and teaching institutions are the receivers of the lion's share of all public funding.

Hall et al. (2005) arrive at a similar conclusion a decade later. They find that Canada has more government funded charitable organizations than other countries and government payments play a primary role above all for hospitals, universities and colleges. Lasby (2011) states that between 2005 and 2009 government funding constituted two thirds or more of total revenues, with provincial funding representing the biggest bulk. Hospitals, universities, colleges and school boards were generally financed very differently from other charities that are not as much reliant on government funding.

Registered charities have revenue sources that range from memberships fees and selling goods and services, to donations from individuals and other charities; however, a meaningful portion of their income comes from various levels of government. The federal government is paying in many instances for social programs and, not surprisingly given the division of responsibilities in Canada, the provincial government plays a prominent role for charities delivering programs in health and education. The transfers from the government to the charities occur in form of grants and reimbursements of services (Emmet and Emmet, 2015).³⁷

³⁷ This exact distinction is not observable in the T3010 dataset though. Only the total revenue received from the government or from the federal, provincial and municipal level is reported.

The importance and the dependence of government funding for charitable organizations has been studied also in other countries. The next few studies relate to the US. Pipes (2002) looks at government funding and social services that include children, youth and senior services, refugee assistance, health and nutrition. According to him developing a dependency on government funds can pose some problems, as there is firstly no security that funding will be provided in the future. Secondly, government monies will impose administrative burdens and supplementary government control and performance supervision. Thirdly, smaller charities will have difficulties to administer large government grants. Lastly, as government contractors, charities might also incur additional costs, in reporting for instance, or will have to adjust programs to meet specific criteria.

For Guo (2007), charities represent the interest of the citizen in front of the state. He studies government money influx and its effect on the governance of nonprofit organizations and realizes that government revenues are a very important component. Funding coming from government contracts allow them to add more services and to develop new ones. The amount of money that charities receive depend on some organizational characteristics, such as the presence of professionals who have a specific expertise in grant writing.

Lu (2015) recognizes government revenues in the form of contracts and grants as being a focal point for many nonprofit organizations. He asserts that those which have received government funding in the past are the most likely to receive repeatedly government revenue as they are effective in providing services under a third-party government or contract regime. However, receiving government funding does not come without costs: organizations having access to government funding have also to deal with government regulations and oversights and administrative burden. Already a decade earlier, Hall et al. (2005) stated that the red tape coupled with getting and reporting on government funds is a rising concern for charities.

In Australia, Cortis and Lee (2019) find that social service charities are highly dependent on government funds after entering a partnership with public authorities for delivering services. However, charities are struggling with problems related to competition, financial insecurity and increasing service demand. As stated in Bennet and Savani (2011), British government agencies develop progressively a dependency on contracting out welfare services and charities act as suppliers of these services in a responsible manner and by engaging proactively with government bodies.

Lastly, there is a small literature on why charities are government funded. According to Hall and Reed (1998), the government chooses to withdraw from the delivery of some social programs

and to subcontract their delivery to the non-profit sector, as it is viewed as being more cost-efficient and it targets directly specific groups of the population. The same conclusion was reached by Ebaugh, Saltzman and Pipes (2005), who studied faith-based organizations that deliver social and welfare services. For them, organizations that receive public funds accelerate the provision of social services targeting above all low-income people. Garrow (2010) suggest that the government does not take full accountability for the provision of social services anymore and grants and contracting out are the two major funding mechanisms through which the government delegates their delivery.

2.3 Data

The main source of data for this chapter is the T3010 - Registered Charity Information Return.³⁸ Primarily for income tax exemption purposes and to maintain its status as a legal entity, registered charities file every year the T3010 return with the Canada Revenue Agency (CRA). The T3010 provides rich information on the financial statements of each charity, including revenues and their sources.³⁹

The time frame for this analysis ranges from 2003 to 2017. Since a 15-year period is quite long, I adjust all monetary variables for inflation, with 2017 as the base year. In the first chapter, I used T3010 variables on location and on the amount spent on charitable activities for the years 2000, 2005 and 2010 that were merged with Census data. The first few years are excluded in this second chapter, as there were significant changes in the T3010 format in 2003 that would hamper the comparison of variables over time. The most notable difference for this analysis is that before 2003, government funding was split among four different categories, which included besides federal, provincial/territorial and municipal funding also “other” government grants.

The dependent variables of interest are all related to public funding. I created three binary variables that reflect whether the charity received in any given year at least one dollar of federal, provincial or municipal funding; I also create one variable for government funding that combines these three levels.

The analysis distinguishes between Non-Indigenous and Indigenous charities (1,226,173 versus 11,277 observations); the Indigenous sample is broken down into Indigenous charities off reserve and on reserve (6,301 versus 4,976 observations). The Indigenous charity sample includes three main groups: charities that are located within the borders of an Indigenous community, those

³⁸ These data are available to anyone upon request to the CRA. I obtained an updated version of the data at <https://www.canada.ca/en/revenue-agency/services/charities-giving/charities/guidance-videos-forms/request-charities-listings.html>.

³⁹ A template of the T3010 form can be downloaded at <https://www.canada.ca/content/dam/cra-arc/formspubs/pbg/t3010/t3010-18e.pdf>.

that have an Indigenous reference in its legal name and those that provide benefits almost exclusively to Indigenous peoples.

For the first group, I located a registered charity by means of its postal code and address in one of the Indigenous Census Subdivisions (CSD) so classified by the government department Aboriginal Affairs and Northern Development (AANDC). This same procedure was adopted for the sample used in the first chapter.

The second group encompasses charities that contain in their legal name words such as *Aboriginal, Indigenous, First Nation, Inuit, Métis, Indian* or *Native*. Some examples for these are: First Nations Child and Family Caring Society of Canada, National Indian & Inuit Community Health Representative Organization (NICHRO), Okanagan Métis & Aboriginal Housing Society. I assured that charities whose name contained for instance the word *Indian* and pertained to the country India or the locality Indian Harbour, were removed from the sample.

In the third group, I included all those charities that report on the T3010 form (lines 1200, 1210 or 1220) as one of their primary fields of charitable activity the code A9 - *Services for Aboriginal Peoples*. These charities cover a wide range of areas that include suicide prevention lines, shelters for victims of abuse, counselling centers for alcoholism and substance abuse, as well as family counselling, drop-in and community centers, and organizations that provide legal services or consultation for industry, commerce, agriculture, or craftsmanship activities (CRA, 2017). Since these three subsamples are not mutually exclusive, in the sense that a charity that offers an Indigenous service can have an Indigenous denomination and be located in an Indigenous community, besides the on and off-reserve distinction, no further breakdown between these groups is made.

A further distinction needs to be made as not all charities reported a breakdown of government revenues all the time. To address this issue, I created a subsample that I called “Schedule 6”. This includes all charities that indicate if they received funding from federal, provincial and/or municipal governments. Therefore, it includes all charities until 2008 and thereafter only those which were subject to fill out Schedule 6. In 2009, the T3010 changed its reporting of financial information. To reduce part of the administrative burden in filling out tax returns, the CRA requested from some charities, usually smaller ones, only reduced financial information in Section D of the T3010. Other charities had to continue to report more details regarding their finances in Schedule 6, if any of the following conditions applied “*a) the charity’s revenue exceeds \$100,000; b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than*

\$25,000; c) *the charity has permission to accumulate funds during this fiscal period*” (T3010 form, p. 3).⁴⁰ Hence, the Schedule 6 sample contains 870,093 observations, 861,423 non-Indigenous and 8,670 Indigenous charities of which 5,360 were off-reserve and 3,310 on-reserve charities.⁴¹

One of the primary obligations of a registered charity is to direct its financial resources towards activities with a charitable purpose. It is responsible for how it uses the funds and adequate records must be kept. Administrative data such as the T3010 represent a rich source of secondary data, but they are not collected with the purpose of conducting research. In the past, there was some concern raised over the quality and accuracy of the T3010 data from scholars and in the philanthropic environment. In the 1990s Sharpe (1994) detected some issues with financial figures that were incomplete or missing and sums of single revenue components that would not always add up to the total revenue. Of course, in early days errors could arise from the scanning of the returns into a machine-readable code (Andreoni and Payne, 2011). Ayer et al. (2009) employed T3010 data from 2003 to 2007 and found that charities sometimes reported impossible values, left important lines blank, made calculation errors or neglected to report values rounded to the nearest dollar, having a 100-fold increase in the figure. These inaccuracies pertained in particular to fundraising costs and fundraising revenues. Lasby (2011) found a relatively high rate of errors in some returns when using data spanning from 2005 to 2009. Andreoni and Payne (2011) corrected mistakes and anomalies that they detected when converting the data to a working dataset. For instance, they converted negative values that were not supposed to be negative into positive ones.

If the T3010 has posed some challenges for researchers, it needs also to be said that errors have decreased over time as the CRA has become sensitive to the issues plaguing earlier years. Manually filled out forms have been replaced with fillable PDF versions, where scanning is less

⁴⁰ Only for the year 2009 there is an additional condition that applies, namely “d) *The charity has spent or transferred enduring property during this fiscal period*” (T3010 form, p.3). Enduring property are generally gifts in form of bequests or inheritances from individual donors, gifts from other charities or ten-year gifts that cannot be spent for ten years. For more details, one can consult the CRA’s glossary on charities and giving at <https://www.canada.ca/en/revenue-agency/services/charities-giving/charities/charities-giving-glossary.html>. To detect charities that were supposed to fill out Schedule 6 starting from 2009 the following lines of the T3010 have been used: a) *the charity’s revenue exceeds \$100,000*: if the amount of line 4700 Total revenue is greater than \$100,000; b) *the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000*: if the amounts of lines 5900 and 5910 regarding property not used in charitable activities during the 24 months before the beginning or before the end of the fiscal period are greater than \$25,000; c) *the charity has permission to accumulate funds during the fiscal period*: if the amount of line 5500 concerning the permission to accumulate property for the fiscal year, including income earned on accumulated funds is different from zero and if the amount of line 5510 that has been disbursed for the fiscal year for the specified purpose of accumulating property is not equal to zero. Prior to 2009, all charities had to report detailed financial information in Section E, which is comparable to Schedule 6.

⁴¹ The table here below summarizes the number of observations (n) and the number of charities (N) of the various samples.

	Non-Indigenous charities	Indigenous charities	Indigenous charities off-reserve	Indigenous charities on-reserve
Observations full sample: n=1,237,450	n=1,226,173	n=11,277	n=6,301	n=4,976
Number of charities: N=107,291	N= 106,197	N= 1,022	N=564	N= 458
Observations sample Schedule 6: n=870,093	n=861,423	n=8,670	n=5,360	n=3,310
Number of charities: N=94,338	N=93,418	N= 920	N=512	N=408

problematic and with electronic versions (E-filing) which eliminates some mistakes. Furthermore, the use of the software FaciliT3010 introduced in 2012 for a few years, was aimed at improving the accuracy of the declarations filed by the organizations (CRA, 2013).

To address further these data input issues, the CRA started requesting that the charities submit their audited annual reports or financial statements when filing the T3010 (Andreoni and Payne, 2011). In 2005, the CRA stated that they check the data on a regular basis in order to detect and correct large incongruities and achieve the standards for data accuracy (CRA, 2005). In more recent years, the CRA ensures accurate and reliable data by means of periodic audits and verification checks: wherever arithmetic or reporting errors have been detected, these have been readjusted or corrected and few outliers have been deleted (Brouard, 2014).

With the continuous modernization of IT systems and by monitoring data input, balance sheet information has become more reliable. The data available for researchers have improved in quality over time; they are a good source of information for analytic purposes. Andreoni and Payne (2013) compared the quality of the T3010 data with its counterpart data from the US, the 990 form the IRS Section 501(c)(3) for tax-exempt organizations; they found that the Canadian data were richer and more complete. Searing (2019) praises the T3010 data which not only provides information on different funding strains, but they also capture funding from different levels of government. This is different from and an improvement over many of the government funding studies based on US information.⁴²

I have spent a great deal of time improving further the quality of the data by dropping charities with anomalies and by recalculating financial variables when arithmetic inconsistencies persisted. For example, over the 15 years of my dataset, I found 3,400 charities that submitted the T3010 twice and a handful of charities that reported anomalous amounts. For these latter charities, I emailed them directly to ask about their funding, I examined the balance sheet published on the website of the organization and I checked to see if a boost in total revenues for one year was also reflected in an increase in total assets net of expenditures in the following years. Some of these outliers include the SHAD foundation that had a private donation in the amount of several tens of millions of dollars in 2007, the Cold Lake Native Friendship Centre Society, which reported municipal funding incorrectly in 2007 and the Coast Conservations endowment fund with 10 times higher revenues for private donations in 2008 as compared to previous years. Then, I recalculated

⁴² Contrariwise, the US form makes two other distinctions in terms of government funding: first, it differentiates between government grants and second between other types of government funding, such as reimbursements and contracts (Lecy and Van Slyke, 2013).

line 4570, namely the amounts of revenue from any level of government in Canada, which are the sum of lines 4540 for federal, 4550 for provincial/territorial and 4560 for municipal/regional funding. If a charity had to fill out Schedule 6 and specify between the three government revenue sources, line 4570 would have been empty. I replaced the recalculated variable 4570 if the charity had to fill out Schedule 6 and if the two variables were not already the same. I could see from the data if there were zero values reported for line 4570 but positive government funds were obtained. I thus recorded these government funds in line 4570. Lastly, I replaced negative values of line 4570 with those of my recalculated government funding numbers if the recalculated numbers had the same absolute value. A total matching of 96.28% could be achieved, leaving only 46,000 values as they originally were. In a similar manner, I employed this approach to lines 4200 total assets, 4350 total liabilities, 4700 total revenue, 4950 total expenditures before gifts to qualified donees and 5100 total expenditures, also if not all variables are used for the analysis undertaken in this chapter.

Another source of data used for some robustness checks is provincial expenditures. I add information on the Canadian classification of functions of government (CCOFOG) by consolidated government component retrieved from table 10-10-0005-01 (formerly CANSIM 385-0041) of Statistics Canada. There are nine different classifications of expenditures: 1) general public services, 2) public order and safety, 3) economic affairs, 4) environmental protection, 5) housing and community amenities, 6) health, 7) recreation, culture and religion, 8) education, and 9) social protection. To avoid double counting, I deducted first the provincial revenues received by the charities in the following areas: benefits to community, education, health, religion, other and welfare. Provincial revenue for benefits to community have been deducted from general public service expenditures, revenues for welfare from social protection, revenues for other from economic affairs and obviously revenues from education, health and religion from education, health and recreation, culture and religion respectively. In this way I control for other provincial expenditures, that do not occur via the charitable sector. Then I calculated these expenditures in per capita terms by province. Since data are available only for the period 2008 - 2017, this timeframe is considered.

2.4 Why does the government fund charities: some hypotheses

According to the most recent Census data collection of 2016, Indigenous peoples represent over 1.6 million or 4.9% of the Canadian population (Statistics Canada, 2017). Nearly one-half of them live in reserves or communities (Government of Canada, 2017). Regrettably, when compared to

other Canadian residents, they are considered as one of the most vulnerable populations, with extreme rates of poverty. Individual and family incomes are often not sufficient to have an adequate standard of living. Communities that experience a disproportionate burden of poverty face also barriers to accessing health care. Indigenous peoples who live in rural and geographically isolated areas have, on average, less educational opportunities and limited labour market choices relative to those in less isolated areas (Wien, 2017). The problem of high levels of poverty and inequality require action. One strategy that may help to alleviate some of these problems is the charitable sector; government funding of this sector may allow public policy to use this tool. It can represent a reasonably nimble way to provide a host of services to small populations and hence to serve some of the needs of Indigenous peoples, in particular those living on reserve. This leads to the first two hypotheses:

H1: *Indigenous charities have a greater chance to get financial support from government sources than non-Indigenous charities*

H2: *Indigenous charities on reserve are more likely to receive government revenue than Indigenous charities off reserve.*

In comparison to non-Indigenous services, the jurisdictional allocation of responsibility for service delivery is less clear-cut for Indigenous populations. Different levels of government are responsible for the delivery of services to Indigenous peoples in Canada. For instance, starting from the 1950s, the provinces have taken more responsibility for the delivery of health and educational services (Feir, 2016). For on-reserve schools operated by First Nation bands, funding generally comes from the federal department of Crown-Indigenous Relations Canada (CIRNAC) and Indigenous Services Canada (ISC), formerly Aboriginal Affairs and Northern Development Canada (AANDC) (Friesen and Krauth, 2010). Moreover, out of the 46 currently federal supported programs by CIRNAC/ISC, eight relate to education as for instance Inuit Cultural Education Centres Grant Program or First Nation Student Success Program.⁴³ Further access to funding for programs, services and initiatives where inadequate resources are a present-day issue, is granted by the CIRNAC/ISC and is open to communities, governments and individuals as well as to Indigenous organizations. The jurisdiction for health services falls according to the Canada Health Act 1984 strictly under provincial and territorial governments. However, for Indigenous health service planning and delivery, multiple levels of authority have taken a greater role to coordinate a cross-jurisdiction service provision (NCCAH, 2011). CIRNAC/ISC serves additionally as a focal

⁴³ The other programs can be found on the CIRNAC/ISC website at <https://www.aadnc-aandc.gc.ca/eng/1425576051772/1425576078345>.

point for supporting housing and community infrastructure, and social support, although under Canada's federal system, provinces bear the responsibility for social services and housing (CIRNAC/ISC, 2017). Hence, one expects funding from different government levels to Indigenous communities; this leads to the third hypothesis.

***H3:** The joint probability of getting two sources of government funding is higher for Indigenous charities than for non-Indigenous charities.*

Another aspect to consider for the allocation of government funding is the remoteness of geographically isolated communities. The CIRNAC/ISC representing the federal government developed a support-funding program for First Nations bands and Inuit communities. The funding sources are for improving local governance and their administrative systems as well for the provision of services delivered through an array of local organizations. Part of the formula to determine the funding is an environmental index and a geographical remoteness classification. The index is based on the degrees of geographical latitude, which ranges from below 45° latitude (Index A) to above 65° latitude (Index F), with a 5° latitude increment. An Indigenous community located between the 50° and the 55° latitude (Index C) receives more funding as compared to a community located between the 45° and the 50° latitude (Index B). With a similar approach, there are three geographic zones, characterized by the location within 50 km, between 50 and 350 km, over 350 km with year-round road access from the nearest service centre and a fourth one with no year-round road access. Funding in zones 3 and 4 is more generous as compared to zones 1 and 2 which are closer to a service centre, defined as offering access to government services, banks and suppliers (Indigenous Services Canada, 2020). Since on-reserve charities are mostly in rural and more remote areas, it might occur that on reserve charities are more likely to get public funding from various sources as compared to the off-reserve Indigenous charities. The fourth and last hypothesis is therefore as follows.

***H4:** The joint probability of getting two sources of government funding is higher for Indigenous charities on reserve than for those off reserve.*

2.5 Testing the hypotheses: Empirical strategy

To test the four hypotheses, a probit model and a bivariate model are employed. The first model predicts the binary outcome of receiving public funding from various government levels and the latter approach permits to examine whether the three levels of government funding (federal, provincial and municipal) are contingent on each other. The unit of analysis is always the charity and both methodologies include the same dependent variables, independent variables of interest,

controls and fixed effects. The results presented are the marginal effect representing the change in the predicted probability associated with each given variable.

2.5.1 Econometric models

To address the likelihood of receiving government funding, I opt for probit regressions, which are appropriate when the dependent variable is a binary variable. The econometric specification is derived from a latent model representation that takes the following form:

$$Y_{it}^* = \alpha + \beta Ind_Status_{it} + X'_{it}\gamma + \delta_p + \theta_t + \varepsilon_{it} \quad (1)$$

$$Y_{it}^* = \kappa + \lambda On_Reserve_{it} + X'_{it}\chi + \tau_p + \pi_t + v_{it} \quad (2)$$

$$Y_{it} = \begin{cases} 1 & \text{if } Y_{it}^* > 0 \\ 0 & \text{if } Y_{it}^* \leq 0 \end{cases}$$

$$\varepsilon_{it} \sim N(0,1) \quad \text{and} \quad v_{it} \sim N(0,1)$$

In the latent regressions (1) and (2), Y_{it}^* is the unobserved variable, whereas Y_{it} represents the observed data relative to government, federal, provincial or municipal funding for each charity i in year t . When estimated as the marginal effect, β and λ are the coefficients of interest for the independent variables Ind_Status and $On_Reserve$, respectively. These variables are both binary in nature, with the first one representing the Indigenous charities, and the second one the Indigenous charities on reserve. X'_{it} is a set of charities' characteristics: designation type, program type, size and location. In the two equations, δ_p and τ_p are provincial fixed effects, whereas θ_t and π_t are year fixed effects. ε_{it} and v_{it} are the error terms, assumed to follow a normal distribution.

This analysis is not trying to reveal causal effects, rather it is uncovering correlations. Causal interpretations are hampered by potential concerns over endogeneity, arising, for instance, if unobserved components in the error term are simultaneously correlated with having Indigenous charity status. This would arise if when creating and establishing a charity, the founders choose to serve Indigenous peoples because of funding opportunities. In a similar manner, an existing charity could change its programs to Indigenous ones to pursuit more money. The first issue is not observable in the data, whereas the second one is. In my data set, there were 47 charities that changed their programs to serve Indigenous peoples, but there were also 40 charities that choose not to serve these populations anymore. Since the difference is quite small, there is no clear

evidence that selection into having an Indigenous status is a worry. Other concerns for endogeneity could be measurement error and omitted variable bias. However, this problem is mitigated since I use administrative data and I include in the model all the variables that function as relevant independent variables.

To examine whether the three levels of government funding (federal, provincial and municipal) are contingent on each other, I implement a bivariate probit model to estimate the joint probability of receiving government support from these sources for Indigenous charities or for Indigenous charities on reserve, as a function of various charity level characteristics. With this approach, I look at the two-way combinations of federal and provincial, funding, federal and municipal, provincial and municipal funding.

In econometric terms and following Greene (2012), the bivariate probit model can be used to estimate the following two joint outcomes:

$$y_1 = \begin{cases} 1 & \text{if } y_1^* > 0 \\ 0 & \text{if } y_1^* \leq 0 \end{cases}$$

$$y_2 = \begin{cases} 1 & \text{if } y_2^* > 0 \\ 0 & \text{if } y_2^* \leq 0 \end{cases}$$

In equations (3) and (4) these outcomes are expressed by two unobserved latent variables and the error terms are jointly normally distributed, each with a mean of zero and variance of one.

$$y_1^* = x_1' \beta + \varepsilon_1 \quad (3)$$

$$y_2^* = x_2' \beta + \varepsilon_2 \quad (4)$$

$$\begin{pmatrix} \varepsilon_1 \\ \varepsilon_2 \end{pmatrix} | x_1, x_2 \sim N \left[\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} 1 & \rho \\ \rho & 1 \end{pmatrix} \right]$$

In order to justify a bivariate probit model as compared to two separate probit models, the correlation between the outcomes cannot be weak. In the analysis with the Schedule 6 sample, the correlation between the funding coming from two different levels of government is always statistically significant with 0.401 for federal and provincial, 0.325 for federal and municipal, and 0.412 for provincial and municipal funding. A positive correlation means that one variable increases as the other one increases, and this link suggests possibly some joint programs between

two levels of government, or even a potential matching between two sources of government funding.

For a more comprehensive analysis of the interdependency of charities receiving government funding from various sources I also apply a multivariate probit model. This adds to the bivariate probit model in a way that the binary nature of the dependent variable is extended to all three levels of government revenue. By allowing for correlation between the error term, three probit models are estimated simultaneously to assess if the probability of getting one source of government funding is interdependent on getting government support from the other two sources. Compared to the probit and bivariate probit, the marginal effects are not provided for this approach as their estimation is according to Hsiao (2014) computationally not feasible.

2.5.2 Variables

The dependent variables are the four public funding variables: any government funding, federal funding, provincial funding and municipal funding. Each of them takes the value of one if revenues from that specific level are at least one dollar in any given year.

The independent variables of interest are Indigenous charities and Indigenous charities on reserve. Both are binary variables. The first one takes the value one if the charity is included in the Indigenous charity sample and zero if it is a non-Indigenous charity. The second one takes the value one if the charity is located inside the borders of an Indigenous CSD and zero if it is located off reserve. The control variables help to identify factors that influence government funding. I include charities' designation, program, size and location as controls.

Charitable bodies are designated either as a public foundation, private foundation or as a registered charity, depending on their structure, source of funding and how they operate. Common to all three types are their charitable commitments. Registered charities fulfill their own charitable activities, public foundations share most of their revenues with other registered charities and private foundations are a hybrid of the first two (CRA, 2020).

Charitable programs belong to one of the six broad classification areas, as categorized by the CRA: benefits to community, education, health, religion, other and welfare.⁴⁴ Charities that belong

⁴⁴ The CRA provides more than 50 subcategories for a charity to choose from, which it then groups into six major types. All subcategories are mutually exclusive as are the six broader categories. For religious charities, some of these subgroups are missionary organizations, Hindu religious groups, Islamic religious groups, Presbyterian congregations. When founded, a charity must self-identify its main area. Of course, there are charities in one category that could potentially belong to another category, but this cannot be disentangled. For instance, the University of Ottawa which offers classes in health economics or classes for medical students has identified itself as a learning institution and is therefore an educational charity. Definitively it has some spillover effects in other subareas, health in this case, but due to the mutually exclusive nature of the categories, such effects cannot be taken into consideration.

to benefits to community include: museums, galleries, concert halls, libraries, volunteer firefighters and agricultural societies; whereas universities and colleges, nursery programs, language schools, scholarships, bursaries and awards, employment preparation and training belong to the education charities. Some examples for health charities are hospitals and nursing homes, cancer foundations, promotion and protection of health, including mental health and Alzheimer societies. Bible schools, places of worship, ministries, seminaries and other religious colleges fall under the category of religious charities. The category ‘other charities’ include for instance employees’ charity trusts or Rotary clubs. Welfare charities comprise of organizations associated with early learning, family and senior care centers, community services and support organizations such as retired citizens organizations, housing societies and food banks.

To capture size, I generate dichotomous variables that split charities based on the amount of their total revenues: charities with less than \$25,000, charities between \$25,000 and less than \$100,000, charities between \$100,000 and less than \$250,000, charities between \$250,000 and less than \$500,000, charities between \$500,000 and less than \$1 million, charities between \$1 million and less than \$5 million, charities between \$5 million dollars and less than \$10 million, and charities above \$10 million.

I created a rural and an urban binary variable using the alphanumeric postal code of the charities’ address. If the first digit of the postal code is a zero, it represents a rural location, whereas if the first digit is between one and nine it is coded as urban area.⁴⁵ Spatial and time units are used as fixed effects. Provincial fixed effects control for all the characteristics of a province that do not change over time and are not directly observable. Year fixed effects control for factors that are year-specific, in the sense that can fluctuate each year, but are common to all provinces for a given year. The error term captures unobserved factors. I report standard errors clustered at the charity level.

2.6 Descriptive Statistics

The summary statistics and a difference in means analysis provided in table 2.1 establish that non-Indigenous and Indigenous charities, and that Indigenous charities on reserve and off reserve, are significantly different from each other when it comes to program financing. Column 4 provides the absolute difference between the mean values of 1,226,173 non-Indigenous charities and 11,277

⁴⁵ New Brunswick does not have any rural postal codes, as these have been phased out by Canada Post. Nunavut and the Northwest Territories share postal codes starting with the letter X. Only Yellowknife is considered as an urban place, but not the capital of the territory of Nunavut, Iqaluit, which falls under a rural area. The charities in New Brunswick and Nunavut account for approximately 3% of the sample.

Indigenous charities. There are 21% more Indigenous charities as compared to non-Indigenous charities, which receive funds from public sources; this difference is even larger for federal government funds (25% more) about the same for provincial funding (20% more) but smaller for municipal funding (8% more). When considering government support in monetary terms, Indigenous charities receive on average more federal funding (+\$329,104) but less provincial (-\$873,570) than their non-Indigenous counterparts. Nevertheless, for Indigenous charities, provincial funding represents the biggest chunk of public money with an average of \$758,518 for each charity, followed by federal funding with \$414,369 and lastly by municipal funding with \$60,272.⁴⁶ This pattern can be traced in figure 2.1 and along with figure 2.2 show the variation of Indigenous charities in federal, provincial and municipal funding, first as an average dollar amount per year and second as a percentage of charities which receive government revenue.

The distinction between Indigenous charities off reserve and on reserve is depicted in columns 5 and 6. More charities off reserve are government funded (69%) as compared to the ones on reserve (39%). Also in monetary terms, Indigenous charities off reserve receive more public funding, with each charity collecting on average \$1.5 million in government money as compared to \$867,000 for those on reserve. The differences in means are obviously statistically significant and are reported in column 7.

The government share of charitable revenue is the proportion of total revenues received from the government. It represents on average 41% of total revenues for Indigenous charities, as opposed to 28% for the non-Indigenous ones. The share for Indigenous charities off reserve is higher than for those on reserve with 53% and 26% respectively. Furthermore, among the three levels of government, the share of provincial funding is always the largest, and this holds regardless of it is an Indigenous or a non-Indigenous charity.⁴⁷ Total expenditures give an understanding of the importance of the charitable sector: on average each non-Indigenous charity spends almost \$2.7 million whereas an Indigenous charity spends close to \$1.7 million.

In terms of the size of the charities, based on total revenues, it is notable that Indigenous charities are larger in size than non-Indigenous charities: 80% of non-Indigenous charities are in the first four categories with revenues below \$500,000 and 24% of Indigenous charities are in the category between \$1 million and \$5 million dollars. Indigenous charities on reserve are generally speaking smaller in size than those off reserve.

⁴⁶ Although, I am not using the dollar amount of government funding in the empirical analysis, I am reporting it as it provides a deeper understanding of the whole picture.

⁴⁷ Also the government share is not used in the regression analysis.

When it comes to the program or area in which charities are active, 28% of Indigenous charities are religious entities, mostly operating on reserve, versus 39% of religious non-Indigenous charities. Exactly half of the Indigenous charities are welfare or benefits to community charities, where both types are mostly located off reserve. Welfare and benefits to community charities together represent 36% of the non-Indigenous charities. 17% are education charities, located mostly on reserve and 5% are health charities, which are equally dispersed among on and off reserve. In comparison, 16% are education non-Indigenous charities and 7% health non-Indigenous charities.

Table 2.4A in the appendix 2.A provides some additional descriptive statistics for charities by program: benefits to community in *Panel A*, education in *Panel B*, health in *Panel C*, religion in *Panel D*, welfare in *Panel E* and other in *Panel F*. Irrespective of the broad service area under consideration, the proportion of charities that receive revenues from the government is larger for Indigenous charities as compared to non-Indigenous charities. The only exception are religious charities from which it can be inferred that the provision of public goods and services are less pronounced as compared to the charities that have one of the other scopes.

The last insight from table 2.1 is on urbanicity and rurality. More than three quarter of all charities are in urban regions. For the Indigenous charities, the split is 59% on urban and 41% on rural areas. One might think that all urban charities are those off reserve and all rural charities those on reserve, but this is not correct. 17% of the Indigenous charities off reserve are in rural zones and 28% of those on reserve are urban.

Table 2.2 reports the information for the sample Schedule 6, namely those charities that reported government funding by level of government. The patterns of both, the summary statistics and the differences in means are very close to those of table 2.1. For the Schedule 6 sample, table 2.3A in the appendix 2.A reports additional information on public funding by differentiating between charities that get only government funding (*Panel A*), only federal funding (*Panel B*) and only provincial funding (*Panel C*).

2.7 Results

This section presents the result of the two econometric models, which are both divided in two parts: the first considers non-Indigenous charities versus Indigenous charities, and the second, Indigenous charities off reserve versus those on reserve. The probit model analysis uses the full sample, the Indigenous sample and the Schedule 6 samples, and reports the outcomes on the likelihood of being publicly funded. The bivariate model analysis uses only the Schedule 6 sample and delivers insights

on the prospect of getting two sources of government funding contemporaneously. Both models use the same set of covariates and for the results, the level of statistical significance is always at the 1% level, if not else specified.

2.7.1 Probit

From the descriptive statistics, more Indigenous charities as compared to non-Indigenous charities and fewer Indigenous charities on reserve than off reserve receive government financial support. After controlling for designation code, program, size, location, and using province and year fixed effects, the probit model confirms this observation.⁴⁸ Marginal effects show how much more (less) likely Indigenous charities (Indigenous charities on reserve) are to get public support in comparison to non-Indigenous charities (charities off reserve). Marginal effects are an informative way to present results as differences in probabilities when an indicator variable changes from 0 to 1.⁴⁹

The increase or decrease in probabilities represented by the marginal effects can be further understood by comparing them to the predicted probabilities arising from the model at the mean value for the continuous independent variables, or for the reference category for the dichotomous ones.⁵⁰ The predicted probabilities are reported at the bottom of the columns and can be interpreted as the probability of getting government, federal, provincial or municipal funds for charities with the reference characteristics. These charities have non-Indigenous status (or Indigenous status and located off reserve), are religious public foundations, have a size of less than \$25,000 and are located in an urban setting. The year 2003 and British Columbia are the reference year and province, respectively.

In table 2.3, column 1, the predicted probability of getting government funding for the reference charity is 28.3%.⁵¹ The fact that a charity has an Indigenous status increases this probability by 6.8 percentage points (p.p.), which translates into a 24% increase in the predicted probability of funding.⁵² Columns 2 and 3 display an increase in the predicted probability of 15.6 p.p. for federal funding and 3 p.p. for provincial funding, from a predicted probability of 16.2% and 18.8%. The first represents a 96% and the second a 16% increase in the predicted probability. The regression coefficient for municipal funding in column 4 is not significant. In terms of

⁴⁸ A linear probability model provides the same confirmation.

⁴⁹ I am using the marginal effect at the means (MEM) which keeps the covariates at mean values. The Stata command for this is *margins, dydx(*) atmeans*, which is replacing the older command *mfx* (Williams, 2012).

⁵⁰ This study relies exclusively on dichotomous independent variables.

⁵¹ Choosing a different reference category in terms of program area, changes the predicted probability considerably only if the reference category is benefits to community, in which case the predicted probability is 23.9%.

⁵² The percentage change is calculated by dividing the marginal effect of the probit model by the predicted probability (multiplied by 100).

programs, being religious charities the reference group⁵³, all other programs have a higher probability of getting financial support, regardless of the exact source of funding. Benefits to community charities and welfare charities exhibit the highest increase. Furthermore, when the size of the charity increases the probability of getting government funding increases as well and rural charities are more likely to get public funding as compared to urban charities.

Table 2.4 looks at Indigenous charities off reserve and on reserve. There is a decrease of 9.6 p.p., statistically significant at the 5% level, in the predicted probability of 57.8% for charities on reserve when it comes to being generally government funded and a decrease of 16.1 p.p. from 47.6% for provincial funding. The percentage change is 16.6 in the first case and 33.8 in the second case. Furthermore, it holds again that all non-religious charities, larger charities and rural charities have a higher probability of funding.⁵⁴

I ran a probit by year and by program, reported in tables 2.5 and 2.6. The first of these tables shows that the probability of Indigenous charities getting public funds varies greatly by year, with the first and the last year of the sample, namely 2003 and 2017, having the highest probability increases of more than 9 p.p. The years 2006 and 2010 have the lowest: 4.8 and 3.8 p.p. respectively. *Panel D* shows the regression coefficients, estimated when looking separately at the six different programs of the charity. The coefficient estimate is positive for all programs, but statistically significant only for health (32.8 p.p.) and welfare (11.6 p.p.) charities, with an overall increase in the predicted probability of 81.4% and 30.6% respectively. Presumably due to the low number of observations in table 2.6, not all estimated coefficients are statistically significant for charities on reserve. In 2016, they experience a 23.3 p.p. decrease in the predicted probability of getting government funding and in terms of programs, for benefits to community, education and health charities on reserve the decrease is 10, 17 and 9.5 p.p. respectively and statistically significant at the 5% level.

Tables 2.7 and 2.8 add interactions between Indigenous status or charities on reserve and programs.⁵⁵ This is a difference-in-difference approach and provides insights on whether government funding also depends on the sector in which a charity operates. The results are not as strong as expected. The interactions terms in table 2.7 are positive and all statistically significant

⁵³ The choice of religious charities as reference group is purely based on the biggest group in terms of program area. Since religious organizations are often very different than other charities, as they serve mainly spiritual purposes, a robustness check exercise shows what happens if this group is excluded.

⁵⁴ Tables 2.3 and 2.4 report on the likelihood of receiving public funding at the extensive margin. This relates to how many charities are receivers of government funding as compared to how much government funding charities receive. I report some results on the amounts of government funding in tables 2.5A and 2.6A in the appendix 2.A.

⁵⁵ Tables 7A and 8A in the appendix 2.A add interactions between Indigenous status or charities on reserve and rurality.

with federal funding as the dependent variable in column 2, but none of them is statistically significant for provincial funding in column 3. When considering all sources of government funding in column 1 the coefficient estimates are statistically significant only for health and welfare charities. These results are consistent with those of *Panel D* in table 2.5. Column 4 reports that the probability of receiving municipal funding decreases for Indigenous charities that work in the benefits to community, educational, welfare (statistically significant at the 5% level) and other sector (statistically significant at the 10% level). To summarize table 2.7, the program matters for Indigenous charities when the funding comes from federal agencies. Table 2.8 looks at the interactions between charities on reserve and programs, but only two coefficient estimates are statistically significant, and this only at the 10% level.⁵⁶ For charities on reserve working on benefits to community programs the predicted probability of getting federal funding decreases by 22.4 p.p. and for on reserve charities working in health the decrease in the probability of getting municipal funding is 21.1 p.p.

Two hypotheses have been tested using the probit model and the results point to a higher likelihood of receiving government support for Indigenous charities as compared to non-Indigenous charities, where Indigenous health and welfare charities manifest the highest increase. This provides support for Hypothesis 1, which states that Indigenous charities have a greater chance to get financial support from government sources than non-Indigenous charities. The analysis suggests further that the program area matters when the funding comes from the federal government.

Conversely, charities on reserves experience a decrease in the predicted probability of receiving public funds as compared to Indigenous charities off reserve. Hence, hypothesis 2, that Indigenous charities on reserve are more likely to receive government revenue than Indigenous charities off reserve, is not supported. A potential explanation is that there are more charities off reserve that are on average bigger in size in terms of total assets, total expenditures and total revenues. In the regressions, the coefficient estimates for the size of the charities reveal that the bigger the charity, the more government funded they are. Bigger charities have more resources to apply for government grants and employees are more likely to be more educated in writing proposals for these grants.

⁵⁶ Small sized dataset can have confidence intervals that are too wide for the interactions, which leads at times to inconclusive results.

2.7.2 Bivariate probit

Tables 2.9 to 2.16 display the results of receiving funding from two government sources, with the last two tables looking at interactions between Indigenous status and program of the charity. I use here the samples of Schedule 6, which include all charities from 2003 to 2008 and from 2009 only those who had to fill out Schedule 6 of the T3010.

A bivariate probit estimates two equations simultaneously. The results reflect the marginal effects for four joint probabilities, including: $P(\text{Federal funding}=0, \text{Provincial funding}=1)$ or $P(\text{Federal funding}=1, \text{Provincial funding}=1)$. The correlation between the residuals of the two estimations is given by ρ . In each bivariate probit model, this correlation is statistically significant and varies between 0.38 and 0.45 with the sample Schedule 6 and between 0.21 and 0.26 for the Indigenous sample Schedule 6.⁵⁷ In econometric terms, the classical interpretation of a positive ρ is that individuals/firms who are more likely to have X, are also more likely to have Y. In my analysis, the unit of observations is at the charity level, so it follows that charities with an Indigenous charity status have a higher chance to receive two sources of funding. This finding holds with Indigenous charity status as the independent variable of interest, where there is a complementarity between two sources of funding, but not for charities on reserve as the independent variable of interest, when the correlation is not as strong as in the first case. The next six tables will provide evidence for these results.

Tables 2.9, 2.10 and 2.11 focus on federal and provincial, federal and municipal, and provincial and municipal funding for non-Indigenous and Indigenous charities. Two major aspects emerge. First, the joint probability of getting federal funding if a charity does not get any provincial funding increases by 10 p.p. from a 7.4% predicted joint probability for an Indigenous charity as compared to non-Indigenous charities. Similarly, for Indigenous charities, federal funding increases by 13.4 p.p. from a 12.7% predicted joint probability if a charity does not get any municipal funding. In these two cases, the predicted probability increases by 135% and by 105%, respectively. In the analysis for provincial and municipal funding, the probability of getting provincial funding if a charity does not get any municipal funding increases by 2.8 p.p. from a predicted joint probability of 18%, reaching a 15.5 percentage change. Second, Indigenous charities are 5.4 p.p. more likely to get both sources of federal and provincial (39% increased predicted

⁵⁷ Since the correlation is statistically significant, a bivariate probit model must be used. Else, estimating two separate probit models for each outcome would be sufficient.

probability), and 2 p.p. more likely to get federal and municipal funding (23.5% increased predicted probability) than non-Indigenous charities.

Tables 2.12, 2.13 and 2.14 look again at federal and provincial, federal and municipal, and provincial and municipal funding but for Indigenous charities off reserve and on reserve. The joint probability of getting both federal and provincial funding decreases by 10.6 p.p. for Indigenous charities on reserve, it decreases by 3.9 p.p. when considering federal and municipal funding and by 6 p.p. when analyzing provincial and municipal funding. The predicted probability is around 20% in all three cases and the coefficient estimates are statistically significant only at the 10% in the second case. More specifically, the decrease in the predicted probability is 49.1% for federal and provincial, 19.4% for federal and municipal and 27.8% for provincial and municipal funding. Another statistically significant and noteworthy result is that for charities on reserve which do not get any municipal funding the probability of getting provincial funding decreases by 9.9 p.p. from a 32.4% predicted probability.

In table 2.15, the coefficients of interest are the interaction terms between Indigenous status and program. *Panel A* shows that the predicted probability of getting federal and provincial funding increases for Indigenous charities working in benefits to community, education, health and welfare programs, moreover it increases even more for the same set of charities and for other charities in the case where they get federal funding but not provincial funding. *Panel B* considers federal and municipal funding. For all types of Indigenous charities, the predicted probability increases for the combination federal funding, but no municipal funding. However, the only type of charity that shows a statistically significant increase in the predicted probability of getting both are health charities. In fact, only those Indigenous charities working in health receive some help from municipal governments if they already receive some federal funding. Municipal funding is the weakest and rarest source of public funding. The last combination of provincial and municipal funding is provided in *Panel C*, where results are mainly statistically significant for benefits to community and education charities for which there is a decrease in the predicted probability of getting municipal funding when they get no provincial help, and also of getting both sources.

The results for the estimated coefficients of the interaction terms between program and charities on reserve presented in table 2.16 are mainly statistically significant for “other” charities. However, as there are only 24 of these charities located on reserve and as the magnitude of the coefficient estimates is at times quite large, these results must be taken with a grain of salt (*Panel A* and *Panel C*). Health charities operating on reserve experience a decrease in the predicted

probability of receiving simultaneously federal and municipal funding (*Panel B*), and provincial and municipal funding (*Panel C*). These two results are statistically significant at the 10% and 5% level, respectively.

Tables 2.17 and 2.18 display the results of a multivariate probit model looking at the probability of getting funding from all three government sources contemporaneously. In comparison to non-Indigenous charities, the Indigenous ones are more likely to get federal funding (62.2%) if they receive also provincial and municipal funding and to get provincial funding (9.5%) if they receive also federal and municipal funding. This latter result is significant at the 10% level. Indigenous charities on reserve are less likely to get provincial support (-40.1%) if they get already the other two sources of government funding as compared to Indigenous charities off reserve.

The interpretation of the results with terms interacting Indigenous status or location and programs in tables 2.19 and 2.20, is as follows. Irrespective of the program, Indigenous charities are more likely to get federal funding if they get also the other two sources of funding, but they are less likely to get municipal funding if they get the other two sources. The coefficient estimates for provincial funding are not statistically significant. Charities on reserve working in ‘benefits to community’, ‘welfare’ and ‘other’ programs are more likely to receive some municipal funding when they receive also federal and provincial funding. Health charities on reserve are more likely to get provincial funding if they are supported by the other two sources as well. Results are statistically significant at the 10% level. Welfare charities working on reserve are less likely to receive provincial funding when they get already the other two sources.

Two main conclusions can be drawn from the analysis of the bivariate probit model for Indigenous and non-Indigenous charities. The first important result is that the federal government supports Indigenous charities if they do not get any of the two other funding sources and the province supports them if they do not get any municipal funding. The second result reveals a complementarity between two sources of government funding, affirming Hypothesis 3, which specifies that the joint probability of getting two sources of government funding is higher for Indigenous charities than for non-Indigenous charities. Possibly, the federal government plays a catalytic role - once it funds Indigenous charities, the other levels are willing to step in as well. Or the federal government provides funds if provinces and municipalities match either fully or partially its support. In both cases, federal funding appears to attract matching funding from the provinces and municipalities.

Regarding getting all three government sources simultaneously, Indigenous charities are more likely to receive federal funding when they get also provincial and municipal funding, as compared to non-Indigenous charities. When it comes to the program area of the Indigenous charities, the federal government steps in more frequently than the provincial and the municipal level.

For the analysis of Indigenous charities on reserve versus those off reserve, the bivariate probit suggests that charities on reserve are less likely to get two sources of funding simultaneously. This rejects Hypothesis 4, that the joint probability of getting two sources of government funding is higher for Indigenous charities on reserve than for those off reserve. All this does not hinder a potential spillover effect from Indigenous charities off reserve to those on reserve. Although not observable in the data, Indigenous charities on reserve might get financial help from Indigenous charities located outside the reserves or in bigger urban areas.

2.7.3 Robustness Checks

The first robustness check in table 2.21 takes into consideration a probit model with nine categories of provincial spending: economic affairs; education; environment protection; general public services; health; housing and community; public order and safety; recreation, culture and religion; and social protection. The amount of money spent by the province in sectors in which the charities operate, could affect the probability of receiving government grants. Due to data availability, the timeframe is limited to 2008 to 2017. With slight changes in magnitude and in statistical significance in one case as compared to the coefficient estimates of tables 2.4 and 2.5, the results appear to be robust to adding these provincial expenditures.

The second robustness check for the probit model reported in table 2.22 uses lags of government funding. With these, there is a decrease in the magnitude of the estimated coefficient for Indigenous charities and provincial funding is not significant anymore. For charities on reserve, the magnitude of the coefficient estimates decreases. Furthermore, there is a decrease and a loss in statistical significance for provincial and for government funding respectively. The results for municipal funding were not statistically significant in tables 2.3 and 2.4 and they remain like that. With the lags of government funding, the results are still robust, but receiving public funding in the previous period does not seem to have a catalytic effect on funding in the current period.

The last robustness check for the probit model reported in table 2.23 excludes religious charities. These have always been seen more as spiritual, faith-based organizations, and less as providers of public services. Religious charities account for 39% of the total sample (table 2.1), but

only 15% of them are government funded (table 2.4A in the appendix 2.A). By excluding religious charities, the predicted probabilities for Indigenous charities are quite like previous results, except for municipal funding, where they experience a decrease of 2.5 p.p. as compared to non-Indigenous charities. This latter result is statistically significant, at the 10% level. For charities on reserve, the negative effect is not as large as in the case when religious charities are included.⁵⁸

Tables 2.24 and 2.25 report the first robustness checks for the bivariate probit model and they consider charities whose revenue exceeds \$100,000, which is one of the main requirements for filling out Schedule 6. The estimated coefficients of Indigenous charities for joint federal and provincial funding are not statistically significant anymore. The sign of the coefficient estimates for getting municipal funding turns positive, if Indigenous charities do not get any federal or any provincial funding. Also, the estimated coefficient for getting both municipal and provincial funding increases. These results are compared with those of tables 2.9 to 2.11. For charities on reserve, the coefficient estimates for getting both sources of funding are not statistically significant anymore. Moreover, the estimated coefficient for receiving municipal funding but no provincial funding becomes statistically significant and is positive. The comparison of these results is with those of tables 2.12 to 2.14. The conclusion that can be drawn is that the municipal government helps these “bigger” charities on reserve.

Tables 2.26 and 2.27 display the second robustness check for the bivariate model, which includes lags of government funding. The results are again compared with the coefficient estimates of tables 2.9 to 2.11 for Indigenous charities and of tables 2.12 to 2.14 for charities on reserve. For Indigenous charities, the magnitude of the positive coefficient estimates decreases, implying that government funding in the previous period does not influence the decision of government funding in this period. The contrary appears to be true at first glance for charities on reserve, where government funding in the previous period has a beneficial effect on government funding in the current period. However, since the rho is not significant these latter results for charities on reserve must be considered as inconclusive.

⁵⁸ With two more robustness exercises I checked the validity of the results in tables 2.3 and 2.4. The first one excludes hospitals and schools (i.e. charities that incorporate in their legal name words such as “hospital”, “university”, “college”, “school”, “hôpital”, “université”, “école”), on the grounds that these are publicly provided goods anyway. For the same reasons, the second one excludes all health and education charities. 50,000 observations are removed in the former case and over 280,000 in the latter case. The results still hold in both cases.

2.8 Conclusion

Through the financial analysis of the T3010 data of registered charities starting from 2003 to 2017, this study yields insights on the link between government funding and Indigenous charities. Four different hypotheses have been tested using probit and bivariate probit models.

Indigenous charities have a greater chance of financial support from government sources than non-Indigenous charities (Hypothesis 1). Moreover, this support differs by level of government. The predicted probability of receiving federal government funding for Indigenous charities is almost twice that of their non-Indigenous counterparts; for provincial funding, this predicted probability is 16% higher for Indigenous charities relative to non-Indigenous ones. This finding suggests that Indigenous charities are relying more on government funding because the government is using them more often as a means of providing services to the Indigenous populations than for others. Interestingly, the analysis of government funding patterns between Indigenous charities on reserve and off reserve (Hypothesis 2) reveals that charities on reserve are relatively less likely to receive public funds. One can speculate as to what is behind this finding. Possibly, government funding of services is more direct off reserve than on reserve and this means that the charities play a diminished role when they are on reserve relative to off-reserves ones. It seems that governments are using the charitable sector to provide services to Indigenous peoples - and this reliance is greater for the Indigenous populations residing off reserve.

When I examine the likelihood of receiving funds from two different sources simultaneously, two results arise. Firstly, I find that the federal government supports Indigenous charities if they do not receive provincial and municipal funding; secondly, if the charities receive funds from other levels of government, federal funding is still forthcoming. In other words, I am finding a complementarity between two sources of government funding (Hypothesis 3). Possibly, federal funding has a catalytic effect for other funding - provincial governments may use the presence of federal funding to signal that the charity ‘deserves’ support. But other things may be going on as well. For instance, there are some projects and programs supported by the federal department Indigenous and Northern Affairs Canada that require a matching investment from other levels of government (e.g., Grants and contributions to Increase First Nations and Inuit Youth Participation in Education and Labour Market Opportunities).⁵⁹ In this case, one would observe a ‘complementary’ relationship because of these technical constraints.

⁵⁹ More details can be found at <https://www.aadnc-aandc.gc.ca/eng/1385747327206/1385747397222>.

Charities on reserve are less likely to receive funding from two levels of government simultaneously relative to those Indigenous charities off reserve - contrary to the last hypothesis. Hypothesis 4 was predicated on the idea that reserves were located in more remote and isolated communities relative to other locations and hence would render them eligible for more funding programs (Indigenous Services Canada, 2020). However, I was able to control for rurality, which takes account of this situation. Moreover, Indigenous charities off reserve are those who are more likely to receive provincial funding. This further serves to mitigate the influence of remoteness on funding from various sources for Indigenous charities on reserve.

The public funding of charities is long-standing across all three levels of government, and the federal government appears to be the most important player for Indigenous charities. Furthermore, the provincial government supports Indigenous charities more than other charities. Going back to the analysis of the first chapter of my thesis, I find evidence of a positive relationship between the presence of charities and some socio-economic outcomes as well as for a restrictive definition of community well-being for Indigenous communities. Government funding presumably assists in this positive outcome. However, one limitation of my analysis is that I did not examine whether government funding displaces other donations (e.g., private gifts) or supplements them. This question is the subject of the third chapter of my thesis.

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Table 2.1: Summary statistics and difference in means

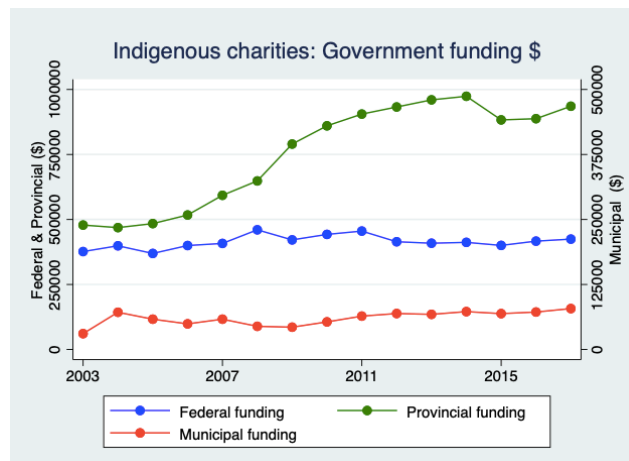
	Mean (Std. Dev.) - percentage				Mean (Std. Dev.) - percentage		
	Full Sample				Indigenous sample		
	Full sample	Sample A			Sample C	Sample D	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Full sample n=1,237,450	Non-Indigenous charities n=1,226,173	Indigenous charities n=11,277	Difference in means (A-B)	Indigenous charities off-reserve n=6,301	Indigenous charities on-reserve n=4,976	Difference in means (C-D)
Gov funding (Y/N)	0.35	0.35	0.56	-0.21*** (0.005)	0.69	0.39	0.30*** (0.009)
Fed funding (Y/N)	0.16	0.16	0.41	-0.25*** (0.003)	0.52	0.25	0.27*** (0.009)
Prov funding (Y/N)	0.23	0.22	0.43	-0.20*** (0.004)	0.56	0.26	0.30*** (0.009)
Mun funding (Y/N)	0.13	0.13	0.21	-0.08*** (0.003)	0.29	0.11	0.18*** (0.008)
Gov funding (\$)*	1,834,218 (45,126,514)	1,839,743 (45,331,573)	1,233,498 (4,375,146)	606,244 (426,896)	1,522,574 (4,518,226)	867,448 (4,158,669)	655,126*** (82,748)
Fed funding (\$)*	88,265 (2,770,404)	85,265 (2,778,820)	414,369 (1,577,884)	-329,103*** (26,206)	489,564 (1,630,692)	319,152 (1,503,138)	170,411*** (29,882)
Prov funding (\$)*	1,624,128 (4,3236,303)	1,632,089 (43,433,147)	758,518 (3,689,550)	873,570** (409,014)	944,392 (3,726,635)	523,150 (3,628,783)	421,241*** (69,862)
Mun funding (\$)*	121,296 (6,239,656)	121,857 (6,268,183)	60,272 (364,078)	61,584 (59,027)	88,220 (425,846)	24,883 (261,822)	63,336*** (6,879)
Gov share*	0.28	0.28	0.41	-0.13 (1.061)	0.53	0.26	0.27*** (0.018)
Fed share*	0.02	0.02	0.16	-0.14*** (0.006)	0.19	0.12	0.07*** (0.005)
Prov share*	0.22	0.22	0.20	0.02 (1.061)	0.27	0.11	0.16*** (0.006)
Mun share*	0.03	0.03	0.04	-0.01*** (0.004)	0.05	0.03	0.02*** (0.003)
Public foundation	0.06	0.06	0.02	0.03*** (0.002)	0.02	0.03	-0.01*** (0.003)
Private foundation	0.06	0.06	0.03	0.03*** (0.002)	0.02	0.03	-0.01** (0.003)
Registered charity	0.89	0.88	0.95	-0.06*** (0.003)	0.96	0.94	0.01*** (0.004)
Benefits to community	0.15	0.15	0.23	-0.07*** (0.003)	0.28	0.16	0.12*** (0.008)
Education	0.16	0.16	0.17	-0.01*** (0.003)	0.14	0.21	-0.07*** (0.007)
Health	0.07	0.07	0.05	0.02*** (0.002)	0.05	0.05	0.00 (0.004)
Religion	0.39	0.39	0.28	0.12*** (0.005)	0.15	0.43	-0.28*** (0.008)
Welfare	0.21	0.21	0.27	-0.06*** (0.004)	0.37	0.15	0.22*** (0.008)
Other	0.01	0.01	0.01	0.00*** (0.001)	0.01	0.01	0.01*** (0.002)
Total assets*	3,831,484 (67,000,31)	3,850,562 (67,302,745)	1,757,063 (8,264,086)	2,093,498*** (633,820)	2,309,092 (10,545,803)	1,058,042 (3,617,276)	1,251,049*** (156,291)
Total revenue*	2,733,117 (52,939,960)	2,742,703 (53,180,461)	1,690,867 (5,144,703)	1,051,835** (500,811)	2,142,044 (5,471,504)	1,119,552 (4,636,337)	1,022,492*** (97,097)
Total expenditure*	2,657,278 (52,297,824)	2,666,410 (52,535,452)	1,664,334 (5,040,168)	1,002,076** (494,736)	2,119,211 (5,381,041)	1,088,335 (4,507,339)	1,030,875*** (95,096)
Size<25K	0.27	0.27	0.21	0.06*** (0.004)	0.15	0.29	-0.14*** (0.008)
Size25K<100K	0.24	0.24	0.18	0.06*** (0.004)	0.11	0.26	-0.15*** (0.007)
Size100K<250K	0.18	0.18	0.12	0.07*** (0.004)	0.10	0.14	-0.04*** (0.006)
Size250K<500K	0.11	0.11	0.08	0.03*** (0.003)	0.09	0.07	0.02*** (0.005)
Size500K<1MIL	0.08	0.08	0.12	-0.04*** (0.003)	0.15	0.07	0.08*** (0.006)
Size1MIL<5MIL	0.08	0.08	0.24	-0.15*** (0.003)	0.32	0.13	0.18*** (0.008)
Size5MIL<10MIL	0.03	0.03	0.06	-0.03*** (0.002)	0.08	0.04	0.04*** (0.005)
Size>10MIL	0.01	0.01	0.01	0.00*** (0.001)	0.01	0.01	0.00 (0.000)

Table 2.1 cont.: Summary statistics and difference in means

	Mean (Std. Dev.) - percentage Full Sample			(4)	Mean (Std. Dev.) - percentage Indigenous sample		(7)
	Full sample	Sample A	Sample B		Sample C	Sample D	
	(1)	(2)	(3)		(5)	(6)	
	Full sample n=1,237,450	Non-Indigenous charities n=1,226,173	Indigenous charities n=11,277	Difference in means (A-B)	Indigenous charities off-reserve n=6,301	Indigenous charities on-reserve n=4,976	Difference in means (C-D)
Rural	0.23	0.23	0.41	-0.18*** (0.004)	0.17	0.72	-0.55*** (0.008)
Urban	0.77	0.77	0.59	0.18*** (0.004)	0.83	0.28	0.55*** (0.008)
AB	0.11	0.11	0.10	0.00 (0.003)	0.14	0.06	0.08*** (0.006)
BC	0.14	0.14	0.23	-0.09*** (0.003)	0.23	0.22	0.01 (0.008)
MB	0.05	0.05	0.08	-0.03*** (0.002)	0.13	0.03	0.11*** (0.005)
NB	0.03	0.03	0.02	0.02*** (0.002)	0.01	0.03	-0.02*** (0.002)
NL	0.01	0.01	0.01	0.00** (0.001)	0.01	0.02	-0.01*** (0.002)
NS	0.05	0.05	0.01	0.03*** (0.002)	0.01	0.02	-0.01*** (0.002)
NT	0.01	0.01	0.04	-0.04*** (0.000)	0.01	0.08	-0.07*** (0.004)
NU	0.01	0.01	0.05	-0.05*** (0.000)	0.01	0.10	-0.10*** (0.004)
ON	0.35	0.36	0.27	0.08*** (0.005)	0.30	0.25	0.05*** (0.008)
PE	0.01	0.01	0.01	0.00** (0.001)	0.01	0.01	0.00** (0.001)
QC	0.19	0.19	0.10	0.09*** (0.004)	0.06	0.15	-0.09*** (0.006)
SK	0.05	0.05	0.07	-0.01*** (0.002)	0.10	0.03	0.07*** (0.005)
YT	0.01	0.01	0.01	-0.01*** (0.000)	0.01	0.02	-0.01*** (0.002)

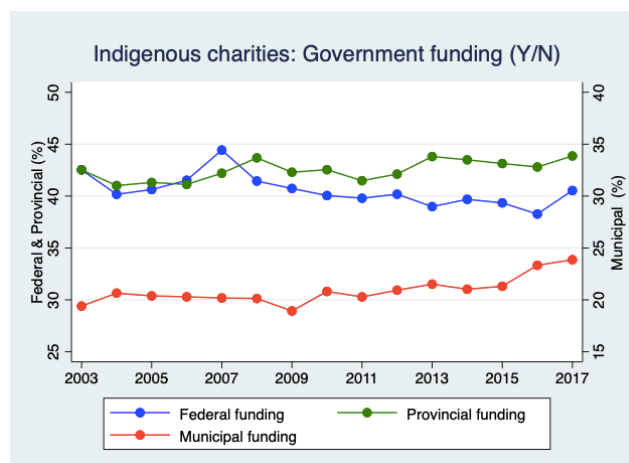
*These variables have not been used in the regressions. The standard deviation (in parenthesis) is not provided for dichotomous variables.
The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Figure 2.1: Government funding (\$) for Indigenous charities



Source: CRA - T3010

Figure 2.2: Government funding (Y/N) for Indigenous charities



Source: CRA - T3010

Table 2.2: Summary statistics and difference in means - Schedule 6

	Mean (Std. Dev.) - percentage Sample Schedule 6				Mean (Std. Dev.) - percentage Indigenous sample Schedule 6		
	Sample Schedule 6	Subsample A	Subsample B	(4)	Subsample C	Subsample D	(7)
	(1)	(2)	(3)		(5)	(6)	
	Sample n=870,093	Non-Indigenous charities n=861,423	Indigenous charities n=8,670	Difference in means (A-B)	Indigenous charities off-reserve n=5,360	Indigenous charities on-reserve n=3,310	Difference in means (C-D)
Gov funding (Y/N)	0.41	0.41	0.68	-0.27*** (0.005)	0.78	0.52	0.26*** (0.010)
Fed funding (Y/N)	0.21	0.21	0.52	-0.31*** (0.004)	0.61	0.37	0.25*** (0.011)
Prov funding (Y/N)	0.30	0.30	0.54	-0.24*** (0.005)	0.65	0.37	0.28*** (0.011)
Mun funding (Y/N)	0.17	0.17	0.27	-0.10*** (0.004)	0.33	0.16	0.17*** (0.010)
Gov funding (\$)*	2,605,868 (53,795,250)	2,616,074 (54,062,975)	1,591,818 (4,882,189)	1,024,255* (580,642)	1,788,702 (4,850,209)	1,272,998 (4,917,576)	515,703*** (107,790)
Fed funding (\$)*	125,396 (3,303,163)	121,250 (3,314,681)	537,285 (1,779,372)	-416,034*** (35,650)	575,344 (1,754,078)	475,655 (1,818,165)	99,688** (39,322)
Prov funding (\$)*	2,308,242 (51,544,384)	2,321,648 (51,801,289)	976,235 (4,135,739)	1,345,412** (556,346)	1,109,761 (4,017,860)	760,012 (4,311,664)	349,748*** (91,353)
Mun funding (\$)*	172,207 (7,440,326)	173,152 (7,477,554)	78,295 (413,528)	94,857 (80,307)	103,598 (459,999)	37,320 (320,310)	66,277*** (9,114)
Gov share*	0.34	0.34	0.49	-0.15 (1.405)	0.57	0.36	0.22*** (0.009)
Fed share*	0.03	0.03	0.20	-0.17*** (0.004)	0.21	0.17	0.04*** (0.006)
Prov share*	0.28	0.28	0.25	0.04 (1.405)	0.31	0.15	0.16*** (0.007)
Mun share*	0.03	0.03	0.05	-0.01*** (0.004)	0.05	0.03	0.02*** (0.003)
Public foundation	0.06	0.06	0.02	0.04*** (0.003)	0.01	0.03	-0.01*** (0.003)
Private foundation	0.06	0.06	0.02	0.04*** (0.003)	0.02	0.02	-0.01** (0.003)
Registered charity	0.88	0.88	0.96	-0.08*** (0.003)	0.97	0.95	0.02*** (0.004)
Benefits to community	0.14	0.14	0.25	-0.11*** (0.004)	0.30	0.18	0.12*** (0.010)
Education	0.16	0.16	0.17	-0.01*** (0.004)	0.13	0.23	-0.10*** (0.008)
Health	0.07	0.07	0.05	0.02*** (0.003)	0.05	0.06	-0.01 (0.005)
Religion	0.38	0.39	0.21	0.18*** (0.005)	0.12	0.35	-0.23*** (0.009)
Welfare	0.23	0.23	0.31	-0.08*** (0.005)	0.39	0.18	0.21*** (0.010)
Other	0.01	0.01	0.01	0.00** (0.001)	0.01	0.01	0.01*** (0.002)
Total assets*	5,376,605 (79,740,352)	5,408,193 (80,134,504)	2,238,043 (9,360,908)	3,170,150*** (860,676)	2,700,097 (11,387,869)	1,489,822 (4,316,834)	1,210,274*** (206,536)
Total revenue*	3,871,217 (63,095,117)	3,888,271 (63,409,005)	2,176,769 (5,729,633)	1,711,502.07** (681,019)	2,512,669 (5,854,392)	1,632,834 (5,478,990)	879,834*** (126,314)
Total expenditure*	3,762,291 (62,332,444)	3,778,632 (62,642,597)	2,138,705 (5,609,936)	1,639,926.32** (672,787)	2,483,955 (5,757,309)	1,579,631 (5,316,209)	904,324*** (123,640)
Size<25K	0.16	0.16	0.11	0.05*** (0.004)	0.08	0.17	-0.10*** (0.007)
Size25K<100K	0.15	0.15	0.10	0.05*** (0.004)	0.06	0.17	-0.11*** (0.007)
Size100K<250K	0.25	0.25	0.14	0.11*** (0.005)	0.11	0.20	-0.09*** (0.008)
Size250K<500K	0.16	0.16	0.11	0.05*** (0.004)	0.11	0.10	0.01 (0.007)
Size500K<1MIL	0.11	0.11	0.15	-0.04*** (0.003)	0.18	0.11	0.07*** (0.008)
Size1MIL<5MIL	0.12	0.12	0.31	-0.19*** (0.003)	0.37	0.20	0.17*** (0.010)
Size5MIL<10MIL	0.05	0.05	0.08	-0.03*** (0.002)	0.09	0.05	0.04*** (0.006)
Size>10MIL	0.01	0.01	0.01	0.01*** (0.001)	0.01	0.01	0.00 (0.000)

Table 2.2 cont.: Summary statistics and difference in means - Schedule 6

	Mean (Std. Dev.) - percentage Sample Schedule 6				Mean (Std. Dev.) - percentage Indigenous sample Schedule 6		
	Sample Schedule 6	Subsample A	Subsample B		Subsample C	Subsample D	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample n=870,093	Non-Indigenous charities n=861,423	Indigenous charities n=8,670	Difference in means (A-B)	Indigenous charities off-reserve n=5,360	Indigenous charities on-reserve n=3,310	Difference in means (C-D)
Rural	0.20	0.20	0.38	-0.18*** (0.004)	0.16	0.74	-0.58*** (0.009)
Urban	0.80	0.80	0.62	0.18*** (0.004)	0.84	0.26	0.58*** (0.009)
AB	0.11	0.11	0.11	-0.00 (0.003)	0.14	0.06	0.09*** (0.007)
BC	0.14	0.14	0.23	-0.09*** (0.004)	0.23	0.22	0.02** (0.009)
MB	0.05	0.05	0.09	-0.04*** (0.002)	0.13	0.02	0.10*** (0.006)
NB	0.03	0.03	0.01	0.02*** (0.002)	0.01	0.03	-0.02*** (0.003)
NL	0.01	0.01	0.01	0.00 (0.001)	0.01	0.02	-0.01*** (0.002)
NS	0.04	0.04	0.01	0.03*** (0.002)	0.01	0.02	-0.01*** (0.002)
NT	0.00	0.00	0.04	-0.04*** (0.000)	0.01	0.09	-0.09*** (0.004)
NU	0.00	0.00	0.04	-0.04*** (0.000)	0.01	0.11	-0.11*** (0.004)
ON	0.36	0.36	0.27	0.09*** (0.005)	0.29	0.24	0.06*** (0.010)
PE	0.01	0.01	0.01	0.00* (0.001)	0.01	0.01	0.00** (0.002)
QC	0.20	0.20	0.10	0.10*** (0.004)	0.06	0.16	-0.10*** (0.006)
SK	0.05	0.05	0.07	-0.02*** (0.002)	0.09	0.02	0.07*** (0.005)
YT	0.00	0.01	0.01	-0.01*** (0.000)	0.01	0.01	-0.00 (0.002)

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”.

*These variables have not been used in the regressions. The standard deviation (in parenthesis) is not provided for dichotomous variables. The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.3: Probit model Non-Indigenous charities and Indigenous charities
Dependent variable: government/federal/provincial/municipal funding

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.068*** (0.013)	0.156*** (0.010)	0.030** (0.013)	-0.011 (0.008)
Benefits to community	0.512*** (0.004)	0.201*** (0.003)	0.475*** (0.004)	0.294*** (0.003)
Education	0.407*** (0.004)	0.157*** (0.003)	0.420*** (0.004)	0.237*** (0.003)
Health	0.341*** (0.006)	0.066*** (0.005)	0.402*** (0.005)	0.169*** (0.004)
Welfare	0.432*** (0.004)	0.130*** (0.003)	0.457*** (0.004)	0.233*** (0.003)
Other	0.178*** (0.016)	0.051*** (0.015)	0.265*** (0.017)	0.118*** (0.012)
Registered charity	0.444*** (0.007)	0.234*** (0.006)	0.409*** (0.007)	0.144*** (0.004)
Private foundation	-0.225*** (0.013)	-0.133*** (0.011)	-0.167*** (0.014)	-0.144*** (0.009)
Size25K<100K	0.302*** (0.003)	0.174*** (0.003)	0.248*** (0.004)	0.097*** (0.002)
Size100K<250K	0.435*** (0.004)	0.254*** (0.004)	0.387*** (0.004)	0.148*** (0.003)
Size250K<500K	0.501*** (0.004)	0.289*** (0.004)	0.453*** (0.005)	0.168*** (0.003)
Size500K<1MIL	0.565*** (0.005)	0.318*** (0.004)	0.499*** (0.005)	0.178*** (0.003)
Size1MIL<5MIL	0.648*** (0.005)	0.340*** (0.004)	0.563*** (0.006)	0.187*** (0.003)
Size5MIL<10MIL	0.802*** (0.008)	0.385*** (0.006)	0.698*** (0.008)	0.194*** (0.005)
Size>10MIL	1.105*** (0.031)	0.515*** (0.013)	0.939*** (0.024)	0.213*** (0.010)
Rural	0.119*** (0.003)	0.036*** (0.003)	0.061*** (0.003)	0.030*** (0.002)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,237,450	870,093	870,093	870,093
Predicted probability	0.283	0.162	0.188	0.0924

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.4: Probit model Indigenous charities off-reserve and on-reserve
Dependent variable: government/federal/provincial/municipal funding

	Indigenous sample (1)	Indigenous sample Schedule 6 (2)	Indigenous sample Schedule 6 (3)	Indigenous sample Schedule 6 (4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Charity on-reserve	-0.096** (0.043)	-0.058 (0.050)	-0.161*** (0.050)	-0.052 (0.033)
Benefits to community	0.527*** (0.055)	0.445*** (0.057)	0.614*** (0.067)	0.217*** (0.041)
Education	0.465*** (0.054)	0.481*** (0.057)	0.567*** (0.069)	0.216*** (0.042)
Health	0.601*** (0.100)	0.447*** (0.081)	0.565*** (0.094)	0.235*** (0.059)
Welfare	0.478*** (0.053)	0.329*** (0.057)	0.607*** (0.065)	0.259*** (0.039)
Other	0.185 (0.143)	0.392*** (0.123)	0.046 (0.262)	-0.052 (0.129)
Registered charity	0.523*** (0.120)	0.514*** (0.166)	0.488** (0.190)	0.210*** (0.081)
Private foundation	0.091 (0.172)	0.328 (0.228)	0.085 (0.241)	-0.066 (0.145)
Size25K<100K	0.492*** (0.046)	0.492*** (0.074)	0.477*** (0.067)	0.218*** (0.050)
Size100K<250K	0.682*** (0.049)	0.718*** (0.074)	0.644*** (0.066)	0.349*** (0.047)
Size250K<500K	0.875*** (0.052)	0.822*** (0.074)	0.852*** (0.068)	0.378*** (0.049)
Size500K<1MIL	1.094*** (0.054)	0.974*** (0.073)	1.001*** (0.069)	0.423*** (0.047)
Size1MIL<5MIL	1.156*** (0.053)	1.150*** (0.071)	1.038*** (0.066)	0.433*** (0.045)
Size5MIL<10MIL	1.175*** (0.076)	1.138*** (0.087)	1.107*** (0.084)	0.375*** (0.059)
Size>10MIL	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Rural	0.096** (0.043)	0.032 (0.045)	0.007 (0.046)	-0.048 (0.031)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	11,277	8,670	8,670	8,670
Predicted probability	0.578	0.467	0.476	0.201

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.5: Probit model - Non-Indigenous charities and Indigenous charities by year and by program
Dependent variable: government funding

	Full sample					
	(1)	(2)	(3)	(4)	(5)	
	Panel A: 2003 -2007					
	2003	2004	2005	2006	2007	
Indigenous charity	0.093*** (0.020)	0.061*** (0.019)	0.065*** (0.018)	0.048*** (0.018)	0.085*** (0.018)	
Observations	77,977	78,751	79,883	81,005	81,696	
Predicted prob.	0.281	0.280	0.280	0.278	0.273	
	Panel B: 2008 - 2012					
	2008	2009	2010	2011	2012	
Indigenous charity	0.073*** (0.018)	0.063*** (0.019)	0.038** (0.018)	0.051*** (0.019)	0.053*** (0.018)	
Observations	82,026	83,102	83,590	83,956	84,449	
Predicted prob.	0.279	0.279	0.280	0.280	0.282	
	Panel C: 2013-2017					
	2013	2014	2015	2016	2017	
Indigenous charity	0.070*** (0.018)	0.061*** (0.018)	0.089*** (0.019)	0.076*** (0.019)	0.091*** (0.019)	
Observations	84,382	84,537	84,310	84,149	83,637	
Predicted prob.	0.293	0.284	0.282	0.289	0.295	
	Panel D: by program					
	Benefits to community	Education	Health	Religion	Welfare	Other
Indigenous charity	0.041 (0.031)	0.047 (0.035)	0.328*** (0.093)	0.001 (0.016)	0.116*** (0.033)	0.033 (0.032)
Observations	189,585	199,538	83,832	487,113	261,239	16,140
Predicted prob.	0.571	0.427	0.403	0.132	0.379	0.0459

The coefficients represent the marginal effects (dy/dx). The control variables are the same as in table 2.3; province fixed effects are included in each regression and year fixed effects are used in *Panel D*. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.6: Probit model - Indigenous charities off-reserve and on-reserve by year and by program
Dependent variable: government funding

	Indigenous sample					
	(1)	(2)	(3)	(4)	(5)	
	Panel A: 2003 -2007					
	2003	2004	2005	2006	2007	
Charity on-reserve	-0.065 (0.073)	-0.206*** (0.078)	-0.106 (0.067)	-0.097 (0.066)	-0.019 (0.065)	
Observations	696	696	696	696	696	
Predicted prob.	0.601	0.545	0.561	0.516	0.571	
	Panel B: 2008 - 2012					
	2008	2009	2010	2011	2012	
Charity on-reserve	-0.091 (0.065)	0.021 (0.065)	-0.119* (0.069)	-0.016 (0.068)	-0.170** (0.067)	
Observations	760	766	761	769	774	
Predicted prob.	0.571	0.570	0.535	0.570	0.552	
	Panel C: 2013-2017					
	2013	2014	2015	2016	2017	
Charity on-reserve	-0.149** (0.068)	-0.106 (0.071)	-0.032 (0.064)	-0.233*** (0.074)	-0.099 (0.062)	
Observations	767	761	765	750	750	
Predicted prob.	0.590	0.566	0.613	0.602	0.639	
	Panel D: by program					
	Benefits to community	Education	Health	Religion	Welfare	Other
Charity on-reserve	-0.100** (0.048)	-0.170** (0.085)	-0.095** (0.044)	-0.026 (0.036)	-0.044 (0.070)	-0.016 (.)
Observations	2,503	1,920	433	3,126	3,028	76
Predicted prob.	0.864	0.704	0.972	0.103	0.811	(.)

The coefficients represent the marginal effects (dy/dx). The control variables are the same as in table 2.4; province fixed effects are included in each regression and year fixed effects are used in *Panel D*. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.7: Probit model with interactions Non-Indigenous charities and Indigenous charities
Dependent variable: government/federal/provincial/municipal funding

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.014 (0.027)	-0.001 (0.025)	0.021 (0.037)	0.071*** (0.019)
Benefits to community	0.512*** (0.004)	0.200*** (0.003)	0.475*** (0.004)	0.296*** (0.003)
Education	0.406*** (0.004)	0.156*** (0.003)	0.420*** (0.004)	0.237*** (0.003)
Health	0.339*** (0.006)	0.063*** (0.005)	0.402*** (0.005)	0.169*** (0.004)
Welfare	0.431*** (0.004)	0.129*** (0.003)	0.457*** (0.004)	0.233*** (0.003)
Other	0.177*** (0.016)	0.048*** (0.015)	0.268*** (0.017)	0.119*** (0.012)
Ind*Benefits to com.	0.027 (0.038)	0.163*** (0.031)	0.004 (0.044)	-0.140*** (0.022)
Ind*Education	0.045 (0.039)	0.190*** (0.034)	-0.013 (0.046)	-0.102*** (0.025)
Ind*Health	0.277*** (0.083)	0.317*** (0.052)	0.032 (0.066)	-0.009 (0.034)
Ind*Welfare	0.097*** (0.037)	0.177*** (0.031)	0.028 (0.043)	-0.049** (0.022)
Ind*Other	0.072 (0.120)	0.274*** (0.089)	-0.214 (0.157)	-0.122* (0.074)
Registered charity	0.444*** (0.007)	0.234*** (0.006)	0.409*** (0.007)	0.144*** (0.004)
Private foundation	-0.225*** (0.013)	-0.133*** (0.011)	-0.167*** (0.014)	-0.144*** (0.009)
Size25K<100K	0.302*** (0.003)	0.174*** (0.003)	0.248*** (0.004)	0.097*** (0.002)
Size100K<250K	0.435*** (0.004)	0.253*** (0.004)	0.387*** (0.004)	0.148*** (0.003)
Size250K<500K	0.501*** (0.004)	0.288*** (0.004)	0.453*** (0.005)	0.169*** (0.003)
Size500K<1MIL	0.565*** (0.005)	0.318*** (0.004)	0.499*** (0.005)	0.178*** (0.003)
Size1MIL<5MIL	0.648*** (0.005)	0.340*** (0.004)	0.563*** (0.006)	0.188*** (0.003)
Size5MIL<10MIL	0.802*** (0.008)	0.385*** (0.006)	0.698*** (0.008)	0.194*** (0.005)
Size>10MIL	1.105*** (0.031)	0.516*** (0.013)	0.940*** (0.024)	0.213*** (0.009)
Rural	0.119*** (0.003)	0.036*** (0.003)	0.061*** (0.003)	0.030*** (0.002)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,237,450	870,093	870,093	870,093
Predicted prob.	0.283	0.162	0.188	0.0923

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.8: Probit model with interactions Indigenous charities off-reserve and on-reserve
Dependent variable: government/federal/provincial/municipal funding

	Indigenous sample (1) Government funding (Y/N)	Indigenous sample Schedule 6 (2) Federal funding (Y/N)	Indigenous sample Schedule 6 (3) Provincial funding (Y/N)	Indigenous sample Schedule 6 (4) Municipal funding (Y/N)
Charity on-reserve	-0.021 (0.078)	0.051 (0.098)	-0.153 (0.106)	0.001 (0.069)
Benefits to community	0.571*** (0.078)	0.529*** (0.080)	0.624*** (0.092)	0.230*** (0.056)
Education	0.554*** (0.083)	0.581*** (0.086)	0.562*** (0.104)	0.257*** (0.065)
Health	0.757*** (0.113)	0.509*** (0.101)	0.660*** (0.124)	0.310*** (0.077)
Welfare	0.513*** (0.073)	0.358*** (0.078)	0.589*** (0.090)	0.279*** (0.055)
Other	0.291 (0.179)	0.480*** (0.140)	0.056 (0.279)	-0.077 (0.159)
On-reserve*Benefits	-0.078 (0.105)	-0.224* (0.116)	-0.039 (0.127)	-0.008 (0.085)
On-reserve*Education	-0.154 (0.106)	-0.185 (0.114)	0.007 (0.132)	-0.087 (0.086)
On-reserve*Health	-0.263 (0.173)	-0.132 (0.166)	-0.205 (0.180)	-0.211* (0.119)
On-reserve*Welfare	-0.044 (0.101)	0.004 (0.117)	0.078 (0.123)	-0.034 (0.081)
On-reserve*Other	-0.447 (0.275)	-0.329 (0.295)	0.000 (.)	0.249 (0.241)
Registered charity	0.519*** (0.119)	0.490*** (0.164)	0.474** (0.190)	0.206** (0.082)
Private foundation	0.096 (0.172)	0.289 (0.226)	0.076 (0.238)	-0.062 (0.147)
Size25K<100K	0.491*** (0.047)	0.473*** (0.072)	0.473*** (0.066)	0.224*** (0.051)
Size100K<250K	0.681*** (0.049)	0.704*** (0.073)	0.637*** (0.067)	0.355*** (0.047)
Size250K<500K	0.883*** (0.053)	0.819*** (0.074)	0.850*** (0.069)	0.391*** (0.049)
Size500K<1MIL	1.101*** (0.054)	0.975*** (0.073)	0.997*** (0.069)	0.433*** (0.047)
Size1MIL<5MIL	1.164*** (0.055)	1.149*** (0.072)	1.038*** (0.067)	0.447*** (0.045)
Size5MIL<10MIL	1.181*** (0.077)	1.140*** (0.087)	1.100*** (0.084)	0.384*** (0.059)
Size>10MIL	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Rural	0.101** (0.042)	0.037 (0.045)	0.004 (0.046)	-0.049 (0.031)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	11,277	8,670	8,670	8,670
Predicted prob.	0.581	0.471	0.478	0.201

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.9: Bivariate probit model Non-Indigenous charities and Indigenous charities
Federal and provincial funding**

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	P(Federal funding=0, Provincial funding=0)	P(Federal funding=0, Provincial funding=1)	P(Federal funding=1, Provincial funding=0)	P(Federal funding=1, Provincial funding=1)
Indigenous charity	-0.125*** (0.013)	-0.029*** (0.010)	0.100*** (0.007)	0.054*** (0.005)
Benefits to community	-0.494*** (0.004)	0.291*** (0.003)	0.020*** (0.002)	0.183*** (0.002)
Education	-0.422*** (0.005)	0.265*** (0.003)	0.002 (0.002)	0.155*** (0.002)
Health	-0.345*** (0.006)	0.279*** (0.004)	-0.055*** (0.003)	0.122*** (0.002)
Welfare	-0.431*** (0.004)	0.300*** (0.003)	-0.025*** (0.002)	0.156*** (0.002)
Other	-0.231*** (0.019)	0.178*** (0.012)	-0.030*** (0.010)	0.082*** (0.007)
Registered charity	-0.466*** (0.008)	0.232*** (0.005)	0.058*** (0.004)	0.176*** (0.003)
Private foundation	0.220*** (0.015)	-0.084*** (0.009)	-0.051*** (0.007)	-0.085*** (0.006)
Size25K<100K	-0.305*** (0.004)	0.131*** (0.003)	0.057*** (0.002)	0.117*** (0.002)
Size100K<250K	-0.461*** (0.005)	0.207*** (0.003)	0.078*** (0.002)	0.176*** (0.002)
Size250K<500K	-0.533*** (0.005)	0.245*** (0.003)	0.086*** (0.003)	0.203*** (0.002)
Size500K<1MIL	-0.589*** (0.005)	0.270*** (0.004)	0.094*** (0.003)	0.224*** (0.003)
Size1MIL<5MIL	-0.651*** (0.006)	0.310*** (0.004)	0.094*** (0.003)	0.247*** (0.003)
Size5MIL<10MIL	-0.778*** (0.008)	0.392*** (0.006)	0.092*** (0.004)	0.294*** (0.004)
Size>10MIL	-1.049*** (0.021)	0.534*** (0.018)	0.120*** (0.010)	0.396*** (0.008)
Rural	-0.071*** (0.004)	0.035*** (0.002)	0.010*** (0.002)	0.027*** (0.001)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.446*** (0.005)	0.446*** (0.005)	0.446*** (0.005)	0.446*** (0.005)
Observations	870,093	870,093	870,093	870,093
Predicted joint prob.	0.624	0.165	0.074	0.138

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.10: Bivariate probit model Non-Indigenous charities and Indigenous charities
Federal and municipal funding**

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	P(Federal funding=0, Municipal funding=0)	P(Federal funding=0, Municipal funding=1)	P(Federal funding=1, Municipal funding=0)	P(Federal funding=1, Municipal funding=1)
Indigenous charity	-0.121*** (0.011)	-0.032*** (0.005)	0.134*** (0.008)	0.020*** (0.003)
Benefits to community	-0.376*** (0.004)	0.175*** (0.002)	0.081*** (0.003)	0.120*** (0.002)
Education	-0.298*** (0.004)	0.141*** (0.002)	0.061*** (0.003)	0.095*** (0.001)
Health	-0.175*** (0.005)	0.108*** (0.003)	0.005 (0.004)	0.062*** (0.002)
Welfare	-0.273*** (0.003)	0.144*** (0.002)	0.039*** (0.003)	0.091*** (0.001)
Other	-0.124*** (0.016)	0.072*** (0.008)	0.009 (0.012)	0.043*** (0.005)
Registered charity	-0.300*** (0.007)	0.065*** (0.003)	0.155*** (0.005)	0.080*** (0.002)
Private foundation	0.216*** (0.013)	-0.081*** (0.006)	-0.070*** (0.009)	-0.065*** (0.004)
Size25K<100K	-0.216*** (0.004)	0.042*** (0.002)	0.117*** (0.003)	0.056*** (0.001)
Size100K<250K	-0.317*** (0.004)	0.063*** (0.002)	0.170*** (0.003)	0.083*** (0.001)
Size250K<500K	-0.359*** (0.004)	0.071*** (0.002)	0.194*** (0.003)	0.094*** (0.002)
Size500K<1MIL	-0.391*** (0.004)	0.073*** (0.002)	0.217*** (0.003)	0.102*** (0.002)
Size1MIL<5MIL	-0.418*** (0.005)	0.077*** (0.002)	0.232*** (0.004)	0.108*** (0.002)
Size5MIL<10MIL	-0.460*** (0.007)	0.075*** (0.003)	0.268*** (0.005)	0.117*** (0.002)
Size>10MIL	-0.584*** (0.015)	0.068*** (0.006)	0.373*** (0.011)	0.143*** (0.004)
Rural	-0.054*** (0.003)	0.017*** (0.001)	0.022*** (0.002)	0.016*** (0.001)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.383*** (0.005)	0.383*** (0.005)	0.383*** (0.005)	0.383*** (0.005)
Observations	870,093	870,093	870,093	870,093
Predicted joint prob.	0.705	0.083	0.127	0.085

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.11: Bivariate probit model Non-Indigenous charities and Indigenous charities
Provincial and municipal funding**

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	P(Provincial funding=0, Municipal funding=0)	P(Provincial funding=0, Municipal funding=1)	P(Provincial funding=1, Municipal funding=0)	P(Provincial funding=1, Municipal funding=1)
Indigenous charity	-0.018 (0.013)	-0.011** (0.005)	0.028*** (0.011)	0.001 (0.004)
Benefits to community	-0.593*** (0.004)	0.120*** (0.002)	0.299*** (0.004)	0.173*** (0.002)
Education	-0.510*** (0.005)	0.091*** (0.002)	0.274*** (0.003)	0.145*** (0.002)
Health	-0.451*** (0.006)	0.050*** (0.002)	0.282*** (0.004)	0.119*** (0.002)
Welfare	-0.538*** (0.004)	0.084*** (0.002)	0.304*** (0.003)	0.149*** (0.002)
Other	-0.300*** (0.019)	0.036*** (0.007)	0.184*** (0.013)	0.080*** (0.006)
Registered charity	-0.440*** (0.007)	0.034*** (0.003)	0.296*** (0.005)	0.111*** (0.002)
Private foundation	0.239*** (0.015)	-0.071*** (0.005)	-0.091*** (0.011)	-0.077*** (0.004)
Size25K<100K	-0.273*** (0.004)	0.027*** (0.002)	0.176*** (0.003)	0.071*** (0.001)
Size100K<250K	-0.422*** (0.004)	0.038*** (0.002)	0.276*** (0.004)	0.108*** (0.002)
Size250K<500K	-0.491*** (0.005)	0.042*** (0.002)	0.325*** (0.004)	0.125*** (0.002)
Size500K<1MIL	-0.537*** (0.005)	0.041*** (0.002)	0.361*** (0.004)	0.135*** (0.002)
Size1MIL<5MIL	-0.596*** (0.006)	0.038*** (0.002)	0.410*** (0.005)	0.148*** (0.002)
Size5MIL<10MIL	-0.711*** (0.008)	0.024*** (0.003)	0.518*** (0.006)	0.169*** (0.003)
Size>10MIL	-0.924*** (0.021)	0.002 (0.006)	0.712*** (0.019)	0.210*** (0.006)
Rural	-0.071*** (0.003)	0.011*** (0.001)	0.040*** (0.003)	0.020*** (0.001)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.416*** (0.006)	0.416*** (0.006)	0.416*** (0.006)	0.416*** (0.006)
Observations	870,093	870,093	870,093	870,093
Predicted joint prob.	0.652	0.046	0.180	0.122

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.12: Bivariate probit model Indigenous charities off-reserve and on-reserve
Federal and provincial funding**

	Indigenous sample Schedule 6 (1) P(Federal funding=0, Provincial funding=0)	Indigenous sample Schedule 6 (2) P(Federal funding=0, Provincial funding=1)	Indigenous sample Schedule 6 (3) P(Federal funding=1, Provincial funding=0)	Indigenous sample Schedule 6 (4) P(Federal funding=1, Provincial funding=1)
Charity on-reserve	0.117*** (0.037)	-0.057 (0.035)	0.046 (0.035)	-0.106*** (0.034)
Benefits to community	-0.554*** (0.055)	0.106*** (0.041)	-0.058 (0.040)	0.506*** (0.046)
Education	-0.547*** (0.056)	0.065 (0.042)	-0.018 (0.041)	0.501*** (0.046)
Health	-0.526*** (0.068)	0.081 (0.064)	-0.036 (0.061)	0.481*** (0.057)
Welfare	-0.488*** (0.053)	0.158*** (0.040)	-0.114*** (0.039)	0.444*** (0.045)
Other	-0.216 (0.149)	-0.173 (0.155)	0.187 (0.143)	0.203 (0.134)
Registered charity	-0.516*** (0.164)	0.010 (0.088)	0.033 (0.082)	0.473*** (0.148)
Private foundation	-0.206 (0.225)	-0.116 (0.099)	0.130 (0.094)	0.192 (0.206)
Size25K<100K	-0.503*** (0.057)	0.011 (0.048)	0.030 (0.048)	0.461*** (0.050)
Size100K<250K	-0.706*** (0.057)	-0.011 (0.051)	0.069 (0.050)	0.648*** (0.049)
Size250K<500K	-0.868*** (0.058)	0.048 (0.052)	0.025 (0.052)	0.795*** (0.051)
Size500K<1MIL	-1.024*** (0.058)	0.054 (0.052)	0.032 (0.053)	0.939*** (0.053)
Size1MIL<5MIL	-1.138*** (0.058)	-0.011 (0.052)	0.105** (0.050)	1.044*** (0.055)
Size5MIL<10MIL	-1.165*** (0.070)	0.028 (0.062)	0.068 (0.060)	1.068*** (0.066)
Size>10MIL	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Rural	-0.019 (0.033)	-0.014 (0.033)	0.015 (0.032)	0.018 (0.030)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.259*** (0.051)	0.259*** (0.051)	0.259*** (0.051)	0.259*** (0.051)
Observations	8,670	8,670	8,670	8,670
Predicted joint prob.	0.409	0.050	0.324	0.216

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.13: Bivariate probit model Indigenous charities off-reserve and on-reserve
Federal and municipal funding**

	Indigenous sample Schedule 6 (1) P(Federal funding=0, Municipal funding=0)	Indigenous sample Schedule 6 (2) P(Federal funding=0, Municipal funding=1)	Indigenous sample Schedule 6 (3) P(Federal funding=1, Municipal funding=0)	Indigenous sample Schedule 6 (4) P(Federal funding=1, Municipal funding=1)
Charity on-reserve	0.070 (0.044)	-0.012 (0.017)	-0.019 (0.041)	-0.039* (0.022)
Benefits to community	-0.452*** (0.053)	0.010 (0.021)	0.238*** (0.048)	0.204*** (0.027)
Education	-0.479*** (0.053)	0.001 (0.022)	0.268*** (0.049)	0.210*** (0.027)
Health	-0.466*** (0.074)	0.019 (0.030)	0.231*** (0.069)	0.216*** (0.038)
Welfare	-0.379*** (0.052)	0.053*** (0.020)	0.123** (0.049)	0.204*** (0.026)
Other	-0.280** (0.114)	-0.104 (0.065)	0.339*** (0.119)	0.046 (0.074)
Registered charity	-0.508*** (0.134)	-0.009 (0.055)	0.302** (0.150)	0.215*** (0.050)
Private foundation	-0.231 (0.199)	-0.101 (0.080)	0.304 (0.198)	0.028 (0.092)
Size25K<100K	-0.495*** (0.064)	0.003 (0.028)	0.274*** (0.065)	0.218*** (0.031)
Size100K<250K	-0.733*** (0.065)	0.017 (0.027)	0.384*** (0.064)	0.332*** (0.031)
Size250K<500K	-0.830*** (0.066)	0.009 (0.027)	0.453*** (0.064)	0.368*** (0.034)
Size500K<1MIL	-0.973*** (0.065)	0.000 (0.026)	0.549*** (0.063)	0.424*** (0.034)
Size1MIL<5MIL	-1.117*** (0.063)	-0.030 (0.027)	0.683*** (0.063)	0.464*** (0.034)
Size5MIL<10MIL	-1.081*** (0.079)	-0.056* (0.032)	0.707*** (0.073)	0.430*** (0.043)
Size>10MIL	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Rural	-0.002 (0.040)	-0.028* (0.016)	0.050 (0.037)	-0.020 (0.020)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.208*** (0.045)	0.208*** (0.045)	0.208*** (0.045)	0.208*** (0.045)
Observations	8,670	8,670	8,670	8,670
Predicted joint prob.	0.415	0.066	0.318	0.201

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.14: Bivariate probit model Indigenous charities off-reserve and on-reserve
Provincial and municipal funding**

	Indigenous sample Schedule 6 (1) P(Provincial funding=0, Municipal funding=0)	Indigenous sample Schedule 6 (2) P(Provincial funding=0, Municipal funding=1)	Indigenous sample Schedule 6 (3) P(Provincial funding=1, Municipal funding=0)	Indigenous sample Schedule 6 (4) P(Provincial funding=1, Municipal funding=1)
Charity on-reserve	0.149*** (0.043)	0.010 (0.017)	-0.099** (0.044)	-0.060*** (0.021)
Benefits to community	-0.585*** (0.060)	-0.025 (0.022)	0.366*** (0.056)	0.244*** (0.029)
Education	-0.548*** (0.064)	-0.018 (0.021)	0.333*** (0.055)	0.234*** (0.031)
Health	-0.556*** (0.086)	-0.008 (0.029)	0.318*** (0.077)	0.245*** (0.042)
Welfare	-0.597*** (0.059)	-0.006 (0.021)	0.337*** (0.054)	0.266*** (0.028)
Other	-0.008 (0.259)	-0.030 (0.032)	0.060 (0.153)	-0.022 (0.121)
Registered charity	-0.478*** (0.151)	-0.009 (0.055)	0.277* (0.168)	0.210*** (0.054)
Private foundation	-0.033 (0.207)	-0.051 (0.077)	0.112 (0.209)	-0.028 (0.095)
Size25K<100K	-0.477*** (0.062)	0.000 (0.024)	0.260*** (0.056)	0.217*** (0.034)
Size100K<250K	-0.665*** (0.064)	0.024 (0.022)	0.319*** (0.054)	0.322*** (0.034)
Size250K<500K	-0.847*** (0.064)	-0.004 (0.024)	0.471*** (0.059)	0.381*** (0.035)
Size500K<1MIL	-0.984*** (0.063)	-0.013 (0.025)	0.561*** (0.061)	0.436*** (0.034)
Size1MIL<5MIL	-1.020*** (0.062)	-0.017 (0.023)	0.588*** (0.056)	0.449*** (0.034)
Size5MIL<10MIL	-1.052*** (0.080)	-0.056** (0.028)	0.678*** (0.069)	0.430*** (0.044)
Size>10MIL	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Rural	0.019 (0.038)	-0.020 (0.016)	0.027 (0.042)	-0.026 (0.019)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.263*** (0.049)	0.263*** (0.049)	0.263*** (0.049)	0.263*** (0.049)
Observations	8,670	8,670	8,670	8,670
Predicted joint prob.	0.409	0.050	0.324	0.216

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.15: Bivariate probit model with interactions Non-Indigenous charities and Indigenous charities

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
<i>Panel A: Federal and provincial funding</i>				
	P(Federal funding=0, Provincial funding=0)	P(Federal funding=0, Provincial funding=1)	P(Federal funding=1, Provincial funding=0)	P(Federal funding=1, Provincial funding=1)
Indigenous charity	-0.015 (0.037)	0.016 (0.025)	-0.006 (0.017)	0.005 (0.014)
Benefits to community	-0.493*** (0.004)	0.291*** (0.003)	0.019*** (0.002)	0.183*** (0.002)
Education	-0.421*** (0.005)	0.265*** (0.003)	0.001 (0.002)	0.155*** (0.002)
Health	-0.344*** (0.006)	0.279*** (0.004)	-0.057*** (0.003)	0.122*** (0.002)
Welfare	-0.430*** (0.004)	0.300*** (0.003)	-0.026*** (0.002)	0.156*** (0.002)
Other	-0.231*** (0.019)	0.182*** (0.012)	-0.033*** (0.010)	0.082*** (0.007)
Ind*Benefits to community	-0.114*** (0.044)	-0.047 (0.031)	0.110*** (0.020)	0.051*** (0.017)
Ind*Education	-0.119** (0.047)	-0.069** (0.032)	0.133*** (0.022)	0.055*** (0.018)
Ind*Health	-0.239*** (0.063)	-0.071 (0.048)	0.205*** (0.036)	0.105*** (0.024)
Ind*Welfare	-0.140*** (0.043)	-0.034 (0.030)	0.113*** (0.020)	0.061*** (0.016)
Ind*Other	-0.012 (0.123)	-0.257** (0.126)	0.245*** (0.077)	0.025 (0.044)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.447*** (0.005)	0.447*** (0.005)	0.447*** (0.005)	0.447*** (0.005)
Observations	870,093	870,093	870,093	870,093
Predicted joint prob.	0.624	0.165	0.074	0.138
<i>Panel B: Federal and municipal funding</i>				
	P(Federal funding=0, Municipal funding=0)	P(Federal funding=0, Municipal funding=1)	P(Federal funding=1, Municipal funding=0)	P(Federal funding=1, Municipal funding=1)
Indigenous charity	-0.051** (0.025)	0.051*** (0.013)	-0.022 (0.022)	0.022*** (0.007)
Benefits to community	-0.376*** (0.004)	0.176*** (0.002)	0.080*** (0.003)	0.120*** (0.002)
Education	-0.297*** (0.004)	0.142*** (0.002)	0.060*** (0.003)	0.095*** (0.001)
Health	-0.173*** (0.005)	0.108*** (0.003)	0.003 (0.004)	0.061*** (0.002)
Welfare	-0.272*** (0.004)	0.143*** (0.002)	0.038*** (0.003)	0.090*** (0.001)
Other	-0.121*** (0.017)	0.073*** (0.008)	0.006 (0.012)	0.042*** (0.005)
Ind*Benefits to community	-0.035 (0.031)	-0.124*** (0.016)	0.178*** (0.026)	-0.019** (0.009)
Ind*Education	-0.085** (0.035)	-0.103*** (0.017)	0.191*** (0.028)	-0.003 (0.010)
Ind*Health	-0.260*** (0.053)	-0.053** (0.024)	0.268*** (0.043)	0.046*** (0.014)
Ind*Welfare	-0.112*** (0.031)	-0.062*** (0.015)	0.162*** (0.026)	0.011 (0.008)
Ind*Other	-0.140* (0.082)	-0.129** (0.056)	0.266*** (0.081)	0.003 (0.024)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.384*** (0.005)	0.384*** (0.005)	0.384*** (0.005)	0.384*** (0.005)
Observations	870,093	870,093	870,093	870,093
Predicted joint prob.	0.705	0.083	0.127	0.085

Table 2.15 cont.: Bivariate probit model with interactions Non-Indigenous charities and Indigenous charities

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
<i>Panel C: Provincial and municipal funding</i>				
	P(Provincial funding=0, Municipal funding=0)	P(Provincial funding=0, Municipal funding=1)	P(Provincial funding=1, Municipal funding=0)	P(Provincial funding=1, Municipal funding=1)
Indigenous charity	-0.067* (0.035)	0.043*** (0.012)	-0.006 (0.032)	0.029*** (0.009)
Benefits to community	-0.594*** (0.004)	0.121*** (0.002)	0.299*** (0.004)	0.174*** (0.002)
Education	-0.510*** (0.005)	0.091*** (0.002)	0.274*** (0.003)	0.145*** (0.002)
Health	-0.451*** (0.006)	0.050*** (0.002)	0.282*** (0.004)	0.118*** (0.002)
Welfare	-0.537*** (0.004)	0.084*** (0.002)	0.304*** (0.003)	0.149*** (0.002)
Other	-0.303*** (0.019)	0.036*** (0.007)	0.187*** (0.013)	0.080*** (0.006)
Ind*Benefits to com.	0.091** (0.042)	-0.091*** (0.015)	0.049 (0.037)	-0.050*** (0.011)
Ind*Education	0.080* (0.046)	-0.064*** (0.016)	0.023 (0.038)	-0.039*** (0.012)
Ind*Health	-0.021 (0.065)	-0.009 (0.021)	0.028 (0.054)	0.002 (0.017)
Ind*Welfare	0.011 (0.041)	-0.036** (0.014)	0.039 (0.036)	-0.014 (0.011)
Ind*Other	0.264 (0.174)	-0.047 (0.032)	-0.142 (0.111)	-0.075 (0.047)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.416*** (0.006)	0.416*** (0.006)	0.416*** (0.006)	0.416*** (0.006)
Observations	870,093	870,093	870,093	870,093
Predicted joint prob.	0.652	0.046	0.180	0.122

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.16: Bivariate probit model with interactions Indigenous charities off-reserve and on-reserve

	Indigenous sample Schedule 6 (1)	Indigenous sample Schedule 6 (2)	Indigenous sample Schedule 6 (3)	Indigenous sample Schedule 6 (4)
<i>Panel A: Federal and provincial funding</i>				
	P(Federal funding=0, Provincial funding=0)	P(Federal funding=0, Provincial funding=1)	P(Federal funding=1, Provincial funding=0)	P(Federal funding=1, Provincial funding=1)
Charity on-reserve	0.061 (0.082)	-0.109* (0.065)	0.103 (0.063)	-0.055 (0.076)
Benefits to community	-0.598*** (0.072)	0.069 (0.056)	-0.021 (0.055)	0.550*** (0.064)
Education	-0.592*** (0.079)	0.013 (0.063)	0.034 (0.061)	0.545*** (0.070)
Health	-0.604*** (0.085)	0.097 (0.083)	-0.048 (0.081)	0.555*** (0.074)
Welfare	-0.491*** (0.070)	0.132** (0.054)	-0.092* (0.053)	0.451*** (0.063)
Other	-0.266* (0.159)	-0.207 (0.164)	0.226 (0.155)	0.248* (0.145)
On-reserve*Benefits	0.129 (0.099)	0.088 (0.075)	-0.098 (0.073)	-0.120 (0.092)
On-reserve*Education	0.084 (0.101)	0.095 (0.077)	-0.101 (0.075)	-0.079 (0.093)
On-reserve*Health	0.169 (0.125)	-0.034 (0.123)	0.020 (0.121)	-0.156 (0.115)
On-reserve*Welfare	-0.045 (0.096)	0.042 (0.078)	-0.038 (0.076)	0.041 (0.088)
On-reserve*Other	1.039*** (0.218)	-0.718*** (0.216)	0.628*** (0.214)	-0.949*** (0.200)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.253*** (0.051)	0.253*** (0.051)	0.253*** (0.051)	0.253*** (0.051)
Observations	8,670	8,670	8,670	8,670
Predicted joint prob.	0.340	0.141	0.119	0.400
<i>Panel B: Federal and municipal funding</i>				
	P(Federal funding=0, Municipal funding=0)	P(Federal funding=0, Municipal funding=1)	P(Federal funding=1, Municipal funding=0)	P(Federal funding=1, Municipal funding=1)
Charity on-reserve	-0.042 (0.087)	-0.009 (0.036)	0.039 (0.085)	0.012 (0.043)
Benefits to community	-0.525*** (0.075)	-0.001 (0.028)	0.296*** (0.065)	0.230*** (0.038)
Education	-0.577*** (0.081)	0.001 (0.032)	0.323*** (0.071)	0.253*** (0.043)
Health	-0.548*** (0.092)	0.041 (0.039)	0.237*** (0.088)	0.270*** (0.048)
Welfare	-0.412*** (0.073)	0.056** (0.027)	0.134** (0.065)	0.222*** (0.037)
Other	-0.343** (0.134)	-0.130* (0.078)	0.420*** (0.138)	0.053 (0.092)
On-reserve*Benefits	0.183* (0.104)	0.040 (0.043)	-0.172* (0.098)	-0.051 (0.054)
On-reserve*Education	0.187* (0.104)	-0.004 (0.043)	-0.097 (0.098)	-0.085 (0.055)
On-reserve*Health	0.202 (0.153)	-0.071 (0.059)	0.011 (0.138)	-0.141* (0.077)
On-reserve*Welfare	0.015 (0.102)	-0.017 (0.043)	0.021 (0.101)	-0.019 (0.051)
On-reserve*Other	0.169 (0.324)	0.176** (0.009)	-0.401** (0.185)	0.057 (0.178)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.207*** (0.045)	0.207*** (0.045)	0.207*** (0.045)	0.207*** (0.045)
Observations	8,670	8,670	8,670	8,670
Predicted joint prob.	0.416	0.066	0.318	0.201

Table 2.16 cont. : Bivariate probit model with interactions Indigenous charities off-reserve and on-reserve

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
<i>Panel C: Provincial and municipal funding</i>				
	P(Provincial funding=0, Municipal funding=0)	P(Provincial funding=0, Municipal funding=1)	P(Provincial funding=1, Municipal funding=0)	P(Provincial funding=1, Municipal funding=1)
Charity on-reserve	0.125 (0.095)	0.031 (0.034)	-0.126 (0.089)	-0.030 (0.047)
Benefits to community	-0.598*** (0.082)	-0.021 (0.029)	0.366*** (0.075)	0.253*** (0.040)
Education	-0.562*** (0.097)	0.001 (0.030)	0.305*** (0.080)	0.256*** (0.049)
Health	-0.660*** (0.114)	0.007 (0.036)	0.349*** (0.095)	0.304*** (0.057)
Welfare	-0.590*** (0.080)	0.007 (0.028)	0.309*** (0.074)	0.273*** (0.039)
Other	-0.001 (0.289)	-0.044 (0.036)	0.082 (0.148)	-0.037 (0.143)
On-reserve*Benefits	0.031 (0.112)	0.004 (0.042)	-0.025 (0.107)	-0.011 (0.057)
On-reserve*Education	0.030 (0.121)	-0.040 (0.040)	0.057 (0.104)	-0.047 (0.062)
On-reserve*Health	0.246 (0.156)	-0.049 (0.061)	-0.044 (0.156)	-0.153** (0.078)
On-reserve*Welfare	-0.052 (0.111)	-0.033 (0.039)	0.089 (0.101)	-0.004 (0.056)
On-reserve*Other	1.232*** (0.313)	0.442*** (0.094)	-1.488*** (0.202)	-0.186 (0.179)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.261*** (0.049)	0.261*** (0.049)	0.261*** (0.049)	0.261*** (0.049)
Observations	8,670	8,670	8,670	8,670
Predicted joint prob.	0.409	0.050	0.324	0.217

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.17: Multivariate probit Non-Indigenous charities and Indigenous charities

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)
	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.622*** (0.039)	0.095* (0.048)	-0.073 (0.046)
Benefits to community	0.827*** (0.013)	1.757*** (0.015)	1.772*** (0.017)
Education	0.642*** (0.014)	1.559*** (0.015)	1.422*** (0.018)
Health	0.276*** (0.019)	1.487*** (0.020)	1.023*** (0.023)
Welfare	0.534*** (0.012)	1.685*** (0.014)	1.410*** (0.017)
Other	0.212*** (0.060)	0.970*** (0.062)	0.690*** (0.070)
Registered charity	0.954*** (0.024)	1.507*** (0.025)	0.868*** (0.026)
Private foundation	-0.559*** (0.043)	-0.630*** (0.050)	-0.896*** (0.057)
Size<100K	0.709*** (0.014)	0.916*** (0.014)	0.589*** (0.015)
Size<250K	1.034*** (0.014)	1.419*** (0.015)	0.873*** (0.015)
Size<500K	1.176*** (0.015)	1.659*** (0.016)	0.987*** (0.017)
Size<1MIL	1.299*** (0.016)	1.831*** (0.018)	1.046*** (0.018)
Size<5MIL	1.391*** (0.017)	2.062*** (0.019)	1.109*** (0.019)
Size<10MIL	1.573*** (0.023)	2.534*** (0.026)	1.149*** (0.026)
Rural	2.105*** (0.053)	3.418*** (0.083)	1.264*** (0.056)
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Constant	-3.182*** (0.031)	-4.521*** (0.033)	-3.868*** (0.035)
Atrho21	0.414*** (0.005)		
Atrho31	0.354*** (0.005)		
Atrho32	0.387*** (0.006)		
Observations	870,093	870,093	870,093

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.18: Multivariate probit Indigenous charities off-reserve and on-reserve

	Indigenous sample Schedule 6 (1) Federal funding (Y/N)	Indigenous sample Schedule 6 (2) Provincial funding (Y/N)	Indigenous sample Schedule 6 (3) Municipal funding (Y/N)
Charity on-reserve	-0.151 (0.124)	-0.401*** (0.124)	-0.176 (0.118)
Benefits to community	1.117*** (0.144)	1.529*** (0.170)	0.767*** (0.152)
Education	1.206*** (0.145)	1.416*** (0.176)	0.749*** (0.156)
Health	1.119*** (0.202)	1.406*** (0.236)	0.836*** (0.213)
Welfare	0.823*** (0.145)	1.506*** (0.164)	0.914*** (0.144)
Other	0.963*** (0.298)	0.074 (0.649)	-0.212 (0.468)
Registered charity	1.282*** (0.422)	1.207** (0.474)	0.698** (0.276)
Private foundation	0.824 (0.584)	0.174 (0.605)	-0.328 (0.509)
Size<100K	1.237*** (0.187)	1.182*** (0.166)	0.763*** (0.181)
Size<250K	1.804*** (0.188)	1.596*** (0.167)	1.226*** (0.171)
Size<500K	2.066*** (0.187)	2.121*** (0.171)	1.331*** (0.174)
Size<1MIL	2.445*** (0.184)	2.488*** (0.172)	1.497*** (0.167)
Size<5MIL	2.889*** (0.180)	2.592*** (0.165)	1.531*** (0.159)
Size<10MIL	2.863*** (0.219)	2.758*** (0.210)	1.317*** (0.208)
Rural	0.079 (0.113)	0.003 (0.115)	-0.158 (0.108)
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Constant	-4.024*** (0.484)	-4.147*** (0.535)	-3.414*** (0.356)
Atrho21	0.236*** (0.048)		
Atrho31	0.192*** (0.039)		
Atrho32	0.220*** (0.043)		
Observations	8,670	8,670	8,670

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.19: Multivariate probit with interactions Non-Indigenous charities and Indigenous charities

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)
	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.001 (0.102)	0.089 (0.136)	0.450*** (0.111)
Benefits to community	0.823*** (0.013)	1.757*** (0.015)	1.782*** (0.017)
Education	0.636*** (0.014)	1.560*** (0.015)	1.426*** (0.018)
Health	0.266*** (0.019)	1.486*** (0.020)	1.021*** (0.023)
Welfare	0.529*** (0.012)	1.684*** (0.014)	1.409*** (0.017)
Other	0.198*** (0.061)	0.982*** (0.062)	0.696*** (0.070)
Ind*Benefits to community	0.642*** (0.124)	-0.004 (0.162)	-0.865*** (0.134)
Ind*Education	0.761*** (0.136)	-0.064 (0.171)	-0.644*** (0.149)
Ind*Health	1.249*** (0.203)	0.111 (0.239)	-0.050 (0.202)
Ind*Welfare	0.700*** (0.124)	0.086 (0.156)	-0.311** (0.131)
Ind*Other	1.088*** (0.346)	-0.908 (0.578)	-0.785* (0.460)
Registered charity	0.953*** (0.024)	1.506*** (0.025)	0.867*** (0.026)
Private foundation	-0.561*** (0.043)	-0.630*** (0.050)	-0.897*** (0.057)
Size<100K	0.710*** (0.014)	0.916*** (0.014)	0.589*** (0.015)
Size<250K	1.033*** (0.014)	1.419*** (0.015)	0.874*** (0.015)
Size<500K	1.175*** (0.015)	1.659*** (0.016)	0.989*** (0.017)
Size<1MIL	1.297*** (0.016)	1.831*** (0.018)	1.049*** (0.018)
Size<5MIL	1.388*** (0.017)	2.063*** (0.019)	1.113*** (0.019)
Size<10MIL	1.572*** (0.023)	2.534*** (0.026)	1.152*** (0.026)
Rural	2.107*** (0.053)	3.418*** (0.083)	1.267*** (0.056)
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Constant	-3.176*** (0.031)	-4.521*** (0.033)	-3.872*** (0.035)
Atrho21	0.414*** (0.005)		
Atrho31	0.354*** (0.005)		
Atrho32	0.387*** (0.006)		
Observations	870,093	870,093	870,093

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.20: Multivariate probit with interactions Indigenous charities off-reserve and on-reserve

	Indigenous sample Schedule 6 (1)	Indigenous sample Schedule 6 (2)	Indigenous sample Schedule 6 (3)
	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Charity on-reserve	-0.221 (0.341)	-0.885** (0.373)	-0.732** (0.353)
Benefits to community	1.322*** (0.200)	1.544*** (0.231)	0.811*** (0.204)
Education	1.446*** (0.216)	1.397*** (0.261)	0.897*** (0.235)
Health	1.274*** (0.253)	1.627*** (0.309)	1.101*** (0.278)
Welfare	0.894*** (0.197)	1.453*** (0.225)	0.984*** (0.198)
Other	1.174*** (0.336)	0.096 (0.693)	-0.295 (0.580)
On-reserve*Benefits	-0.204 (0.391)	0.405 (0.416)	0.714* (0.396)
On-reserve*Education	-0.107 (0.385)	0.516 (0.424)	0.422 (0.402)
On-reserve*Health	0.347 (0.393)	0.698* (0.411)	0.614 (0.389)
On-reserve*Welfare	-0.492 (0.795)	-2.828*** (0.816)	1.590* (0.926)
On-reserve*Other	0.342 (0.413)	0.473 (0.448)	0.732* (0.420)
Registered charity	1.220*** (0.418)	1.173** (0.474)	0.677** (0.282)
Private foundation	0.729 (0.579)	0.161 (0.596)	-0.314 (0.515)
Size<100K	1.187*** (0.181)	1.173*** (0.166)	0.785*** (0.185)
Size<250K	1.766*** (0.185)	1.580*** (0.168)	1.251*** (0.171)
Size<500K	2.057*** (0.187)	2.117*** (0.175)	1.381*** (0.175)
Size<1MIL	2.443*** (0.184)	2.478*** (0.173)	1.532*** (0.168)
Size<5MIL	2.880*** (0.181)	2.589*** (0.167)	1.580*** (0.160)
Size<10MIL	2.860*** (0.219)	2.742*** (0.211)	1.352*** (0.209)
Rural	0.088 (0.113)	-0.005 (0.114)	-0.158 (0.109)
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Constant	-4.074*** (0.497)	-4.097*** (0.544)	-3.508*** (0.374)
Atrho21	0.231*** (0.047)		
Atrho31	0.192*** (0.039)		
Atrho32	0.218*** (0.043)		
Observations	8,670	8,670	8,670

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.21: Probit model with other provincial spending (2008-2017)- Robustness check
Dependent variable: government/federal/provincial/municipal funding

<i>Panel A: Non-Indigenous charities and Indigenous charities</i>				
	Full sample (2008-2017)	Sample Schedule 6 (2008-2017)	Sample Schedule 6 (2008-2017)	Sample Schedule 6 (2008-2017)
	(1)	(2)	(3)	(4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.066*** (0.014)	0.206*** (0.015)	0.049** (0.020)	-0.007 (0.012)
Provincial spending (\$ per capita):				
Economic affairs	-0.00001** (0.00000)	0.00001* (0.00001)	-0.00003*** (0.00001)	0.00001*** (0.00000)
Education	-0.00001*** (0.00001)	-0.00001 (0.00001)	0.00000 (0.00001)	-0.00001 (0.00000)
Environment protection	-0.00003* (0.00001)	0.00002 (0.00002)	-0.00010*** (0.00002)	0.00000 (0.00001)
General public services	-0.00001** (0.00000)	0.00000 (0.00001)	0.00001 (0.00001)	0.00001** (0.00000)
Health	-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000 (0.00000)	-0.00000 (0.00000)
Housing and community	0.00001 (0.00002)	-0.00004** (0.00002)	0.00002 (0.00002)	-0.00001 (0.00002)
Public order and safety	0.00006*** (0.00002)	0.00002 (0.00002)	0.00005** (0.00002)	-0.00001 (0.00002)
Recr., culture, religion	0.00004 (0.00003)	0.00007** (0.00003)	0.00002 (0.00004)	0.00001 (0.00003)
Social Protection	0.00001* (0.00001)	-0.00002* (0.00001)	0.00001 (0.00001)	0.00001 (0.00001)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	756,112	388,755	388,755	388,755
Predicted probability	0.285	0.214	0.291	0.133
<i>Panel B: Indigenous charities off-reserve and on-reserve</i>				
	Indigenous sample (2008-2017)	Indigenous sample Schedule 6 (2008-2017)	Indigenous sample Schedule 6 (2008-2017)	Indigenous sample Schedule 6 (2008-2017)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Charity on-reserve	-0.095** (0.048)	-0.070 (0.062)	-0.139** (0.055)	-0.082 (0.050)
Provincial spending (\$ per capita):				
Economic affairs	-0.00002 (0.00003)	-0.00007** (0.00003)	-0.00001 (0.00003)	0.00003 (0.00003)
Education	0.00004 (0.00007)	-0.00012* (0.00007)	0.00010* (0.00006)	-0.00008 (0.00007)
Environment protection	0.00007 (0.00011)	0.00024 (0.00014)	-0.00005 (0.00013)	-0.00013 (0.00009)
General public services	0.00001 (0.00005)	0.00004 (0.00005)	0.00004 (0.00004)	-0.00002 (0.00004)
Health	0.00006* (0.00003)	-0.00002 (0.00003)	0.00001 (0.00003)	0.00003 (0.00003)
Housing and community	-0.00012 (0.00010)	0.00011 (0.00010)	0.00007 (0.00011)	-0.00013 (0.00011)
Public order and safety	-0.00014 (0.00011)	-0.00021 (0.00013)	-0.00015 (0.00012)	-0.00005 (0.00013)
Recr., culture, religion	-0.00034 (0.00032)	0.00069** (0.00029)	0.00005 (0.00030)	-0.00009 (0.00029)
Social Protection	-0.00005 (0.00008)	-0.00015* (0.00008)	-0.00004 (0.00008)	0.00016* (0.00009)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	6,866	4,259	4,235	4,235
Predicted probability	0.583	0.625	0.675	0.301

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.22: Probit model with lags of government funding- Robustness check
Dependent variable: government/federal/provincial/municipal funding

<i>Panel A: Non-Indigenous charities and Indigenous charities</i>				
	Full sample	Sample Schedule 6	Sample Schedule 6	Sample Schedule 6
	(1)	(2)	(3)	(4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.033*** (0.008)	0.059*** (0.005)	0.007 (0.008)	-0.003 (0.003)
Government lag (Y/N)	0.806*** (0.002)	-	-	-
Federal lag (Y/N)	-	0.493*** (0.002)	-	-
Provincial lag (Y/N)	-	-	0.675*** (0.003)	-
Municipal lag (Y/N)	-	-	-	0.337*** (0.002)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,130,231	775,707	775,707	775,707
Predicted prob.	0.265	0.120	0.184	0.0650
<i>Panel B: Indigenous charities off-reserve and on-reserve</i>				
	Indigenous sample	Indigenous sample Schedule 6	Indigenous sample Schedule 6	Indigenous sample Schedule 6
	(1)	(2)	(3)	(4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Charity on-reserve	-0.038 (0.027)	-0.031 (0.031)	-0.061* (0.032)	-0.025 (0.019)
Government lag (Y/N)	0.870*** (0.031)	-	-	-
Federal lag (Y/N)	-	0.929*** (0.026)	-	-
Provincial lag (Y/N)	-	-	0.951*** (0.028)	-
Municipal lag (Y/N)	-	-	-	0.586*** (0.019)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	10,191	7,697	7,697	7,697
Predicted prob.	0.624	0.518	0.558	0.178

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.23: Probit model excluding religious charities - Robustness check
Dependent variable: government/federal/provincial/municipal funding

<i>Panel A: Non-Indigenous charities and Indigenous charities</i>				
	Full sample (excluding religious charities)	Sample Schedule 6 (excluding religious charities)	Sample Schedule 6 (excluding religious charities)	Sample Schedule 6 (excluding religious charities)
	(1)	(2)	(3)	(4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.083*** (0.019)	0.211*** (0.013)	0.033* (0.020)	-0.025* (0.013)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	750,337	535,545	535,545	535,545
Predicted prob.	0.434	0.202	0.377	0.199
<i>Panel B: Indigenous charities off-reserve and on-reserve</i>				
	Indigenous sample (excluding religious charities)	Indigenous sample Schedule 6 (excluding religious charities)	Indigenous sample Schedule 6 (excluding religious charities)	Indigenous sample Schedule 6 (excluding religious charities)
	(1)	(2)	(3)	(4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Charity on-reserve	-0.116*** (0.036)	-0.080 (0.051)	-0.155*** (0.050)	-0.061 (0.044)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	8,108	6,877	6,834	6,877
Predicted prob.	0.795	0.619	0.661	0.284

The reference category is welfare charities. Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.24: Bivariate probit model Non-Indigenous charities and Indigenous charities
Charities' size above \$100,000 - Robustness check**

	Full sample above \$100,000 (1)	Full sample above \$100,000 (2)	Full sample above \$100,000 (3)	Full sample above \$100,000 (4)
<i>Panel A: Federal and provincial funding</i>				
	P(Federal funding=0, Provincial funding=0)	P(Federal funding=0, Provincial funding=1)	P(Federal funding=1, Provincial funding=0)	P(Federal funding=1, Provincial funding=1)
Indigenous charity	-0.039 (0.058)	0.025 (0.041)	-0.004 (0.024)	0.019 (0.030)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.437*** (0.005)	0.437*** (0.005)	0.437*** (0.005)	0.437*** (0.005)
Observations	598,157	598,157	598,157	598,157
Predicted joint prob.	0.524	0.207	0.081	0.188
<i>Panel B: Federal and municipal funding</i>				
	P(Federal funding=0, Municipal funding=0)	P(Federal funding=0, Municipal funding=1)	P(Federal funding=1, Municipal funding=0)	P(Federal funding=1, Municipal funding=1)
Indigenous charity	-0.084** (0.041)	0.068*** (0.021)	-0.029 (0.035)	0.046*** (0.015)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.394*** (0.006)	0.394*** (0.006)	0.394*** (0.006)	0.394*** (0.006)
Observations	598,157	598,157	598,157	598,157
Predicted joint prob.	0.635	0.096	0.154	0.115
<i>Panel C: Provincial and municipal funding</i>				
	P(Provincial funding=0, Municipal funding=0)	P(Provincial funding=0, Municipal funding=1)	P(Provincial funding=1, Municipal funding=0)	P(Provincial funding=1, Municipal funding=1)
Indigenous charity	-0.094 (0.057)	0.049*** (0.019)	-0.018 (0.054)	0.063*** (0.020)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.415*** (0.007)	0.415*** (0.007)	0.415*** (0.007)	0.415*** (0.007)
Observations	598,157	598,157	598,157	598,157
Predicted joint prob.	0.559	0.048	0.230	0.163

The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

**Table 2.25: Bivariate probit model Indigenous charities off-reserve and on-reserve
Charities' size above \$100,000 - Robustness check**

	Indigenous sample above \$100,000 (1)	Indigenous sample above \$100,000 (2)	Indigenous sample above \$100,000 (3)	Indigenous sample above \$100,000 (4)
<i>Panel A: Federal and provincial funding</i>				
	P(Federal funding=0, Provincial funding=0)	P(Federal funding=0, Provincial funding=1)	P(Federal funding=1, Provincial funding=0)	P(Federal funding=1, Provincial funding=1)
Charity on-reserve	0.062 (0.064)	-0.081 (0.074)	0.117* (0.069)	-0.098 (0.111)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.250*** (0.054)	0.250*** (0.054)	0.250*** (0.054)	0.250*** (0.054)
Observations	6,805	6,805	6,805	6,805
Predicted joint prob.	0.194	0.165	0.136	0.505
<i>Panel B: Federal and municipal funding</i>				
	P(Federal funding=0, Municipal funding=0)	P(Federal funding=0, Municipal funding=1)	P(Federal funding=1, Municipal funding=0)	P(Federal funding=1, Municipal funding=1)
Charity on-reserve	-0.046 (0.088)	0.022 (0.043)	-0.049 (0.108)	0.073 (0.081)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.209*** (0.047)	0.209*** (0.047)	0.209*** (0.047)	0.209*** (0.047)
Observations	6,805	6,805	6,805	6,805
Predicted joint prob.	0.285	0.074	0.385	0.255
<i>Panel C: Provincial and municipal funding</i>				
	P(Provincial funding=0, Municipal funding=0)	P(Provincial funding=0, Municipal funding=1)	P(Provincial funding=1, Municipal funding=0)	P(Provincial funding=1, Municipal funding=1)
Charity on-reserve	0.110 (0.091)	0.069* (0.037)	-0.198* (0.106)	0.018 (0.087)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.252*** (0.051)	0.252*** (0.051)	0.252*** (0.051)	0.252*** (0.051)
Observations	6,805	6,805	6,805	6,805
Predicted joint prob.	0.275	0.056	0.396	0.273

The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.26: Bivariate probit model Non-Indigenous charities and Indigenous charities with lags of government funding - Robustness check

	Sample Schedule 6 (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
<i>Panel A: Federal and provincial funding</i>				
	P(Federal funding=0, Provincial funding=0)	P(Federal funding=0, Provincial funding=1)	P(Federal funding=1, Provincial funding=0)	P(Federal funding=1, Provincial funding=1)
Indigenous charity	-0.026*** (0.007)	-0.031*** (0.007)	0.047*** (0.004)	0.010*** (0.001)
Federal lag (Y/N)	-0.459*** (0.002)	-0.014*** (0.002)	0.351*** (0.002)	0.122*** (0.001)
Provincial lag (Y/N)	-0.621*** (0.003)	0.540*** (0.003)	-0.030*** (0.001)	0.111*** (0.001)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.140*** (0.006)	0.140*** (0.006)	0.140*** (0.006)	0.140*** (0.006)
Observations	772,287	772,287	772,287	772,287
Predicted joint prob.	0.615	0.167	0.073	0.145
<i>Panel B: Federal and municipal funding</i>				
	P(Federal funding=0, Municipal funding=0)	P(Federal funding=0, Municipal funding=1)	P(Federal funding=1, Municipal funding=0)	P(Federal funding=1, Municipal funding=1)
Indigenous charity	-0.045*** (0.005)	-0.015*** (0.003)	0.057*** (0.004)	0.003*** (0.001)
Federal lag (Y/N)	-0.470*** (0.002)	-0.011*** (0.001)	0.434*** (0.002)	0.048*** (0.001)
Municipal lag (Y/N)	-0.328*** (0.002)	0.265*** (0.002)	0.003** (0.001)	0.061*** (0.001)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.153*** (0.005)	0.153*** (0.005)	0.153*** (0.005)	0.153*** (0.005)
Observations	772,287	772,287	772,287	772,287
Predicted joint prob.	0.698	0.084	0.129	0.089
<i>Panel C: Provincial and municipal funding</i>				
	P(Provincial funding=0, Municipal funding=0)	P(Provincial funding=0, Municipal funding=1)	P(Provincial funding=1, Municipal funding=0)	P(Provincial funding=1, Municipal funding=1)
Indigenous charity	-0.005 (0.007)	-0.004 (0.003)	0.010 (0.007)	-0.000 (0.001)
Provincial lag (Y/N)	-0.647*** (0.003)	-0.015*** (0.001)	0.600*** (0.003)	0.062*** (0.001)
Municipal lag (Y/N)	-0.336*** (0.003)	0.239*** (0.002)	0.014*** (0.002)	0.084*** (0.001)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.125*** (0.006)	0.125*** (0.006)	0.125*** (0.006)	0.125*** (0.006)
Observations	772,287	772,287	772,287	772,287
Predicted joint prob.	0.642	0.045	0.184	0.128

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

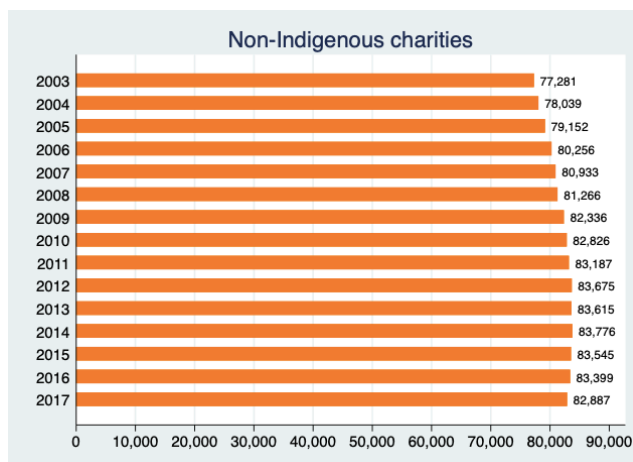
Table 2.27: Bivariate probit model Indigenous charities off-reserve and on-reserve with lags of government funding - Robustness check

	Indigenous sample Schedule 6 (1)	Indigenous sample Schedule 6 (2)	Indigenous sample Schedule 6 (3)	Indigenous sample Schedule 6 (4)
<i>Panel A: Federal and provincial funding</i>				
	P(Federal funding=0, Provincial funding=0)	P(Federal funding=0, Provincial funding=1)	P(Federal funding=1, Provincial funding=0)	P(Federal funding=1, Provincial funding=1)
Charity on-reserve	0.041** (0.019)	-0.018 (0.025)	0.022 (0.023)	-0.046** (0.022)
Federal lag (Y/N)	-0.456*** (0.021)	-0.477*** (0.022)	0.368*** (0.021)	0.565*** (0.022)
Provincial lag (Y/N)	-0.496*** (0.022)	0.419*** (0.024)	-0.455*** (0.021)	0.532*** (0.023)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.067 (0.054)	0.067 (0.054)	0.067 (0.054)	0.067 (0.054)
Observations	7,666	7,666	7,666	7,666
Predicted joint prob.	0.323	0.143	0.117	0.417
<i>Panel B: Federal and municipal funding</i>				
	P(Federal funding=0, Municipal funding=0)	P(Federal funding=0, Municipal funding=1)	P(Federal funding=1, Municipal funding=0)	P(Federal funding=1, Municipal funding=1)
Charity on-reserve	0.033 (0.026)	-0.005 (0.011)	-0.011 (0.028)	-0.017 (0.011)
Federal lag (Y/N)	-0.794*** (0.025)	-0.143*** (0.010)	0.745*** (0.024)	0.191*** (0.012)
Municipal lag (Y/N)	-0.328*** (0.024)	0.261*** (0.015)	-0.252*** (0.024)	0.319*** (0.016)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.030 (0.045)	0.030 (0.045)	0.030 (0.045)	0.030 (0.045)
Observations	7,666	7,666	7,666	7,666
Predicted joint prob.	0.400	0.067	0.323	0.211
<i>Panel C: Provincial and municipal funding</i>				
	P(Provincial funding=0, Municipal funding=0)	P(Provincial funding=0, Municipal funding=1)	P(Provincial funding=1, Municipal funding=0)	P(Provincial funding=1, Municipal funding=1)
Charity on-reserve	0.059** (0.026)	0.004 (0.010)	-0.042 (0.030)	-0.021* (0.012)
Provincial lag (Y/N)	-0.811*** (0.026)	-0.142*** (0.010)	0.756*** (0.026)	0.197*** (0.013)
Municipal lag (Y/N)	-0.301*** (0.026)	0.225*** (0.016)	-0.276*** (0.027)	0.352*** (0.018)
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Rho	0.081 (0.054)	0.081 (0.054)	0.081 (0.054)	0.081 (0.054)
Observations	7,666	7,666	7,666	7,666
Predicted joint prob.	0.390	0.050	0.333	0.227

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

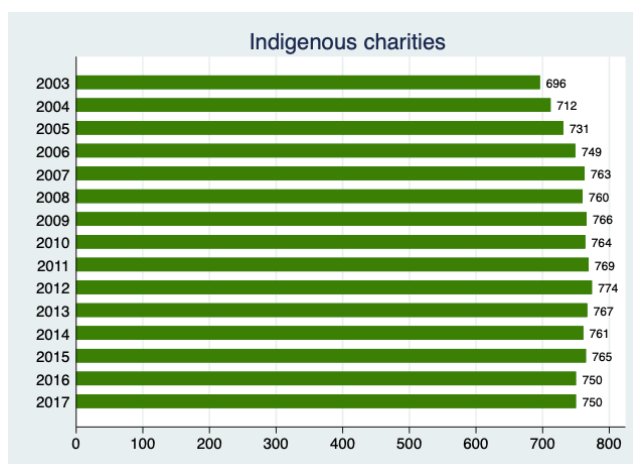
Appendix 2.A: Figures and tables

Figure 2.1A: Number of Non-Indigenous charities by year



Source: CRA - T3010

Figure 2.2A: Number of Indigenous charities by year



Source: CRA - T3010

Table 2.3A: Summary statistics and difference in means for charities Schedule 6 and conditional on getting government, federal and provincial funding

	Mean (Std. Dev.) - percentage				Mean (Std. Dev.) - percentage		
	Full Sample				Indigenous sample		
	Full sample	Sample A	Sample B		Sample C	Sample D	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Conditional on getting government funding							
	Full sample n=432,036	Non-Indigenous charities n=425,741	Indigenous charities n=6,295	Difference in means (A-B)	Indigenous charities off-reserve n=4,359	Indigenous charities on-reserve n=1,936	Difference in means (C-D)
Gvt funding (Y/N)	1.00	1.00	1.00	0.00 (0.000)	1.00	1.00	0.00 (0.000)
Fed funding (Y/N)	0.46	0.45	0.73	-0.27*** (0.006)	0.76	0.65	0.10*** (0.012)
Prov funding (Y/N)	0.65	0.64	0.76	-0.12*** (0.006)	0.81	0.66	0.14*** (0.011)
Mun funding (Y/N)	0.37	0.37	0.37	-0.01 (0.006)	0.42	0.28	0.13*** (0.013)
Gov funding (\$)*	5,253,624	5,298,631	2,209,716	3,088,915***	2,200,904	2,229,557	-28,652
	(76,254,618)	(76,812,303)	(5,668,873)	(968,168)	(5,293,211)	(6,436,365)	(154,839)
Fed funding (\$)*	252,812	245,574	742,311	-496,736***	707,672	820,301	-112,628**
	(4,684,206)	(4,711,718)	(2,053,527)	(59,469)	(1,920,869)	(2,323,318)	(56,072)
Prov funding (\$)*	4,651,877	4,700,568	1,358,827	3,341,741***	1,365,133	1,344,627	20,506
	(73,077,011)	(73,611,815)	(4,855,110)	(927,820)	(4,416,101)	(5,722,826)	(132,612)
Mun funding (\$)*	347,419	350,960	107,974	242,986*	127,523	63,956	63,567***
	(10,556,302)	(10,633,856)	(482,000)	(134,029)	(507,092)	(416,831)	(13,140)
Gov share*	0.78	0.78	0.70	0.07 (2.296)	0.73	0.63	0.10*** (0.032)
Fed share*	0.06	0.06	0.27	-0.21*** (0.013)	0.26	0.29	-0.03*** (0.008)
Prov share*	0.60	0.61	0.34	0.26 (2.295)	0.38	0.27	0.11*** (0.009)
Mun share*	0.07	0.07	0.06	0.01 (0.009)	0.07	0.06	0.01 (0.005)
	Mean (Std. Dev.) - percentage				Mean (Std. Dev.) - percentage		
	Sample Schedule 6				Indigenous sample Schedule 6		
	Sample Schedule 6	Subsample A	Subsample B		Subsample C	Subsample D	
Panel B: Conditional on getting federal funding							
	Full sample n=184,238	Non-Indigenous charities n=179,753	Indigenous charities n=4,485	Difference in means (A-B)	Indigenous charities off-reserve n=3,276	Indigenous charities on-reserve n=1,209	Difference in means (C-D)
Fed funding (Y/N)	1.00	1.00	1.00	0.00 (0.000)	1.00	1.00	0.00 (0.000)
Prov funding (Y/N)	0.66	0.66	0.77	-0.12*** (0.007)	0.82	0.66	0.16*** (0.014)
Mun funding (Y/N)	0.40	0.40	0.39	0.01* (0.007)	0.43	0.28	0.15*** (0.016)
Fed funding (\$)*	592,209	581,070	1,038,631	-457,561***	941,344	1,302,250	-360,905***
	(7,159,060)	(7,237,827)	(2,366,511)	(108,219)	(2,165,647)	(2,824,507)	(79,461)
Prov funding (\$)*	6,879,824	7,019,272	1,290,913	5,728,358***	1,225,201	1,468,972	-243,771*
	(1.028e+08)	(1.041e+08)	(4,281,290)	(1,553,742)	(3,365,030)	(6,106,975)	(144,039)
Mun funding (\$)*	567,833	579,170	113,467	465,703**	135,134	54,755	80,379.20***
	(14,959,795)	(15,144,892)	(504,648)	(226,147)	(527,508)	(431,495)	(16,941)
Fed share*	0.13	0.13	0.37	-0.24*** (0.013)	0.34	0.45	-0.11*** (0.010)
Prov share*	0.27	0.27	0.30	-0.03 (0.233)	0.34	0.20	0.13*** (0.010)
Mun share*	0.07	0.07	0.05	0.02 (0.012)	0.05	0.04	0.01*** (0.004)

Table 2.3A cont.: Summary statistics and difference in means for charities Schedule 6 and

conditional on getting government, federal and provincial funding

Mean (Std. Dev.) - percentage Sample Schedule 6				Mean (Std. Dev.) - percentage Indigenous sample Schedule 6			
Sample Schedule 6	Subsample A	Subsample B		Subsample C	Subsample D		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<i>Panel C: Conditional on getting provincial funding</i>							
	Full sample n=263,434	Non-Indigenous charities n=258,751	Indigenous charities n=4,683	Difference in means (A-B)	Indigenous charities off-reserve n=3,474	Indigenous charities on-reserve n=1,209	Difference in means (C-D)
Fed funding (Y/N)	0.46	0.46	0.74	-0.28*** (0.007)	0.77	0.66	0.11*** (0.015)
Prov funding (Y/N)	1.00	1.00	1.00	0.00 (0.000)	1.00	1.00	0.00 (0.000)
Mun funding (Y/N)	0.41	0.41	0.40	0.00 (0.007)	0.44	0.29	0.16*** (0.016)
Fed funding (\$)*	311,907 (4,716,576)	303,587 (4,750,512)	771,636 (2,068,918)	-468,048*** (69,538)	714,960 (1,893,356)	934,492 (2,499,620)	-219,531*** (69,016)
Prov funding (\$)*	7,623,874 (93,459,552)	7,729,143 (94,295,301)	1,807,399 (5,492,459)	5,921,744*** (1,377,977)	1,712,243 (4,886,492)	2,080,824 (6,940,674)	-368,580** (183,341)
Mun funding (\$)*	509,994 (13,382,781)	517,370 (13,503,081)	102,407 (471,656)	414,963** (197,322)	113,026 (462,057)	71,893 (497,147)	41,132*** (15,739)
Fed share*	0.06	0.06	0.24	-0.18*** (0.011)	0.23	0.27	-0.04*** (0.009)
Prov share*	0.91	0.92	0.45	0.48 (3.409)	0.46	0.40	0.07*** (0.010)
Mun share*	0.06	0.06	0.05	0.01 (0.010)	0.05	0.04	0.01** (0.004)

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”.

*These variables have not been used in the regressions. The standard deviation (in parenthesis) is not provided for dichotomous variables. The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.4A: Summary statistics and difference in means for charities by program

Mean (Std. Dev.) - percentage				Mean (Std. Dev.) - percentage		
Program sample	Subsample A	Subsample B		Subsample C	Subsample D	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Benefits to Community</i>						
Benefits sample n=189,585	Non-Indigenous charities n=187,042	Indigenous charities n=2,543	Difference in means (A-B)	Indigenous charities off-reserve n=1,754	Indigenous charities on-reserve n=789	Difference in means (C-D)
Gvt funding (Y/N)	0.56	0.56	-0.20*** (0.010)	0.84	0.58	0.26*** (0.018)
Fed funding (Y/N)	0.24	0.24	-0.35*** (0.009)	0.70	0.35	0.34*** (0.020)
Prov funding (Y/N)	0.35	0.35	-0.27*** (0.009)	0.71	0.41	0.30*** (0.020)
Mun funding (Y/N)	0.27	0.27	-0.01 (0.009)	0.32	0.18	0.14*** (0.019)
Gov funding (\$)*	339,001 (3,311,042)	329,652 (3,323,586)	-696,975*** (66,084)	1,300,953 (2,398,861)	416,783 (858,572)	884,170*** (87,835)
Fed funding (\$)*	60,602 (1,821,487)	54,878 (1,827,271)	-426,729*** (36,352)	598,860 (1,436,324)	220,948 (655,649)	377,912*** (53,481)
Prov funding (\$)*	166,699 (1,614,329)	162,322 (1,618,477)	-326,306*** (32,220)	637,387 (1,431,809)	157,928 (410,499)	479,458*** (51,912)
Mun funding (\$)*	110,416 (2,094,361)	111,156 (2,108,386)	55,138 (41,812)	64,309 (247,529)	37,585 (136,673)	26,724*** (9,397)
Gov share*	0.37	0.36	-0.25 (0.427)	0.69	0.43	0.25*** (0.083)
Fed share*	0.05	0.05	-0.19*** (0.027)	0.27	0.17	0.09*** (0.013)
Prov share*	0.20	0.20	-0.08 (0.397)	0.31	0.19	0.12*** (0.014)
Mun share*	0.08	0.08	0.03 (0.021)	0.05	0.06	-0.02** (0.006)
<i>Panel B: Education</i>						
Education sample n=199,538	Non-Indigenous charities n=197,618	Indigenous charities n=1,920	Difference in means (A-B)	Indigenous charities off-reserve n=891	Indigenous charities on-reserve n=1,029	Difference in means (C-D)
Gvt funding (Y/N)	0.46	0.46	-0.17*** (0.011)	0.66	0.59	0.08*** (0.022)
Fed funding (Y/N)	0.21	0.20	-0.27*** (0.009)	0.53	0.43	0.10*** (0.023)
Prov funding (Y/N)	0.32	0.32	-0.14*** (0.011)	0.50	0.42	0.07*** (0.023)
Mun funding (Y/N)	0.19	0.19	-0.02** (0.009)	0.27	0.15	0.12*** (0.018)
Gov funding (\$)*	4,236,756 (46,796,018)	4,260,494 (47,018,990)	2,467,008** (1,073,132)	1,268,647 (2,963,285)	2,247,937 (7,037,649)	-979,289*** (253,227)
Fed funding (\$)*	311,676 (5,638,834)	307,671 (5,662,040)	-416,265*** (129,308)	746,105 (2,042,255)	704,740 (2,244,903)	41,365 (98,536)
Prov funding (\$)*	3,432,932 (35,421,324)	3,456,253 (35,588,853)	2,423,598*** (812,278)	492,507 (1,473,570)	1,500,362 (6,577,959)	-1,007,855*** (225,114)
Mun funding (\$)*	491,391 (14,865,665)	495,814 (14,937,598)	459,655 (340,904)	29,034 (120,481)	42,326 (466,188)	-13,292 (16,063)
Gov share*	0.24	0.24	-0.23 (0.217)	0.50	0.44	0.06*** (0.018)
Fed share*	0.04	0.04	-0.21*** (0.004)	0.26	0.23	0.03*** (0.015)
Prov share*	0.16	0.16	-0.02 (0.217)	0.18	0.17	0.01 (0.013)
Mun share*	0.03	0.03	-0.00 (0.002)	0.03	0.03	0.00 (0.005)

Table 2.4A cont.: Summary statistics and difference in means for charities by program

	Mean (Std. Dev.) - percentage			Mean (Std. Dev.) - percentage			
	Program sample	Subsample A	Subsample B	Subsample C	Subsample D		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel C: Health							
	Health sample n=83,832	Non-Indigenous charities n=83,306	Indigenous charities n=526	Difference in means (A-B)	Indigenous charities off-reserve n=294	Indigenous charities on-reserve n=232	Difference in means (C-D)
Gvt funding (Y/N)	0.43	0.43	0.79	-0.36*** (0.022)	0.87	0.68	0.19*** (0.035)
Fed funding (Y/N)	0.16	0.16	0.60	-0.45*** (0.016)	0.69	0.50	0.19*** (0.042)
Prov funding (Y/N)	0.35	0.35	0.56	-0.21*** (0.021)	0.72	0.35	0.37*** (0.041)
Mun funding (Y/N)	0.12	0.12	0.28	-0.16*** (0.014)	0.41	0.12	0.29*** (0.038)
Gov funding (\$)*	13,872,839 (1.565e+08)	13,943,374 (1.570e+08)	2,701,741 (6,698,794)	11,241,633 (6,845,013)	3,740,681 (8,533,386)	1,385,153 (2,551,124)	2,355,528*** (579,763)
Fed funding (\$)*	200,334 (5,181,231)	197,529 (5,194,621)	644,581 (2,157,089)	-447,052** (226,620)	586,511 (2,700,361)	718,169 (1,147,279)	-131,657 (189,521)
Prov funding (\$)*	13,483,886 (1.559e+08)	13,556,418 (1.564e+08)	1,996,613 (6,115,329)	11,559,804* (6,817,348)	3,062,331 (7,726,896)	646,091 (2,446,795)	2,416,239*** (527,072)
Mun funding (\$)*	188,142 (6,082,705)	188,949 (6,101,834)	60,325 (262,545)	128,623 (266,055)	91,725 (322,047)	20,534 (149,207)	71,191*** (22,867)
Gov share*	0.28	0.28	0.68	-0.40*** (0.062)	0.73	0.61	0.12*** (0.034)
Fed share*	0.02	0.02	0.28	-0.26*** (0.005)	0.22	0.36	-0.13*** (0.034)
Prov share*	0.23	0.23	0.36	-0.13** (0.062)	0.46	0.22	0.24*** (0.034)
Mun share*	0.02	0.02	0.03	-0.01*** (0.004)	0.04	0.02	0.02** (0.010)
Panel D: Religion							
	Religion sample n=487,113	Non-Indigenous charities n=483,987	Indigenous charities n=3,126	Difference in means (A-B)	Indigenous charities off-reserve n=967	Indigenous charities on-reserve n=2,159	Difference in means (C-D)
Gvt funding (Y/N)	0.15	0.15	0.14	0.01 (0.006)	0.21	0.11	0.10*** (0.013)
Fed funding (Y/N)	0.10	0.10	0.07	0.02*** (0.005)	0.11	0.06	0.06*** (0.010)
Prov funding (Y/N)	0.05	0.05	0.05	0.00 (0.004)	0.09	0.03	0.06*** (0.008)
Mun funding (Y/N)	0.02	0.02	0.03	-0.01*** (0.002)	0.04	0.02	0.02*** (0.007)
Gov funding (\$)*	24,022 (957,556)	24,043 (960,515)	20,711 (195,294)	3,332 (17,181)	62,291 (346,453)	2,088 (19,467)	60,203*** (7,480)
Fed funding (\$)*	4,079 (200,061)	4,077 (200,661)	4,406 (52,812)	-328 (3,589)	13,988 (94,276)	114 (830)	13,874*** (2,028)
Prov funding (\$)*	15,727 (803,299)	15,737 (805,803)	14,159 (146,686)	1,577 (14,413)	44,079 (260,434)	758 (14,711)	43,320*** (5,623)
Mun funding (\$)*	4,136 (214,791)	4,150 (215,478)	1,926 (19,030)	2,224 (3,854)	3,790 (28,510)	1,091 (12,581)	2,699*** (734)
Gov share*	0.01	0.01	0.03	-0.02*** (0.004)	0.06	0.01	0.05*** (0.005)
Fed share*	0.00	0.00	0.01	-0.00** (0.001)	0.01	0.00	0.01*** (0.002)
Prov share*	0.00	0.00	0.01	-0.01*** (0.001)	0.03	0.00	0.02*** (0.003)
Mun share*	0.00	0.00	0.01	-0.01*** (0.000)	0.01	0.01	0.01*** (0.002)

Table 2.4A cont.: Summary statistics and difference in means for charities by program

	Mean (Std. Dev.) - percentage				Mean (Std. Dev.) - percentage		
	Program sample	Subsample A	Subsample B		Subsample C	Subsample D	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Panel E: Welfare						
	Welfare sample n=261,239	Non-Indigenous charities n=258,183	Indigenous charities n=3,056	Difference in means (A-B)	Indigenous charities off-reserve n=2,313	Indigenous charities on-reserve n=743	Difference in means (C-D)
Gvt funding (Y/N)	0.47	0.47	0.74	-0.27*** (0.009)	0.78	0.63	0.14*** (0.018)
Fed funding (Y/N)	0.19	0.19	0.52	-0.33*** (0.007)	0.55	0.42	0.13*** (0.021)
Prov funding (Y/N)	0.37	0.37	0.62	-0.25*** (0.009)	0.65	0.50	0.15*** (0.020)
Mun funding (Y/N)	0.19	0.19	0.33	-0.14*** (0.007)	0.36	0.22	0.14*** (0.020)
Gov funding (\$)*	707,868 (6,673,283)	691,629 (6,678,259)	2,079,725 (6,085,024)	-1,388,095*** (121,397)	2,164,779 (6,045,370)	1,814,948 (6,203,505)	349,831 (256,564)
Fed funding (\$)*	63,471 (956,418)	57,672 (936,321)	553,390 (1,971,472)	-495,717*** (17,376)	505,609 (1,735,507)	702,137 (2,566,751)	-196,528** (83,072)
Prov funding (\$)*	592,897 (6,521,177)	583,516 (6,535,742)	1,385,423 (5,082,525)	-801,907*** (118,649)	1,491,857 (5,144,617)	1,054,090 (4,872,674)	437,766** (214,214)
Mun funding (\$)*	50,814 (589,928)	49,750 (589,836)	140,701 (590,836)	-90,951*** (10,732)	167,111 (646,030)	58,487 (357,627)	108,623.59*** (24,841)
Gov share*	0.79	0.79	0.58	0.21 (4.450)	0.60	0.50	0.10*** (0.017)
Fed share*	0.03	0.03	0.18	-0.15*** (0.014)	0.17	0.21	-0.04*** (0.012)
Prov share*	0.70	0.71	0.33	0.38 (4.450)	0.36	0.24	0.12*** (0.015)
Mun share*	0.04	0.04	0.06	-0.03*** (0.005)	0.07	0.05	0.03*** (0.008)
	Panel F: Other						
	Other sample n=16,143	Non-Indigenous charities n=16,037	Indigenous charities n=106	Difference in means (A-B)	Indigenous charities off-reserve n=82	Indigenous charities on-reserve n=24	Difference in means (C-D)
Gvt funding (Y/N)	0.11	0.10	0.35	-0.24*** (0.030)	0.44	0.04	0.40*** (0.105)
Fed funding (Y/N)	0.05	0.04	0.33	-0.29*** (0.020)	0.41	0.04	0.37*** (0.104)
Prov funding (Y/N)	0.06	0.06	0.08	-0.02 (0.023)	0.11	0.00	0.11* (0.064)
Mun funding (Y/N)	0.03	0.03	0.03	-0.00 (0.016)	0.02	0.04	-0.02 (0.039)
Gov funding (\$)*	29,588 (249,224)	28,882 (249,146)	136,380 (238,865)	-107,497*** (24,272)	175,297 (259,058)	3,412 (16,716)	171,885*** (53,090)
Fed funding (\$)*	11,146 (121,596)	10,335 (120,046)	133,727 (238,466)	-123,391*** (11,809)	172,291 (258,920)	1,966 (9,635)	170,324*** (53,041)
Prov funding (\$)*	15,084 (175,987)	15,171 (176,563)	1,893 (7,967)	13,278 (17,149)	2,447 (8,995)	0.00 (0.000)	2,447 (1,842)
Mun funding (\$)*	3,186 (80,712)	3,202 (80,976)	759 (5,466)	2,443 (7,865)	559 (4,931)	1,445 (7,080)	-886 (1,271)
Gov share*	0.04	0.04	0.13	-0.09*** (0.021)	0.16	0.03	0.13*** (0.046)
Fed share*	0.01	0.01	0.10	-0.09*** (0.008)	0.12	0.02	0.10*** (0.034)
Prov share*	0.02	0.02	0.02	-0.00 (0.011)	0.03	0.00	0.03 (0.030)
Mun share*	0.01	0.01	0.01	-0.00 (0.006)	0.00	0.01	-0.01 (0.010)

*These variables have not been used in the regressions. The standard deviation (in parenthesis) is not provided for dichotomous variables. The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.5A: OLS regression Non-Indigenous charities and Indigenous charities
Dependent variable: government/federal/provincial/municipal funding (\$)

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Government funding (\$)	Federal funding (\$)	Provincial funding (\$)	Municipal funding (\$)
Indigenous charity	253,915** (117,602)	442,359*** (62,873)	-118,196 (147,824)	-54,757*** (19,175)
Benefits to community	120,576*** (41,126)	62,024*** (23,373)	-37,536 (73,960)	157,230*** (26,658)
Education	103,752 (305,369)	194,314*** (36,114)	-336,037 (398,572)	340,707*** (90,579)
Health	3,609,063*** (940,157)	-312,461*** (72,464)	5,816,790*** (1,218,946)	-619,282*** (163,079)
Welfare	145,650** (70,552)	20,976** (9,067)	219,613** (95,640)	10,350 (8,995)
Other	739,693*** (150,537)	32,368*** (9,246)	951,697*** (201,539)	3,656 (14,063)
Registered charity	1,666,329*** (229,413)	30,135** (13,753)	2,439,212*** (326,876)	-18,691 (27,934)
Private foundation	872,034*** (199,325)	-30,248** (14,253)	1,387,021*** (266,634)	-90,561*** (31,335)
Size25K<100K	11,719 (12,649)	9,528*** (1,820)	-26,898 (26,734)	19,712*** (3,689)
Size100K<250K	-6,995 (30,191)	19,854*** (4,248)	-379,211** (164,211)	50,543*** (19,471)
Size250K<500K	12,246 (35,699)	24,473*** (4,298)	-383,580** (174,844)	50,729*** (18,603)
Size500K<1MIL	73,838 (49,084)	39,161*** (4,610)	-375,950* (193,623)	64,961*** (18,456)
Size1MIL<5MIL	499,779*** (75,791)	121,533*** (6,768)	-166,094 (225,280)	145,687*** (20,594)
Size5MIL<10MIL	10,476,440*** (332,615)	774,316*** (44,112)	8,172,852*** (445,194)	946,929*** (67,294)
Size>10MIL	314,090,660*** (25,450,513)	11,643,476*** (1,741,203)	282,940,387*** (24,122,929)	18,653,742*** (4,108,921)
Rural	-100,389 (78,452)	-6,612 (7,688)	-161,109 (111,359)	-1,504 (9,953)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,237,450	870,093	870,093	870,093

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.6A: OLS regression Indigenous charities off-reserve and on-reserve
Dependent variable: government/federal/provincial/municipal funding (\$)

	Indigenous sample (1)	Indigenous sample Schedule 6 (2)	Indigenous sample Schedule 6 (3)	Indigenous sample Schedule 6 (4)
	Government funding (\$)	Federal funding (\$)	Provincial funding (\$)	Municipal funding (\$)
Charity on-reserve	133,271 (301,957)	198,883* (116,413)	-145,070 (347,115)	16,018 (14,846)
Benefits to community	-41,368 (150,652)	141,226* (82,715)	-105,152 (167,130)	-9,789 (18,906)
Education	402,379* (230,667)	386,986*** (144,038)	226,677 (329,727)	-25,678 (20,637)
Health	621,587 (691,956)	-54,640 (211,862)	922,215 (717,696)	-25,325 (29,136)
Welfare	644,819** (250,952)	117,941 (94,236)	563,221** (259,947)	87,656*** (25,747)
Other	26,948 (243,010)	123,267 (118,048)	13,226 (252,048)	-22,357 (21,945)
Registered charity	658,691* (340,991)	210,214 (160,593)	666,777* (392,288)	46,831* (28,243)
Private foundation	189,291 (449,648)	131,331 (274,119)	-66,598 (490,586)	-28,834 (32,447)
Size25K<100K	-23,381 (57,430)	-20,488 (56,345)	-59,199 (78,440)	921 (6,787)
Size100K<250K	-88,665 (76,993)	89,140** (40,188)	-361,710*** (132,936)	-772 (10,658)
Size250K<500K	-36,731 (117,665)	127,263** (51,205)	-397,489** (157,771)	8,970 (12,636)
Size500K<1MIL	309,782*** (118,040)	290,274*** (60,714)	-214,198 (151,223)	16,295 (15,567)
Size1MIL<5MIL	1,431,394*** (121,563)	778,852*** (73,481)	342,031** (147,789)	115,866*** (20,100)
Size5MIL<10MIL	12,755,503*** (1,511,943)	3,859,641*** (577,324)	8,281,679*** (1,426,001)	290,275*** (96,331)
Size>10MIL	0 (.)	0 (.)	0 (.)	0 (.)
Rural	-17,842 (240,278)	211,168 (146,409)	-185,818 (252,403)	-37,914** (15,206)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	11,277	8,670	8,670	8,670

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.7A: Probit model with interaction term for rurality
Non-Indigenous charities and Indigenous charities
Dependent variable: government/federal/provincial/municipal funding

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Government funding (Y/N)	Federal funding (Y/N)	Provincial funding (Y/N)	Municipal funding (Y/N)
Indigenous charity	0.116*** (0.017)	0.189*** (0.012)	0.070*** (0.016)	0.011 (0.009)
Benefits to community	0.511*** (0.004)	0.201*** (0.003)	0.475*** (0.004)	0.294*** (0.003)
Education	0.407*** (0.004)	0.157*** (0.003)	0.421*** (0.004)	0.237*** (0.003)
Health	0.340*** (0.006)	0.066*** (0.005)	0.402*** (0.005)	0.169*** (0.004)
Welfare	0.432*** (0.004)	0.130*** (0.003)	0.457*** (0.004)	0.233*** (0.003)
Other	0.177*** (0.016)	0.051*** (0.015)	0.264*** (0.017)	0.117*** (0.012)
Registered charity	0.444*** (0.007)	0.234*** (0.006)	0.409*** (0.007)	0.144*** (0.004)
Private foundation	-0.225*** (0.013)	-0.132*** (0.011)	-0.167*** (0.014)	-0.144*** (0.009)
Size25K<100K	0.302*** (0.003)	0.174*** (0.003)	0.248*** (0.004)	0.097*** (0.002)
Size100K<250K	0.435*** (0.004)	0.254*** (0.004)	0.387*** (0.004)	0.148*** (0.003)
Size250K<500K	0.501*** (0.004)	0.289*** (0.004)	0.453*** (0.005)	0.169*** (0.003)
Size500K<1MIL	0.566*** (0.005)	0.318*** (0.004)	0.500*** (0.005)	0.178*** (0.003)
Size1MIL<5MIL	0.648*** (0.005)	0.340*** (0.004)	0.563*** (0.006)	0.188*** (0.003)
Size5MIL<10MIL	0.802*** (0.008)	0.385*** (0.006)	0.698*** (0.008)	0.194*** (0.005)
Size>10MIL	1.105*** (0.031)	0.516*** (0.013)	0.940*** (0.024)	0.213*** (0.010)
Rural	0.121*** (0.003)	0.038*** (0.003)	0.063*** (0.003)	0.032*** (0.002)
Ind*Rural	-0.129*** (0.026)	-0.098*** (0.020)	-0.123*** (0.028)	-0.070*** (0.016)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,237,450	870,093	870,093	870,093
Predicted probability	0.283	0.162	0.188	0.0923

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Table 2.8A: Probit model with interaction term for rurality
Indigenous charities off-reserve and on-reserve
Dependent variable: government/federal/provincial/municipal funding

	Indigenous sample (1) Government funding (Y/N)	Indigenous sample Schedule 6 (2) Federal funding (Y/N)	Indigenous sample Schedule 6 (3) Provincial funding (Y/N)	Indigenous sample Schedule 6 (4) Municipal funding (Y/N)
Charity on-reserve	-0.060 (0.057)	-0.001 (0.068)	-0.152** (0.070)	-0.158*** (0.049)
Benefits to community	0.530*** (0.055)	0.446*** (0.057)	0.615*** (0.067)	0.218*** (0.041)
Education	0.469*** (0.054)	0.485*** (0.057)	0.568*** (0.070)	0.213*** (0.042)
Health	0.600*** (0.099)	0.444*** (0.080)	0.564*** (0.094)	0.245*** (0.059)
Welfare	0.480*** (0.052)	0.329*** (0.057)	0.606*** (0.065)	0.262*** (0.039)
Other	0.189 (0.143)	0.395*** (0.123)	0.047 (0.262)	-0.057 (0.130)
Registered charity	0.520*** (0.118)	0.512*** (0.163)	0.488*** (0.189)	0.220*** (0.076)
Private foundation	0.086 (0.170)	0.327 (0.226)	0.085 (0.240)	-0.060 (0.142)
Size25K<100K	0.493*** (0.046)	0.491*** (0.074)	0.476*** (0.067)	0.217*** (0.051)
Size100K<250K	0.684*** (0.049)	0.721*** (0.074)	0.644*** (0.066)	0.341*** (0.047)
Size250K<500K	0.875*** (0.052)	0.824*** (0.073)	0.851*** (0.068)	0.370*** (0.049)
Size500K<1MIL	1.092*** (0.054)	0.974*** (0.073)	1.000*** (0.069)	0.421*** (0.047)
Size1MIL<5MIL	1.159*** (0.053)	1.155*** (0.071)	1.038*** (0.066)	0.424*** (0.045)
Size5MIL<10MIL	1.181*** (0.076)	1.147*** (0.087)	1.108*** (0.084)	0.359*** (0.058)
Size>10MIL	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Rural	0.145*** (0.055)	0.078 (0.056)	0.015 (0.058)	-0.113*** (0.040)
On-reserve*Rural	-0.091 (0.082)	-0.119 (0.092)	-0.019 (0.097)	0.202*** (0.067)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	11,277	8,670	8,670	8,670
Predicted probability	0.578	0.467	0.476	0.199

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”. The coefficients represent the marginal effects (dy/dx). Robust standard errors in parentheses are clustered at the charity level. Significance: * p<.10, ** p<.05, *** p<.01

Chapter three: The causal relationship between government funding and donations to Indigenous charities

3.1 Introduction

In 2017, private donations reached a record value of 18.1 billion dollars.⁶⁰ Fifty-six percent of Canadians donated money to registered charities during this year and over the previous five years, and the average participation was 64% (CAF, 2018). More modest amounts of these donations go to charities that specifically serve Indigenous populations. Only 61% of these get private donations as compared to 78% of the non-Indigenous charities. In dollar amounts, per year and per charity, these percentages translate into \$58,000 versus \$190,000 meaning that on average each Indigenous charity receives \$132,000 less in private donations per year than a non-Indigenous one. This situation was acknowledged over a decade ago. According to a report on philanthropy and Indigenous peoples in Canada “*Canadians donate \$10 billion annually to charitable organizations. Little goes to Aboriginal communities.*” (The Circle and United Way Winnipeg, 2010, p.17).

Private donations are an important source of revenue for all registered charities. These are given by individuals or businesses, who receive a tax receipt which can be used as a credit against their income tax liability. Government funds are also critical for charities. From the previous chapter, we learned that Indigenous charities are more likely to receive public money. This chapter’s interest consists largely in studying the causal relationship between public funding and private donations. More specifically it aims at understanding how government funding affects private donations. Do private donations fall (crowding out) when government funding increases (e.g., Andreoni, 1993; Bergstrom, Blume and Varian, 1986; Duncan, 1999); or, do they increase with government funding (crowding in), with government funding potentially signaling something about the ‘quality’ of the services provided (e.g., Seaman 1981)? Two further revenue components might be affected by government support: fundraising and gifts from other (registered) charities. Receiving public funds can potentially decrease the interest in engaging in fundraising activities or even boost fundraising initiative, as more money is available. Charities that get income from the government can signal a good reputation to other charities, encouraging gifts from them to support their activities. Conversely, charities (like United Way, for instance) might decrease their contributions to other charities that are already government funded. Understanding better the

⁶⁰ More details on donations are provided in appendix 3.A. Figure 3.1A reports the total amount of private donations to registered charities by year and Figure 3.2A private donations by provinces for the year 2017.

interplay of government funding on these variables might help explain why government transfers to Indigenous peoples through the charitable sector is so different, as observed in chapter two.

The theoretical literature hints at a crowding out effect of private donations in response to government funding, and empirical studies confirm this effect (e.g., Andreoni, 2006; Andreoni and Payne, 2013). It is also found that receiving government grants leads to a reduction in fundraising efforts (Andreoni and Payne, 2003). The question of the government crowding out of private donations as well as fundraising and gifts from other charities is an important public economics issue; no one has looked at it in the Indigenous charities' context. Assessing and measuring this effect, will provide additional information to better understand which government programs and policies could be implemented, when it comes to funding initiatives aimed at providing public and charitable goods and services for the Indigenous populations.

This chapter contributes to the literature in three distinct ways: it adds to the crowding in-crowding out literature by investigating this phenomenon in an important and hitherto neglected group of charities; it contributes to our understanding of the economics of Indigenous peoples by highlighting and identifying gaps in our knowledge of the impact of charitable services on the Indigenous population, and finally it implements novel instrumental variables for causal interpretation. Furthermore, this is only the second study in Canada looking at crowding in-crowding out of government grants coming from various levels of government. I use the T3010, a large dataset with financial information for over 95,000 registered charities and covering a 15- year period from 2003 to 2017. The scarce empirical evidence from prior studies does not go beyond 2008 and looking through a magnifying glass at Indigenous charities is something that no study has done. Furthermore, the difficulty in identifying a proper crowding in or crowding out effect arises mainly from a reverse causality problem that can bias OLS estimates. I address this issue using novel instruments. First, I exploit variations in the amount of government funding received over the years and second, I make use of variations in the number of years that a charity was a recipient of government funding.

The main results from the instrumental variable approach indicate a crowding out effect of public funding on private donations for Indigenous charities: a one dollar increase in government funding crowds out seven cents of private contributions. I also find strong evidence that the level of government from which the funding arises, matters: funding from the federal government decreases private donations by 15 cents, from the provincial government by six cents and from the municipal one by 46 cents. Government funding also negatively affects fundraising revenues and

gifts from other charities. For every dollar in public support fundraising revenues decreases by one to seven cents and gifts from other charities by three to 12 cents. These reductions imply an economically substantial effect on charities' revenue. Little evidence is found that government grants affect differently Indigenous charities on reserve as opposed to off reserve. The area and programs in which charities operate matter though. For instance, education charities on reserve experience a crowding in effect of federal funding for all three dependent variables and its magnitude ranges between two and 11 cents.

The chapter unfolds as follows. The next section outlines the literature on crowding in and crowding out. In the following two sections, the data, the empirical model and the identification strategy are presented. Section 3.5 outline the descriptive statistics and section 3.6 sums up the results. The conclusion of section 3.7 considers the implications for policy.

3.2 Literature review

Individuals may give to charity because of pure altruism, when they get utility solely from the level of public goods supplied. They may also be driven to give by impure altruism, as they gain utility from satisfaction or a “warm glow” for doing good. Other ‘benefits’ that play a role are prestige, respect, and social acclaim; there may even be social pressure to give (Andreoni, 1990). Donors may derive positive marginal utility from donating to institutions which acknowledge them publicly, or where they can see firsthand the services that their contributions provide (Ferreira Neto, 2018). This chapter, however, is not about giving, but about receiving and although the individual behavior is not accounted for, donors still play a very important role for charitable organizations, as does the government.

A body of work analyzes the interaction between public and private funding of nonprofit organizations or charities. Much of it looks at the direct impact of the first on the second, but there are also some studies looking at how government funding impacts fundraising. Public funding can induce private support and fundraising (crowding in) or it is a deterrent for them (crowding out). Brooks (2003) explains that the crowding out of private donations is based on the perception that a charitable organization needs less help from donors if they receive already public funds. Crowding in can occur when or because donors become increasingly aware that charitable organizations get government grants, and this is a signal for the quality of a charity's program. A third way of considering this, again according to Brooks (2000), is that government grants can encourage private donations (complementing factor) at low levels of government funding, whereas

it can discourage private giving at high levels (substituting factor). An excellent reputation of the charity should lead to increased funding from private donors. But this is not always the case. According to Horne, Johnson and Van Slyke (2005) private donors are rarely aware of the amount of government funds received by the nonprofit organizations they support. Once donors become more and more aware of these amounts, their willingness to give declines. These are the results of a survey experiment targeted specifically at studying this information effect and conducted by Kim and Ryzin (2014).

The crowding in literature is quite wide-ranging and varies according to the type of charities and their programs. McCleary and Barro (2008) look at the historical interplay between government revenues and private donations of US voluntary organizations operating in international assistance programs. Using 65 years of data since WWII, they find that with 31 cents crowding in, the federal funding acts as a magnet for private donations. Ferreira Neto (2018) utilizes the Public Library Survey from 2000 to 2013 to understand how government and private revenues are related. First, he observes that in the US, over 90% of public library revenues are from public sources and 8% from donations. Then he establishes a positive relationship between the two variables, and this points to a crowding in effect. Considering the various levels of government, he finds that local funding increases donations by four to six cents, state funding by 20 to 23 cents and federal funding by 75 cents to one dollar and 33 cents. Smith (2007) reports a crowding in effect for the arts organizations, where the effect ranges from 14 cents to one dollar and 15 cents.

Heutel (2014) studies the relationship between public and private funding from both directions. He acknowledges that reverse causality and simultaneity exist. With an instrumental variable approach that addresses this endogeneity, he determines that private donations increase by 15 to 30 cents with every dollar of government support and a crowding in effect is confirmed. When looking in the opposite direction, he observes that the government contributes 30% to 190% less in response to the level of private contributions. Dokko (2009) looks at the role of government funding cuts on private donations and fundraising for non-profit arts organizations. In the United States, grants decreased by 40% from 1995 to 1996 following the unexpected Republican victory of 1994. Using this identifying exogenous variation and data from the Internal Revenue Service (IRS) 990 Core files and the National Endowment for the Arts (NEA) grant award, he finds that a one dollar decrease in government support increases fundraising effort by 25 cents to 38 cents and private donations by 51 cents to 58 cents.

The other stream of the literature observes a crowding out effect. This is the case for Andreoni and Payne (2011a) who report this outcome in a working paper analyzing over 6,500 between 1992 and 2006, using the Canadian T3010 dataset. To address endogeneity issues, they exploit information on party affiliation and tenure of members of parliament as instruments. For every dollar of government support, private donations decrease by 23 cents, fundraising revenue by 54 cents and gifts from other charities by 36 cents. In 2013, the same authors release an updated version of the working paper using 13,000 charities and covering the period from 1994 to 2008, where they confirm the crowding out effect (Andreoni and Payne, 2013).

Governments should be concerned not only about how they affect private donations but also how charities respond behaviorally to their funding. Andreoni and Payne (2003) consider 767 organizations in arts and social services in the United States to study how grants influence fundraising efforts. As instruments they use total federal and state transfers to nonprofit organizations at the state level which represent the size of the pie that every organization is contending for, then political representation in appropriations committees and transfers to nonprofit organizations in other disciplines. The weakness of these instruments prevents them from estimating a proper causal crowding out effect, so they establish a negative relationship between public grants and fundraising revenue. To tackle the question if crowding out is entirely due to fundraising, Andreoni and Payne (2011b) use a panel of over 8,000 US charities. By instrumenting with tenure of congressional representatives who can bring grant money to the districts where charities are located, they find that with increased government grants, less money and effort is invested in fundraising, which in turn leads to decreases in private donations.

An important aspect of this work is the ability to identify causality between donations or fundraising and government revenue. Quantitative evidence shows that both crowding in and crowding out can be found with a variety of instrumenting tools. Payne (1998) instruments US government grants with state-level funding of welfare transfers to individuals to analyze the crowding out of private donations for 430 non-profit firms providing human services. To measure the effect of federal research funding on private donations at research universities Payne (2001) uses publications and citations of each university and the ratio of research expenditures by discipline to total research expenditure, in combination with lags of these variables to predict federal grants. To address endogeneity of grants on highway aid programs, Knight (2002) employs political power of state congressional delegations. Gordon (2004) instruments with the difference between expected and reported poverty rates when analyzing how federal grants affect educational

spending. Hungerman (2005) instruments with the share of noncitizens living in a community to understand better government spending and church activities. These are a few examples of papers identifying causality.

Not many studies focus on sources of government funding. Hughes and Luksetich (1999) are the pioneers in this. They use federal, state and local funding to study the relationship between these sources and private donations for art and history museums. With a system of equations, they estimate that state government funding crowds out local funding by 15 cents and private donations by 46 cents for art museums. History museums experience on the contrary a 48 cents crowding in effect in private donations for each dollar of federal funding received. Grasse, Searing and Neely (2021) explore the role of funding by different levels of government to charities in Canada. They use the T3010 dataset and generalized method of moments (GMM) estimations and find no effect of total government revenue nor of the three levels of government funding on donations when considering all charities. They find both crowding in and crowding out effects when disaggregating the charities by subsectors.

Despite extensive studying of the charitable sector, some issues remain unexplored. Very little is known about the effect of different levels of government funding, about the impact of public support on fundraising revenue and gifts from other charities and nothing about Indigenous charities.

3.3 Data

The annual T3010 Registered Charity Information Return from 2003 to 2017 constitutes the main source of data. This administrative dataset from the CRA provides rich financial information on registered charitable organizations. Charities that want to issue tax receipts to donors or want to receive grants from other registered charities, must comply each year with the tax filing. In chapter two I classified all the organizations from these returns into two groups: Indigenous charities and non-Indigenous charities. Charities are defined as Indigenous if at least one of three conditions applies: 1) they have an Indigenous reference in their legal name; 2) their primary concern is the needs of Indigenous peoples, determined by activity code A9 - *Services for Aboriginal Peoples*; 3) they are located on a First Nation reserve or in an Inuit community.⁶¹ As these conditions are not mutually exclusive, some charities may have more than one of the listed conditions.

⁶¹ These are census subdivisions (CSD) identified by the federal department Aboriginal Affairs and Northern Development (AANDC) and include among others: Indian reserves (IRI), Indian settlements (S-É), Indian government districts (IGD) and Terres réservées aux Cris (TC).

In this study, besides government revenue (line 4570) with a further breakdown in federal (line 4540), provincial/territorial (line 4550) and municipal/regional (line 4560) revenue, the focus is on three supplementary revenue sources: private donations (line 4500), fundraising (line 4630) and transfers/gifts from other charities (line 4510). Government funding is revenue received in the form of grants and contributions, or earned for goods and services delivered either directly to the different levels of government or on their behalf. Private donations are monetary gifts for which the charity issues an official donation receipt. A donor can be an individual as well as a business entity. Not included in private donations are anonymous gifts from donors that cannot be identified. Fundraising revenue can be collected through different methods such as advertisements, print, radio or TV commercials; draws and lotteries; fundraising dinners, galas and concerts; solicitations either by telephone, TV or door-to-door. A charity can carry on fundraising activities on its own or it can hire and pay external fundraisers. Donation receipts cannot be issued for amounts reported under this revenue type. If revenue is collected through fundraising with a receipt, that amount must be reported as private donations.⁶² Transfers from other charities can be both, in monetary and property value, but they must come from another Canadian registered charities and do not have to be necessarily tied to the same area of operations. Donation receipts cannot be issued to any other charity.

Although the emphasis of this chapter is tax-receipted revenue from gifts (private donations in brief), I consider also non-tax-receipted revenue from fundraising and the total amount received from other charities as dependent variables. Every dollar amount variable is adjusted for inflation using the consumer price Index and is expressed in 2017 dollars.

Charities are required to report government revenues, but only those obliged to fill out Schedule 6 in the financial section need to specify between federal, provincial and municipal funding. This applies specifically if: “*a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period*” (T3010 from, p. 3).

As discussed in chapter two, some outliers have already been dropped. Other considerations in this chapter are related to negative values. A very small percentage of charities (0.02%) report a negative value for the total revenues, which at first sight appears to be bizarre. However, the CRA

⁶² More information on fundraising revenue and fundraising methods can be found in Section C: Programs and general information of the T3010 at <https://www.canada.ca/content/dam/cra-arc/formspubs/pbg/t3010/t3010-fill-19e.pdf>.

requires to report a negative amount for the variable *net proceeds from disposition of assets* in the revenue section of the statement of operations, which can lead to a final negative amount of total revenues. Furthermore, 166 Non-Indigenous charities and six Indigenous charities report negative government revenues. Andreoni and Payne (2011a) converted a small number of negative values into positive ones, after having consulted with the T3010 data provider. My approach was different. I contacted some charities that reported negative values in the government contributions' section. One charity justified a negative amount of federal government as funds that were not spent on their federally funded project in Ethiopia and were hence returned to Ottawa. Similarly, a second charity explained that provincial grant funding had to be returned to the Province of Alberta, because not all funds granted were required to achieve the objectives of a particular project. A third charity illustrated a gap between the timing of the request for reimbursement and the actual reimbursement from the government as the reason for reporting a negative value. Although these clarifications do not come directly from the Indigenous charities sample, they could apply analogously to them when reporting negative government transfers. In a nutshell, a charity that does not use a grant and returns it, can report a negative amount and is not dropped from the sample.

The same explanation cannot be applied to negative values for private donations, fundraising revenues⁶³ or for gifts from other charities; these observations are dropped. Thirty-nine observations from 37 different charities have negative private donations, 349 observations from 301 charities report negative fundraising and 46 observations from 43 charities have negative gifts from other charities. It is rarely the case that the same charity reports negative values repeatedly over the years or that it reports two negative values (e.g., private donations and fundraising) in the same fiscal year. Lastly, in order to have a stronger balanced dataset, I exclude charities with three or fewer years of data (20,633 observations). The full dataset has over 1.2 million observations, coming from 95,865 different charities.⁶⁴

⁶³ Revenue from fundraising (line 4630) could be negative if the costs of fundraising is larger than the fundraising revenue. This can be excluded, as charities need to indicate exactly in the T3010 their expenditures on fundraising (line 5020), if they paid external fundraisers (line 2700), the gross revenue collected by fundraisers on behalf of charity (line 5450) and the amounts paid to or retained by the fundraisers (line 5460).

⁶⁴ The table here below summarizes the number of observations (n) and the number of charities (N) of the various samples.

	Non-Indigenous charities	Indigenous charities	Indigenous charities off-reserve	Indigenous charities on-reserve
Observations full sample: n=1,216,383	n=1,205,386	n=10,997	n=6,206	n=4,791
Number of charities: N=96,751	N=95,865	N=886	N=492	N=394
Observations sample Schedule 6: n=856,626	n=848,157	n=8,469	n=5,309	n=3,160
Number of charities: N=87,852	N=87,024	N=828	N=465	N=363

Data on the median total income at the provincial level comes from Statistics Canada.⁶⁵ For a robustness check I include data on tax benefits for giving philanthropically from CRA and www.TaxTips.ca. Specifically, I employ the provincial marginal tax credit rates for charitable donations on the first dollar donated. These correspond to the lowest personal tax rate, except in Quebec.⁶⁶

3.4 Empirical model and identification strategy

The analysis considers Indigenous charities versus non-Indigenous charities in equation (1) and Indigenous charities on reserve versus those off reserve in equation (2). In order to explore how government funding affects private donations, fundraising and gifts from other charities, the baseline equations are ordinary least square (OLS) regressions.

$$Y_{it} = \alpha + \beta_1 GovtFund_{it} + \beta_2 Ind_Status_{it} + \beta_3 GovtFund_{it} * Ind_Status_{it} + X'_{it}\gamma + I_{pt} + \delta_p + \theta_t + \varepsilon_{it} \quad (1)$$

$$Y_{it} = \kappa + \lambda_1 GovtFund_{it} + \lambda_2 On_Reserve_{it} + \lambda_3 GovtFund_{it} * On_Reserve_{it} + X'_{it}\chi + oI_{pt} + \tau_p + \pi_t + \nu_{it} \quad (2)$$

The subscript i stands for the charity, the unit of analysis, and t is the year in which the charity files the T3010 information return. Y_{it} is the dependent variable and represents either private donations, fundraising revenue or gifts from other charities, expressed in dollar amounts and including zero values. $GovtFund_{it}$ is also a monetary variable for total government funding, which is replaced by federal funding, provincial funding and by municipal funding in the Schedule 6 sample. Ind_Status_{it} in equation (1) is a binary variable that takes the value 1 if the charity is Indigenous. Similarly, $On_reserve_{it}$ in equation (2) is a binary variable that takes the value 1, but if the Indigenous charity is located on reserve. X'_{it} is a vector of charities characteristics embodying the designation code of the charity (public foundation, private foundation or registered charity); the program of the charity (benefits to community, education, health, religion, welfare, other); size of the charities in terms of their total revenues (below \$25K, between \$25 and \$100K, between \$100k

⁶⁵ Table 11-10-0047-01 Summary characteristics of Canadian tax filers (preliminary T1 Family File). Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110004701>.

⁶⁶ Marginal tax credit rates can be retrieved at <https://www.taxtips.ca/filing/donations/tax-credit-rates-2016.htm> and <https://www.canada.ca/en/revenue-agency/services/forms-publications/tax-packages-years.html>.

and \$250K, between \$250K and \$500K, between \$500K and \$1 million, between \$1 million and \$5 million, between \$5 million and \$10 million, above \$10 million); urbanicity (rural – urban). I_{pt} is the median per capita total income at the provincial level. In the two equations, time-invariant factors are captured by provincial fixed effects δ_p and τ_p ; whereas year fixed effects θ_t and π_t account for general time trends. ε_{it} and v_{it} are the error components. Robust standard errors are clustered at the postal code level.

In equation (1), the coefficient β_1 represents the change in the dependent variables associated with a one dollar increase in government funding for non-Indigenous charities. The sum of the coefficients β_1 and β_3 represents this effect for Indigenous charities and β_3 , considered as the main coefficient of interest, represents the difference between Indigenous and non-Indigenous charities. In equation (2), the same concept applies to the coefficients λ_1 and λ_3 for charities off and on reserve. In both equations, a positive coefficient or sum embodies a crowding in effect and a negative one points to a crowding out. A value of -1 implies a one dollar decrease in one of the three dependent variables, say private donations, for every dollar increase in government funding or in other words a one-to-one crowding out. A value between -1 and 0 is a partial crowding out. A value larger than zero is a partial crowding in and a value of 1 represents a complete crowding in effect. β_3 and λ_3 establish a stronger crowding in or a stronger crowding out effect in comparison to their counterparts or it can net out any effect.

3.4.1 Endogeneity issues

OLS regressions reveal correlations between the dependent and the independent variable. To estimate the crowding in or crowding out effect, endogeneity issues need to be addressed. Three different sources of endogeneity can bias the OLS estimates: reverse causality, measurement error and omitted variable bias. For the first matter, it is reasonable to think that government funding affects private donations but also that private donations affect government funding. A charity could, for instance, reduce its effort to apply for government grants if it receives a large private donation or conversely apply for more government grants if funding from individual donations decreases. The same can be true for fundraising efforts and receiving gifts from other charities. On account of this interdependence relationship, simultaneity bias and reverse causality exist. The second matter, measurement error, applies to the accuracy of the data. Over the years the CRA has tried to improve the quality of the data, but some reporting mistakes may persist. The accuracy of the data, however, is not likely to be the main issue partly because of CRA efforts and because there is no advantage

for charities to over-report or even under-report revenues from the government or from donations, fundraising or other charities. The third concern entails omitted variable bias. Although I include in the model all variables that function as relevant independent variables, I might still miss out some factors that could influence the dependent variable and give biased and inconsistent estimates.

The potential simultaneous relationship between the dependent variables and the independent variable of interest or reverse causality is the most worrying matter.⁶⁷ To address endogeneity dilemmas, an instrumental variable (IV) approach is commonly used. The identification strategy relies in instrumenting the endogenous regressor with an exogenous variable Z . This variable must be correlated with the endogenous explanatory variable ($\text{corr}(Z, \text{GovtFund}) \neq 0$) but not with the error term ($\text{corr}(Z, e) = 0$), so that consistent estimates for our parameters of interest can be achieved.

3.4.2 Instrumental variables

To estimate correctly a causal effect, I employ two different and novel instruments: a) the cumulative amount of government funding a charity obtains over the years; and b) the number of years during which a charity receives public funding. The instruments are used individually in the regressions.

The first instrument is the cumulative amount of public support a charity receives over the years. Exploiting the variation in accumulated wealth has been used by Sav (2010) when studying the causal effect of private donations on state funding in higher education. The author instruments private donations from fundraising with accumulated wealth in the form of institutional endowment, remarking that for college and universities private fundraising is more profitable if the past donor base is large. My instrument sums government funding. For the year 2003, there is no information on public funding for the previous year and consequently, this year is excluded from the IV regressions. For the year 2004 the instrument is the lag of government funding, for the year 2005 the instrument is the sum of the government funding collected in the years 2003 and 2004, in 2006 and the other years till 2017 the instrument is the cumulative amount of funding received in all previous years, if any obtained. When different levels of government funding are analyzed, the

⁶⁷ It is not entirely clear if private donations affect government funding or if government funding affects private donations. To see the direction of the endogeneity, I tested also for Granger causality using some subsamples of data having a longitudinal perspective as proposed first by Dumitrescu and Hurlin (2012) and then by Lopez and Weber (2017) for panel data. The test uses the first variable x and its lags to see the impact on a second variable y and the lags of this second variable and assesses statistically if x happens before/causes y . In two different settings, I test the null hypothesis if government funding does not Granger-cause private donations and also if private donations do not Granger-cause government funding. A p-value below 0.05 leads to reject the null hypothesis and confirms that the endogeneity goes two ways. This applied to the following samples and subsamples: all charities, Indigenous charities and Indigenous charities off reserve.

instrument changes accordingly. For instance, if the independent variable of interest is related to provincial funding, the instrument is calculated using the sum of provincial government funding. Similarly, if the analysis considers the federal or municipal level of government funding, the cumulative amount of funding is calculated as the sum of federal or municipal funding correspondingly. These instruments approximate the ability to get public support: the larger the funding collected in the past, the higher the probability of receiving public funding again. Moreover, once expertise is gained in grant writing, one expects that the likelihood of obtaining additional grants increases. This instrument solves the problem of simultaneity, as it is exogenous to the error term in period t and current donations can never have an impact on past government funding decisions. As cumulative funding over the years is the best predictor of government funding in monetary terms, this is the preferred instrument, and is used in the program breakdown regressions and in the robustness checks.

The second instrument, the number of years during which the charity gets government funding, is constructed analogously to the second instrument. Instead of the cumulative amount of money, it catches if the charity received (or not) government funding in the previous years.⁶⁸ For the different levels of government analysis, the number of years of federal, provincial and municipal funding is considered again.⁶⁹

The validity of an instrument is based on two main criteria. First, it must trigger variation in the endogenous regressors and second, it must satisfy the exclusion restriction. Only the first condition can be tested within the data, more specifically through the strength of the F-statistic

⁶⁸ Utilizing the variation in the number of years has been employed before in other types of literature. Nunn and Qian (2014) use for instance the proportion of years that a country receives US food aid as an instrument when analyzing the effect of US food aid on conflict for a panel of 125 non-OECD countries. Similarly, Dreher and Langlotz (2020) use the share of years that one country receives aid from other countries to study the effect of foreign aid on economic growth. Both instruments are a proxy for the probability of receiving some kind of aid.

⁶⁹ I endeavored to employ a third instrument, the share of government funded charities in the postal code location of the charity. This instrument is constructed as the ratio of government funded organization to all organizations, funded and not funded, at the postal code level. Similar to the other two instruments, when different levels of government funding are analyzed, the ratio changes accordingly. The idea to use this instrument was inspired by Fafchamps and Owens (2009), who use the social connectivity of the leader of an organization as an instrument to study the determinants of funding to nongovernmental organizations in Uganda. Within my dataset, there are no variables that directly observe similar traits of the leaders, but somehow, the instrument needs to predict the ability to get public support. At the postal code level, there can be some positive network effects associated with being in a community with charities that receive public funding. The leaders of these charities might get together and share information on how to secure government funds. They might share their experience in grant applications or their acquaintances or personal contacts with local politicians. They might even check out each other's annual reports. Employees who work at one charity might be volunteering in another charity bringing their knowledge in grant writing or fundraising, and according to Deri Armstrong et al. (2016) proximity to charities matters for the decision to volunteer. Government funding is determined in a political framework and some ridings can be more generous in their giving than others. This should be picked up by the instrument within a postal code area. Overall, the suitability of this instrument is determined by its endogeneity to grant funding, the share is randomly assigned and it satisfies the exclusion restriction as donors might have no knowledge of how many charities are public funded in the neighborhood of the charity to which they donate. The drawback of this instrument is that it provides a sufficient source of exogenous variation only if the instrument includes the charity itself at the postal code level and this leads to the reflection problem of Manski (1993).

I tried a further instrument, namely provincial political representation, already employed in the crowding in crowding out literature (e.g., Andreoni and Payne, 2011a) and suggested by Payne (2009). Government funding is the outcome of a political decision-making process and hence it was worth exploring this avenue. I considered political parties in power prior to time t . Four main political parties were in power interchangeably in the provinces from 2003 to 2017: the Liberal Party, the New Democrat Party (NDP), the Conservative Party and others (Coalition for the Northwest Territories and Nunavut, Parti Québécois and Saskatchewan Party). Regardless of which political power is leading, charities will get public funding either in form of grants from liberals and democrats, or as a financial contributions to provide public services that conservatives did not want to provide directly. This instrument was valuable for the whole T3010 dataset, but inappropriate and weak when considering Indigenous charities.

which will be discussed towards the end of this section. The second condition demands that there is no direct relationship between the instrument and the outcome variables. This latter is usually based on economic reasoning. In the case at hand, the exclusion restriction requires that the cumulative amount of funding a charity received in the past and that the number of years during which the charity was funded, do not directly affect current donations.

Two different perspectives emerge: the charity's perspective and the donors' perspective. For the former, a charity is obliged to disburse all money received and is not allowed to accumulate funds under normal circumstances. Only 1.2% of charities reported having permission to accumulate funds during the fiscal years. This pertains for instance to a charity which has a major expenditure in the coming years such as for buying a property or an expensive piece of equipment. The disbursement constraint suggests that the cumulative amount of government funding received in the past, would not affect current efforts to obtain donations or engage in fundraising, rather it points to the importance of the current level of government funding in this regard.

From the donors' perspective, when single donors decide to donate to a particular charity, they are seldom aware of how much government support charities get (Horne, Johnson and Van Slyke, 2005). In a similar manner, donors may therefore be unaware of the past support by various government levels. If so, then the instruments have no effect on donations directly and do not cause a change in them. This reassures that the exclusion restriction is satisfied. A reduced form regression can further help to validate this, if it assesses that the instrument has no impact on the dependent variables.

There are of course some scenarios that could put the instruments in doubt. For instance, a donor having perfect information on the amounts of funding a charity received in the past from all the levels of government, could have a direct effect on his or her decision to donate. There are two different potential outcomes in such a case: a donor decides to refrain from giving because the charity gets already funding from government sources, or he or she decides to donate as government funding signals a 'good' reputation of the charity. The randomness of the decision to either donate or not is purely exogenous.

In equation (1) there are two sources of endogeneity. The first comes from the endogenous variables *GovtFund* and the second one from the interaction term *GovtFund * Ind_Status*. The variable *Ind_Status* is assumed to be exogenous. In chapter two I partially ruled out that there is a selection problem in serving Indigenous peoples for better funding opportunities. Forty-seven charities switched to serve the Indigenous populations, but likewise 40 stopped serving them and

pursued other objectives. But more importantly, when a charity starts its mission, it must first identify a need to fulfill in society and the need itself is exogenous. Regardless of the fact that the charity has an Indigenous name or serves Indigenous peoples, its broad mission is an exogenous decision in reaction to those needs.

To address the endogeneity problems, a two stage least square model (2SLS) introduces the instrumental variables in the estimations. According to Baum, Schaffer and Stillman (2007), a necessary condition for identification is that the number of instruments must at least coincide with the number of endogenous regressors, so that the equation is exactly identified. Hence, for my model including one endogenous regressor and the interaction term between the endogenous regressors and an exogenous covariate, I use the instrument and the instrument interacted with the exogenous part of the endogenous interaction term, as per equations (3) and (4):

$$Z'_{it}\rho = Z_{it} + Z_{it} * Ind_Status_{it} \quad (3)$$

$$Z'_{it}\psi = Z_{it} + Z_{it} * On_Reserve_{it} \quad (4)$$

The same approach was implemented by Aghion, Howitt and Mayer-Foulkes (2005) on a different topic. They analyzed the effect of financial development on convergence with their independent variable of interest being an endogenous term interacted with an exogenous regressor.⁷⁰ Bun and Harris (2019) employ instruments interacted with the exogenous part of the interaction term to analyze the interaction of endogenous regressors and exogenous covariates. In a previous version, they state that an implementation exploiting such an instrument is to be preferred (Bun and Harrison, 2014). Balli and Sørensen (2013) endorse that in the case of an endogenous regressor interacted with an exogenous variable, the interaction of the exogenous regressor with the instrument is the right approach for a valid instrument.⁷¹

⁷⁰ More specifically in their paper they state that “the financial development variable F in (13) may be endogenous (...). Moreover, endogeneity of F is likely to entail endogeneity of the interaction variable $F*(y-y1)$. To deal with this problems, we estimated (13) using instrumental variables, instrumenting for F and $F*(y-y1)$ using legal origins (L) and legal origins interacted with initial relative output ($L*(y-y1)$).” (Aghion et al, 2005, page 193).

⁷¹ The Stata syntax is `ivreg2 Y I ( G GI = Z ZI) X`, where Y is the dependent variable, I Indigenous status, G government funding, Z the instrument, X controls and fixed effects. This approach is sometimes compared to a model with an endogenous regressor and the square of the endogenous regressor. According to Wooldridge (2002), it is key to apply the instruments directly to the structural equation in such a case. Running the first stage regression and substitute the fitted values in the structural equation would lead the second one to be a “forbidden regression”. The approach with the additional interacted instrument is suggested in several Stata forums from various scholars including Jeff Wooldridge:

<https://www.stata.com/statalist/archive/2002-11/msg00558.html>

<https://www.stata.com/statalist/archive/2013-11/msg01021.html>

<https://www.statalist.org/forums/forum/general-stata-discussion/general/18775-iv-regression-with-continuous-interaction-term>

<https://www.statalist.org/forums/forum/general-stata-discussion/general/5429-iv-with-factor-variables-interaction-terms>

The two instruments of Z'_{it} are used in the first stage regressions and the 2SLS model uses their predicted values for the second stage as per equations (5) and (6).

$$Y_{it} = \alpha + \beta_1 \widehat{GovtFund}_{it} + \beta_2 Ind_Status_{it} + \beta_3 \widehat{GovtFund}_{it} * Ind_Status_{it} + X'_{it}\gamma + \sigma I_{pt} + \delta_p + \theta_t + \varepsilon_{it} \quad (5)$$

$$Y_{it} = \kappa + \lambda_1 \widehat{GovtFund}_{it} + \lambda_2 On_Reserve_{it} + \lambda_3 \widehat{GovtFund}_{it} * On_Reserve_{it} + X'_{it}\chi + oI_{pt} + \tau_p + \pi_t + \nu_{it} \quad (6)$$

In the 2SLS approach, special attention is given to the first stage F-statistics Kleibergen-Paap value that provides insight on the weakness of the instrument. I apply the rule of thumb of having an F-statistics greater than 10 to assure that the instrument is reliable (Staiger and Stock, 1997). The IV estimates are the efficient ones in that case and can be used to infer causality.⁷²

Part of the analysis looks furthermore at charities with only a positive value in their dependent variables. Twenty-two percent of all charities do not get any private donations. Fundraising activities are pursued by 36% of charities and only 24% receive gifts from other charities. Beside OLS and IV regressions, to account for a skewed distribution, I employ the tobit model, which is one of the limited dependent variable models. According to Greene (2002) OLS alone would produce inconsistent estimates when the dependent variable has many zero values.

$$Y_{it} = \begin{cases} Y^* & \text{if } Y^*_{it} > L \\ L & \text{if } Y^*_{it} \leq L \end{cases} \quad (7)$$

With the tobit model, a left-censoring of the dependent variable at zero is applied. Only if the latent variable Y^*_{it} of equation (7) is above the lower limit L , the actual value for Y_{it} is observed.

3.5 Descriptive statistics

There are clear differences in the amounts of private donations, fundraising and gifts from other charities that non-Indigenous receive, as compared to the Indigenous ones. The summary statistics and the differences in means are reported in table 3.1 for the full sample and in table 3.2 for the

⁷² Often a Hausman specification test is used to determine if the OLS specifications are preferred to the IV methodology, however the critical endogeneity issues present in the model necessitate here already the IV implementation.

sample Schedule 6, which includes the charities that differentiate between the level of government funding received. Tables in appendix 3.A provide more details on summary statistics by program of the charity and conditional on getting private donations. Figures 3.1 to 3.12 show for each year the percentage of charities that receive one of the three revenue sources, namely private donations, fundraising revenue and gifts from other charities and the amounts, distinguishing as usual between non-Indigenous charities and Indigenous charities, and between Indigenous charities on and off-reserve.

Eighteen percent more non-Indigenous charities are beneficiaries of private donations in comparison to Indigenous charities. This difference increases to 21% for the sample Schedule 6. On average, non-Indigenous charities receive \$190,701 in private donations versus \$59,345 of the Indigenous ones, with the difference being over \$130,000. This amount increases to \$191,194 for the sample Schedule 6. When considering only charities with a positive amount of private donations, the non-Indigenous receive on average \$242,794 compared to only \$97,377 of the Indigenous ones. These latter results can be found in the summary statistics of table 3.4A in the appendix 3.A. By examining the program of the charities and as reported in table 3.3A in the appendix 3.A, Indigenous charities working in benefits to community receive the highest amounts of private donations (\$89,791), followed by welfare charities (\$58,110) and religious charities (\$54,733). Benefits to community Indigenous charity are also the recipients of the most private donations on reserve (\$174,478), whereas Indigenous charities off reserve with the highest amount of private donations are the religion ones (\$79,603).

Fundraising revenue is the outcome of the effort made to collect money. Indigenous charities are less successful in gathering this type of revenue than their non-Indigenous counterparts with amounts totaling \$21,244 on average for the former and \$33,159 for the latter. Similarly, Indigenous charities on reserve strive less in fundraising than charities off reserve, with \$15,784 versus \$25,458. The program of the charity matters. Health charities off reserve report \$64,322 fundraising revenues versus \$10,750 of those on reserve. Quite the contrary is for education charities located on reserves which gather on average \$47,170 in fundraising revenues in comparison to only \$11,282 for charities off reserve.

Gifts from other charities are an even more conspicuous source of revenue than fundraising. On average, these gifts amount to \$63,634 for non-Indigenous charities and to \$37,170 for the Indigenous ones. This latter average splits in \$54,604 for charities off reserve and in \$14,588 for charities on-reserve. The amounts exacerbate for health charities, as those off reserve receive

\$77,111 and those on reserve only \$1,403. By far the biggest difference in these gifts between off and on-reserve charities is for the religious charities, which receive on average \$131,813 off reserve and \$4,559 on reserve.

Fifty-six percent of Indigenous charities are government funded compared to only 35% of the non-Indigenous ones. When examining the amounts of public funding however, another contrasting aspect emerges. Non-Indigenous charities get more public funds than the Indigenous ones, on average \$608,284 more. Indigenous charities off reserve receive \$716,420 more government support than those on reserve. Provincial governments are the leading supporters of Indigenous charities as they provide them, on average, with \$767,759 each in funding. On-reserve charities receiving the highest amounts of provincial funding are education charities with 1.5 million and welfare charities with over one million dollars. Within those off reserve, the most public funded are health charities with over 3 million dollars and welfare charities with 1.5 million dollars in provincial funding.

In the summary statistics and difference in mean tables, more information is provided on the designation and program of the charities, on their size and location, on charities' total expenditures, total revenues and total assets, and the provincial median income.

3.6 Results

A partial crowding out effect of government funding is the key result on all three dependent variables: private donations, fundraising and gifts from other charities. The structure of the tables is constant throughout the whole section, reporting the estimated coefficients for the various government funding levels and the interaction term between these latter and Indigenous status, or the on-reserve location. I list the OLS coefficient estimates in column 1 and the IV results in columns 2 and 3, with the instruments being 'cumulative funding' and 'years of funding'.⁷³ The instruments affect only those charities which are directly influenced by the instrument, namely the government funded ones, and this produces a local average treatment effect, which can be compared to the "true" average treatment effect from the OLS regressions.

Panel A presents the estimates for government funding and *Panels B, C and D* report the results for federal, provincial and municipal funding respectively. The number of observations is reported at the bottom of *Panel A* for the full sample and at the end of the table for the other three panels, which employ the sample Schedule 6. Since no information is available for the instruments

⁷³ Other details of the OLS regressions are presented in appendix 3.A, where tables 3.5A to 3.10A report all the coefficient estimates of tables 3.3 to 3.8.

‘cumulative funding’ and ‘years of funding’ for the year 2003, fewer observations are used in columns 2 and 3. For each IV regression coefficient, I detail the F-test of excluded instruments of each first stage and the Kleibergen-Paap F-Statistic. If the value of this latter is above 10, the instrument is considered as valid and strong. F-Statistic values that exceed the accepted standards are not explicitly discussed in this section. Also, I specify the level of statistical significance only for coefficient estimated at the 5% or borderline level of 10%. Lastly, besides for table 3.3, which embodies the main results of the chapter, I discuss only the results of the preferred ‘cumulative funding’ instrument that best represents the probability of getting public funding.

3.6.1 Main findings

Table 3.3 reports the effect of government funding on private donations for non-Indigenous and Indigenous charities, and the difference in this effect for the two types of charities, which is derived from the interaction term alone.

Panel A presents how private donations are affected by total government funding. For non-Indigenous charities, columns 1 and 2 do not show any impact, however in columns 3 private donations decrease by 18 cents for each additional dollar of public support. The effect for Indigenous charities, calculated as the value of the estimated coefficient for government funding plus the value of the interaction term, is negative and amounts to -7 cents for the OLS regression. The same magnitude is achieved with the IV approach that uses ‘cumulative funding’ as the instrument. Hence, a one dollar increase in government support crowds out or causes private donations to decrease by 7 cents. With the other instrument, the decrease is larger and reaches 28 cents in column 3. The interaction term coefficient estimate is -10 cents in this case and it denotes a much stronger crowding out effect for the Indigenous charities.

The coefficient estimates for federal funding in *Panel B* are positive in columns 1 and 2, which indicates a crowding in effect of this source of funding on private donations for non-Indigenous charities. However, since the value of the estimated interaction term coefficient is negative and larger than the former ones, the overall effect is a crowding out effect for Indigenous charities. Already, the negative correlation between federal funding and private donations stemming from the OLS regression sums up to -14 cents and with the instrument ‘cumulative funding’ a crowding out effect of 15 cents is unveiled. In comparison to the non-Indigenous charities, there is always a stronger decline in private donations, in the amount of 30 cents for each additional dollar of federal support.

As seen in *Panel C*, provincial funding decreases private donations for Indigenous charities by 6 cents and 31 cents. Columns 1 and 2 report a 6 cents stronger crowding out effect in comparison to the non-Indigenous ones; larger is the magnitude in column 3 with -13 cents.

The largest crowding out effect for Indigenous charities is observed for municipal funding in *Panel D*. The OLS regression shows a 26 cents negative correlation. The results from the IV estimation range from -46 to even -75 cents. Indigenous charities receive also between 44 and 56 cents (statistically significant at the 5% level) less municipal funding than their non-Indigenous counterparts.

All these results are considered in relationship to a one dollar increase in public support. The F-statistics is above the threshold of 10 for all IV regressions. The preferred instrument, ‘cumulative funding’ confirms the crowding out effect of the OLS regression for government, federal and provincial funding. For municipal funding, the IV result is larger.

There are a couple of important aspects to summarize about table 3.3. For Indigenous charities, government funding decreases private donations by 7 cents, and the three levels of federal, provincial and municipal funding show case a crowding out effect of 15, 6 and 46 cents respectively. There is clear evidence that the level of government makes a difference and Indigenous charities experience a larger crowding out effect relative to their non-Indigenous counterparts. Although Indigenous charities receive more support from the provinces, \$986,327 on average, compared to \$548,283 from the federal government and only \$79,966 from municipalities, provincial funding is not causing the largest crowding out effect, which is triggered by municipal funding. One explanation is that private donors are more aware of funding from local authorities and consequently donate less.

In table 3.4, the first thing that stands out is that public funding does not affect Indigenous charities’ fundraising revenue as much as their private donations. The overall crowding out effect stemming from total government, federal and provincial funding is just 1 cent for each dollar of public provision. The result for federal funding is statistically significant at the 5% level. The largest crowding out is caused by municipal funding, where Indigenous charities get 8 cent less fundraising revenue for each additional dollar of regional and local public support than the non-Indigenous counterparts. Although government funding causes minimal changes in charities’ behaviour when it comes to fundraising, it still decreases the drive to maximize fundraising efforts. Above all Indigenous charities appear not to be keen on gathering more fundraising revenue. Another point worth mentioning is that revenue raised through fundraising but for which a tax

receipt has been issued, has to be reported under private donations in the T3010. This might also explain why the effect of government support on fundraising revenue is small and larger for private donations.

The results of the impact of government funding on gifts from other charities are displayed in table 3.5. For non-Indigenous charities, federal funding crowds in these gifts by 6 cents on each dollar, whereas the Indigenous ones experience an overall crowding out effect. Municipal funding takes the lead and decreases gifts from other charities by 12 cents, followed by federal funding that decreases them by 7 cents. Total government funding and provincial funding crowd out this type of revenue by 3 cents each. A possible explanation for this behavior is that charities, which are ‘in the same business’ are certainly more informed on the revenue sources of the charity to which they donate. Consequently, they might see government funding as an alternative source to their own contributions.

The coefficient estimates of the impact of government funding on private donations, fundraising revenues and gifts from other charities for Indigenous charities on reserve versus those off reserve are reported in the next three tables. Not much comes out of this exploration, either because the estimated coefficients are statistically insignificant or the F-statistics is below the threshold of ten, as in the case of municipal funding. For private donations in table 3.6, a crowding out pattern can be traced for the off-reserve charities, which amounts to three cents for total government funding, borderline statistically significant, and to two cents for provincial funding, statistically significant at the 5% level. Nothing conclusive can be said for the on-reserve charities. The results for fundraising are reported in table 3.7. Regardless of the location of the charity, public funding has no effect on their fundraising effort, as all estimated coefficients are zero. For gifts from other charities in table 3.8, the only two statistically significant results are for federal funding, where off-reserve charities experience a three cent decrease in these gifts for each additional dollar of public influx. Although the on-reserve get two cents more than the off-reserve ones, there is still 1 cent net crowding out effect. The level of statistical significance is at the 5% and 10% level. Other charities might be more generous towards charities in Indigenous communities and help them a bit more, as they really see the need for it.

In tables 3.9 to 3.14 I analyze the effect of government funding only for those charities which report positive amounts of private donations, fundraising revenue and gifts from other charities. Besides the OLS and IV regressions, I also include Tobit regressions in column 2, which are appropriate in the presence of many zero values of the dependent variables as is found for

approximately one quarter of the charities, which are then censored or excluded. The results of the Tobit and OLS regressions are quite close, but the magnitude of the coefficient estimates of the instrumental variable approach is larger. Non-Indigenous charities experience a crowding in effect of federal funding on all three dependent variables that ranges between 8 and 12 cents. In table 3.10 this result is statistically significant at the 5% level. Table 3.9 displays that for Indigenous charities, each additional dollar of government support decreases private donations by 11 cents, and federal, provincial and municipal funding causes a decrease of 23, 11 and 91 cents, respectively. When comparing the fundraising effort in table 3.10 of non-Indigenous and Indigenous charities involved in fundraising, besides the aforementioned crowding out effect for federal funding, no other effect is identified for the non-Indigenous charities. A crowding out effect in the amount of three cents for total government, five cents for provincial and 41 cents for municipal funding is observed for the Indigenous charities. The municipal funding result is statistically significant at the 5% level. Turning to the gifts from other charities regressions in table 3.11, a crowding out effect for Indigenous charities is observed. Municipal funding has the largest impact with a 24 cents decrease that is statistically significant at the 10% level, followed by a 16 cent decrease for federal funding. A dollar of provincial funding crowds out nine cents and a dollar of total government funding crowds out eight cents of gifts from other charities.

The results for Indigenous charities off and on reserve for positive private donations in table 3.12 illustrate a crowding out effect ranging from five to 12 cents for the off-reserve charities. These effects are precise at the 5% and 10% level of statistical significance. The coefficient estimates for the interaction term are not significant at conventional levels, but they are positive, which would else capture a less severe crowding out effect for the on-reserve charities. Table 3.13 provides two major insights for positive fundraising revenue. First, two borderline significant crowding out effects of three cents for total government funding and of 22 cents for municipal funding are observed for charities located off reserve. Second, federal funding causes a crowding in of fundraising revenue, and charities on reserve get 22 cents more fundraising revenue than those off reserve for each additional dollar of subsidy from the federal government. There are more potential explanations for such a crowding in effect. First it signals satisfaction with the quality of the charity and encourages donations through fundraising events. Second, people might be more sensitive in helping Indigenous people living on reserve and donate accordingly. Third, part of the federal grants might be used to cover costs deriving from this additional fundraising effort. Table 3.14 analyzes only those organizations which receive gifts from other charities. In comparison to

off-reserve charities, those located inside the borders of an Indigenous community receive 12 cent less gifts for each additional dollar of provincial funding and exactly 12 cents more for each additional dollar of federal funding. The former result is statistically significant at the 10% level and the latter nets out to a zero effect as there is already a crowding out effect of 12 cents for off-reserve charities, also statistically significant only at the 10% level.

How the analysis is broken down by the program of the charity is the subject of tables 3.15 and 3.16. The first of the two tables presents the results for non-Indigenous and Indigenous charities and the second for Indigenous charities off and on reserve. There is much variation in both the level of government funding and the program reported in these tables, but a crowding out effect is prevalent regardless of the area in which the charity operates. In table 3.15, *Panel A*, I report the results for private donations. Religious non-Indigenous charities experience the largest crowding out effect that ranges from 35 cents for provincial to \$1.61 for federal funding. Religious Indigenous charities are affected only when they receive provincial support. A stronger crowding out effect is also detected for Indigenous charities operating in the benefits to community, education and health sectors. Another result that is worth mentioning for this table is a crowding in effect for non-Indigenous charities working in education; these get 18 cent more in private donations for each dollar of federal funding. In *Panel B* for fundraising, I find that the estimated coefficients do not change drastically and oscillate between -5 cents and 5 cents for the majority of the programs. For other charities the effect is larger. In *Panel C* for gifts from other charities, the trend is the same as what has been observed for private donations, but the impact is feebler.

More insight is also gathered when I analyze the results by program for Indigenous charities off and on reserve, reported in table 3.16. Education charities on reserve experience a crowding in effect of federal funding for all three dependent variables and its magnitude ranges between two and 11 cents. Religious charities on reserve receive fewer private donations than those off reserve and they are subject to an eight cent decrease in fundraising revenue for each dollar of provincial funding. The coefficient estimates of the interaction term for health charities are quite small, but sometimes of opposite sign. Government funding has almost no impact for welfare charities located on reserve and only a small crowding out of private donations is usually detected for the off-reserve ones. The last relevant result is for the benefits to community charities on reserve regarding gifts from other charities. These decrease by six cents more for each additional government dollar, by eight cents more for federal and for provincial funding, and by 55 cents more for municipal funding in comparison to those of Indigenous charities located off reserve. As there are only 90 Indigenous

other charities and as those on reserve do not receive government funding, their results are not reported.

To explore further the impact of various sources of government funding on private donations, fundraising and gifts from other charities, I control in tables 3.17 and 3.18 for the other two sources of funding when analyzing each dependent variable. For instance, to assess the impact of government funding on private donations, I include fundraising and gifts from other charities as explanatory variables. For the Indigenous and non-Indigenous charities regressions, overall, the results are comparable to those of tables 3.3 to 3.9, with two differences worth mentioning. First, I find a smaller effect of municipal funding on each of the dependent variables. Second, the control for fundraising is strongly positive and ranges between 66 and 71 cents when analyzing the impact of public funding on private donations. This indicates a complementarity in the two sources of funding, as for each additional dollar of fundraising revenue, private donations increase by the aforementioned amounts. This result is in line with the fact that revenue collected through fundraising, but for which a tax receipt has been issued, is considered as private donations.

I report further regressions results in the appendix 3.A. Tables 3.11A and 3.12A present the reduced form regression for the baseline model and the preferred instrument.⁷⁴ In tables 3.13A and 3.14A, instead of assessing the impact of government funding on the three dependent variables through the funding coefficient and the interaction term, I employ a sample of only Indigenous charities and of only charities on reserve.⁷⁵ Although I measure the size of the charity based on large discrete groupings of total revenues, it remains possible that ‘size’ is endogenous with my dependent variable ‘donations’. In tables 3.15A and 3.16A, I use the total assets, rather than the total revenues of the charity, to create the categorical variables for the charities’ size. The results do not change qualitatively, as I find the same crowding out effect. The magnitude of the results differs mainly for private donations.⁷⁶

⁷⁴ The reduced form regressions help to validate the exclusion restriction as they are deemed to confirm that there is no direct effect of the instrument on the dependent variables. In these tables I am considering the ‘cumulative funding’ instrument. Almost all estimated coefficients are zero or very close to zero and this corroborates the excludability of the instrument. Some concern is for column 1 of table 3.20, where federal and municipal funding received in the past slightly impacts the amount of private donations received in the current period.

⁷⁵ With this approach the results for the Indigenous charities are smaller in magnitude and they lose all the statistical significance for gifts from other charities. For charities on reserve the results are generally larger in magnitude and have stronger statistical power; furthermore, federal funding causes a 3 cent crowding in effect on fundraising for these charities.

⁷⁶ In a similar manner, by excluding completely the size of the charity as an explanatory variable from the regressions, I find still a stronger crowding out effect for Indigenous charities.

3.6.2 Robustness check

This last section is dedicated exclusively to the dependent variable ‘private donations’, which is, of the three, not only the most affected by government funding, but also the most studied in the literature. By analyzing the data in different settings, the ten robustness checks confirm the crowding out effect of public funding on private donations for Indigenous charities and for charities on reserve, with slight changes in the magnitude of the results.

In table 3.19 column 1, I investigate the impact of one level of government funding controlling also for the other two levels. It could be that one government level refrains from subsidizing a charity, knowing that the charity gets already public funding from another level. For instance, in *Panel C*, which analyzes the effect of provincial funding on private donations, I also include the amount of federal and municipal funding that charities receive as controls. The magnitude of the estimated coefficient is larger in this case. In column 2, I keep only those charities that report a positive amount of government funding with the results being smaller in magnitude for Indigenous charities. In column 3, I exclude the first five years of the sample, keeping the amounts of the instrument ‘cumulative funding’ as they are. One would expect that the more recent funding affects private donations more, but this does not appear to be the case. Only for municipal funding the magnitude of the coefficient estimate is smaller. In column 4, the dependent variable is the sum of private donations, fundraising and gifts from other charities. As this analysis considers the totality of donations, these results are not directly comparable to the previous ones. Federal funding crowds in 25 cents of revenues for the non-Indigenous charities, else a crowd out effect in the amount of 10 to 65 cents is observed for the Indigenous ones. In column 5, I keep only charities that have observations for the whole 15 years. The reason is similar as for the exclusion of column 3. The results are smaller in magnitude for Indigenous charities in *Panels B* and *D*.

In table 3.20, I exclude charities based on their area of operation. Religious charities were the most affected ones in table 3.15 but excluding them in column 1 does not change the results much. The results are also robust if either education or health charities are excluded in columns 2 and 3. However by excluding both education and health charities, the results become statistically insignificant for Indigenous charities and non-Indigenous charities do not experience a crowding in effect of federal funding anymore. The results are also robust to the exclusion of other charities in column 5.

Tables 3.21 and 3.22 repeat the robustness check analysis for charities off and on reserve. The results are insensitive to the use of different samples or scenarios. The aggregation of the three

revenue sources in table 3.21, column 4 confirms a crowding out effect for off-reserve Indigenous charities and no impact for the on-reserve ones. By excluding education charities in column 2 of table 3.22, the coefficient estimate for federal funding remains negative, but becomes statistically significant.

Tax credits that donors receive when they donate money to charitable organizations affect the amounts that private donors give (Hickey et al., 2019). Donors receive the tax credits of their province of residence but are not bound to donate to charities in the province in which they reside. In a further robustness check, I include the provincial marginal tax credit on the first \$200 donated and the results are reported in tables 3.17A and 3.18A in the appendix 3.A. With this inclusion, the results remain completely unaffected for the OLS regressions and IV regression for all charities in columns 1 and 2, and for charities with positive private donations in columns 4 and 5, in both tables. In column 3, I exclude the province of Quebec which uses a different tax credit system and a higher provincial tax rate than the other provinces. The crowding out effect is slightly stronger for Indigenous charities and for charities on reserve in comparison to the baseline models.

3.7 Conclusion

Government funding is an important policy instrument for charitable organizations that deliver services to local populations and beyond. However, as much as public funds might help charities that privately provide these public goods, they may also cause decreases in private donations, fundraising revenues and gifts from other charities. The results from this analysis indicate a clear crowding out effect of government aid on all types of donations for Indigenous charities, with the magnitude of the impact differing with the level of government in question. Total government funding crowds out contributions from private donors by seven cents on each dollar. Federal government decreases private donations by 15 cents, provincial funding by six cents and municipal funding by 46 cents. Public funding impacts negatively fundraising revenue by up to seven cents and gifts from other charities by up to 12 cents. The strongest economically significant impact is for private donations, rather than for fundraising revenue or gifts from other charities. The crowding out findings of private donations are in line with the two Canadian studies of Andreoni and Payne (2011a, 2013).

In chapter two, I found that Indigenous charities are more likely to receive government funding than non-Indigenous charities. While a direct link cannot be established with the crowding out effect, one can speculate that this is possibly a reason why Indigenous charities get less private

donations, fundraising revenue and even gifts from other charities. The analysis of all three levels of government funding reveals that the largest crowding out effects for Indigenous charities are most evident at a local scale, followed by the federal level and ultimately the provincial level. This is inversely related to the amount of funding received from the different levels of government: the larger the funding, the lowest the degree of crowding out. In the analysis of on-reserve versus off-reserve Indigenous charities, I found little evidence that government grants impact charities differently just based on their location. The area and programs in which charities operate matter though.

Government funding has important consequences for donations. The loss of income resulting from government grants and contributions should be carefully assessed from a policy perspective. A possible strategy to moderate the detrimental crowding out effects and to increase revenue could be a policy designed to boost charitable contributions through a matching grant structure. Charities must show increased private donations or fundraising revenue in order to be eligible for more funds, and governments could match these increases. Similar programs have been implemented by the federal government to help non-for-profit arts organizations to raise capital; matching funds for up to one dollar for every dollar raised from private donors have been made available. Matching grants as a policy response provides a way to channel resources back into the charitable sector. My work suggests that funding decisions taken locally and at the federal level matter more to charities than those at the provincial level, as do the programs of the charities.

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Figures 3.1 to 3.4: Private donations (\$) and private donations (Y/N)

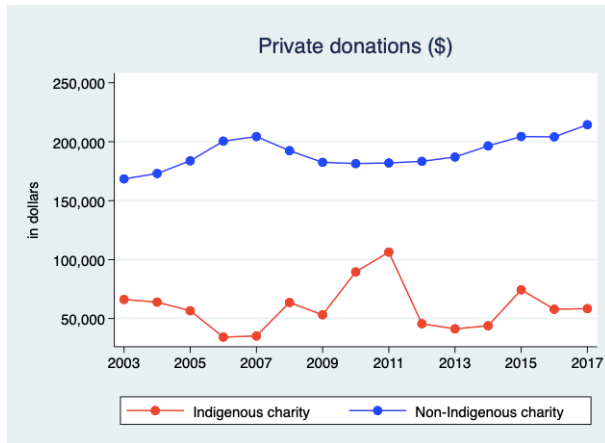


Figure 3.1

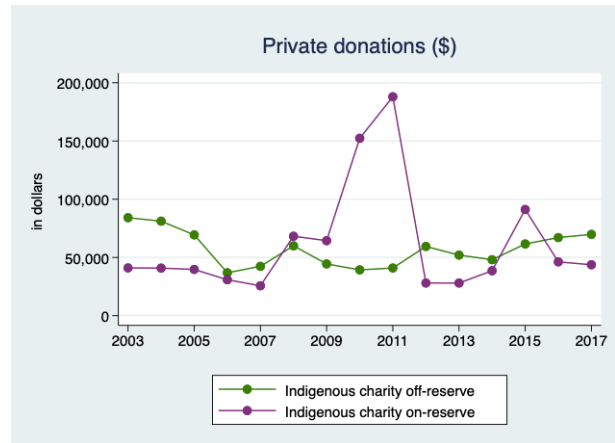


Figure 3.2

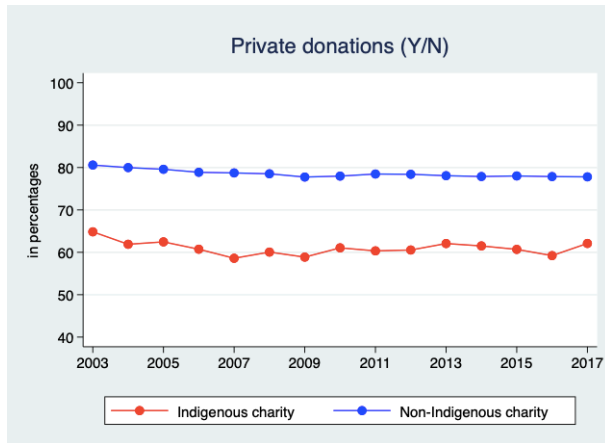


Figure 3.3

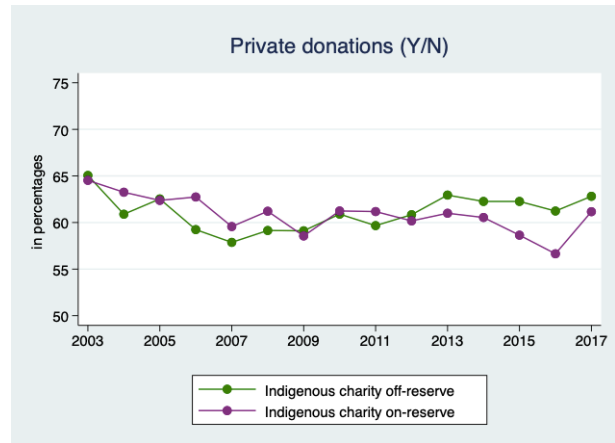


Figure 3.4

Private donations: Line 4500 of the T3010 - Total eligible amount of all gifts for which the charity issued tax receipts

Figures 3.5 to 3.8: Fundraising (\$) and fundraising (Y/N)

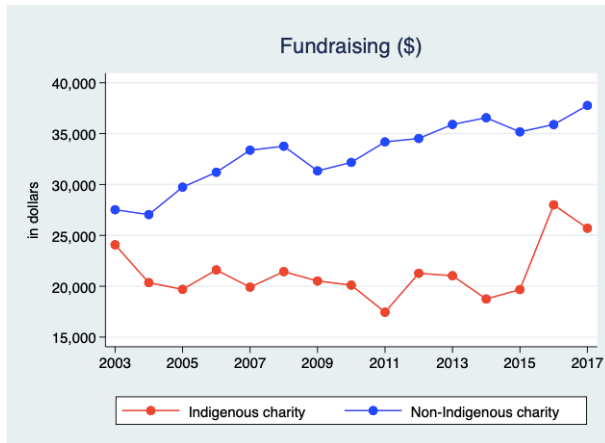


Figure 3.5

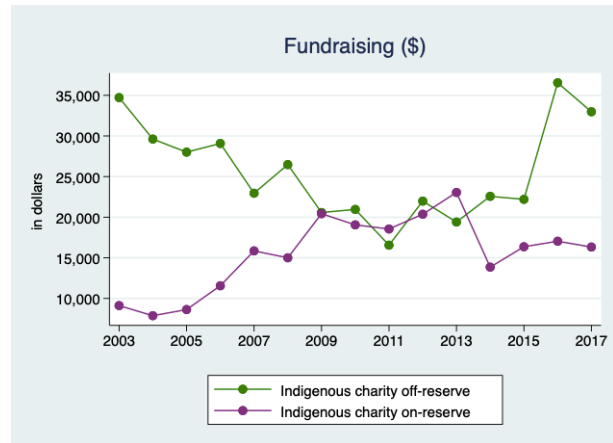


Figure 3.6

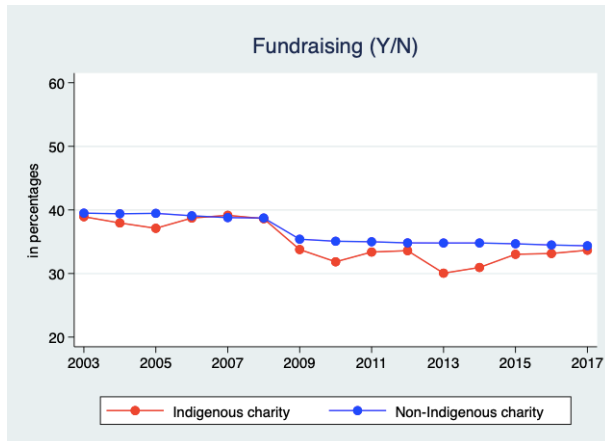


Figure 3.7

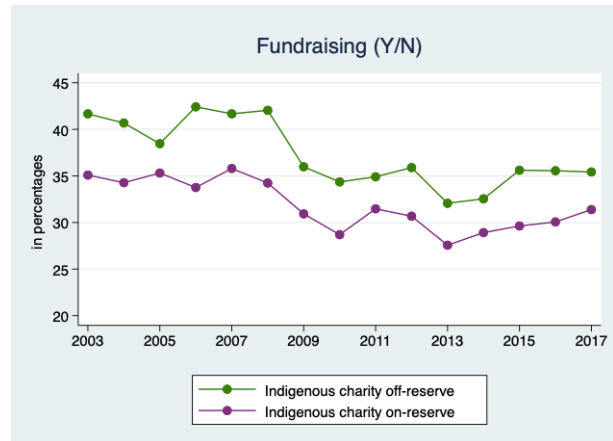


Figure 3.8

Fundraising: Line 4630 of the T3010 - Total non tax-receipted revenue from fundraising.

Figures 3.9 to 3.12: Gifts from other charities (\$) and gifts from other charities (Y/N)

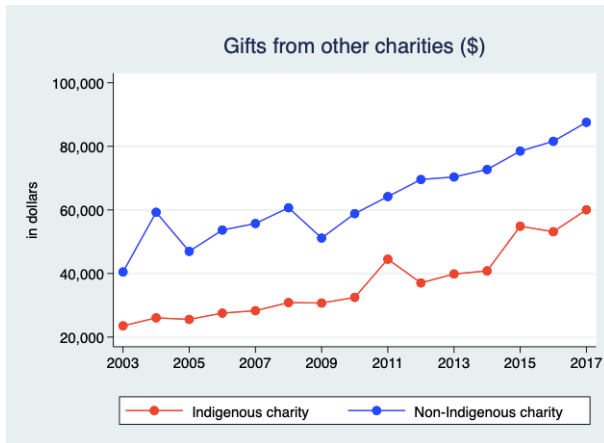


Figure 3.9

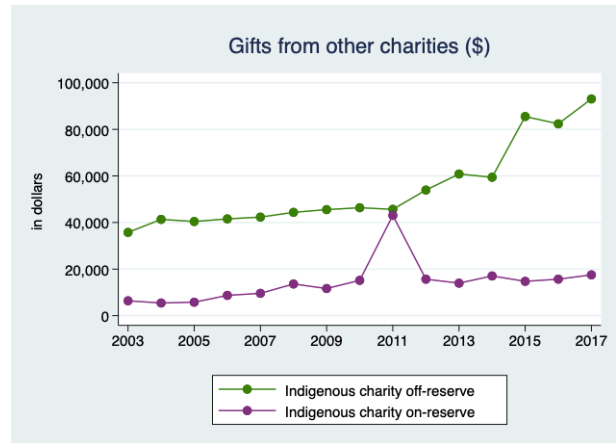


Figure 3.10

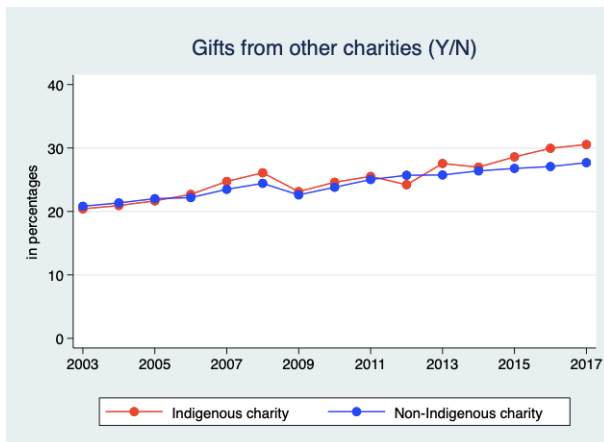


Figure 3.11

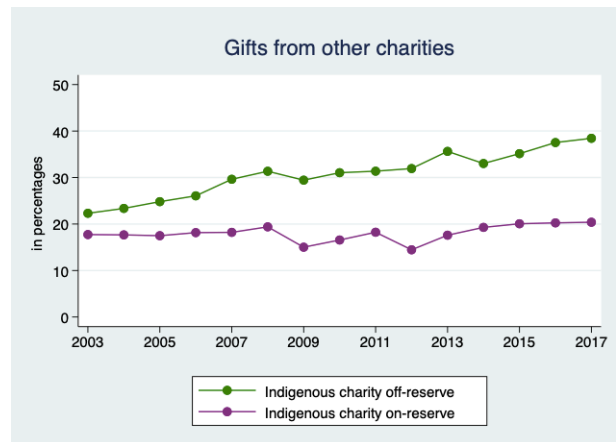


Figure 3.12

Gifts from other charities: Line 4510 of the T3010 - Total amount received from other registered charities.

Table 3.1: Summary statistics and difference in means

	Mean (Std. Dev.) - percentage				Mean (Std. Dev.) - percentage		
	Full Sample		Sample B	(4)	Indigenous sample		(7)
	Full sample	Sample A			Sample C	Sample D	
	(1)	(2)	(3)		(5)	(6)	
	Full sample n=1,216,383	Non-Indigenous charities n=1,205,386	Indigenous charities n=10,997	Difference in means (A-B)	Indigenous charities off-reserve n=6,206	Indigenous charities on-reserve n=4,791	Difference in means (C-D)
Private donations (Y/N)	0.78	0.79	0.61	0.18*** (0.004)	0.61	0.61	0.00 (0.009)
Fundraising (Y/N)	0.36	0.36	0.35	0.02*** (0.005)	0.37	0.32	0.05*** (0.009)
Gifts from other charities (Y/N)	0.24	0.24	0.25	-0.01** (0.004)	0.31	0.18	0.13*** (0.008)
Private donations (\$)	189,513 (2,428,984)	190,701 (2,438,910)	59,345 (766,033)	131,355*** (23,267)	56,586 (388,399)	62,918 (1,073,146)	-6,331 (14,732)
Fundraising (\$)	33,052 (648,412)	33,159 (651,221)	21,244 (141,593)	11,915* (6,211)	25,458 (140,898)	15,784 (142,317)	9,674*** (2,721)
Gifts from other charities (\$)	63,395 (1,920,486)	63,634 (1,929,110)	37,170 (220,966)	26,464 (18,396)	54,604 (255,354)	14,588 (163,445)	40,015*** (4,232)
Gov funding (Y/N)	0.35	0.35	0.56	-0.21*** (0.005)	0.70	0.39	0.31*** (0.009)
Fed funding (Y/N)	0.16	0.16	0.41	-0.25*** (0.004)	0.53	0.25	0.28*** (0.009)
Prov funding (Y/N)	0.23	0.23	0.43	-0.20*** (0.004)	0.57	0.25	0.31*** (0.009)
Mun funding (Y/N)	0.13	0.13	0.21	-0.08*** (0.003)	0.29	0.11	0.18*** (0.008)
Gov funding (\$)	1,856,098 (45,505,892)	1,861,597 (45,711,021)	1,253,313 (4,412,853)	608,284 (435,915)	1,565,432 (4,555,573)	849,011 (4,186,829)	716,420*** (84,595)
Fed funding (\$)	89,506 (2,793,760)	86,458 (2,802,147)	423,565 (1,596,385)	-337,106*** (26,760)	504,634 (1,652,897)	318,553 (1,513,791)	186,080*** (30,651)
Prov funding (\$)	1,643,562 (43,599,420)	1,651,552 (43,796,332)	767,759 (3,717,345)	883,792** (417,652)	970,188 (3,757,599)	505,543 (3,648,272)	464,645*** (71,356)
Mun funding (\$)	122,500 (6,292,416)	123,055 (6,320,954)	61,663 (368,546)	61,392 (60,277)	90,238 (430,305)	24,648 (263,660)	65,589*** (7,060)
Public foundation	0.06	0.06	0.02	0.04*** (0.002)	0.02	0.03	-0.01*** (0.003)
Private foundation	0.06	0.06	0.03	0.03*** (0.002)	0.02	0.03	-0.01** (0.003)
Registered charity	0.89	0.89	0.95	-0.06*** (0.003)	0.96	0.94	0.01*** (0.004)
Benefits to community	0.15	0.15	0.23	-0.07*** (0.003)	0.28	0.16	0.12*** (0.008)
Education	0.16	0.16	0.17	-0.01** (0.004)	0.14	0.20	-0.06*** (0.007)
Health	0.07	0.07	0.05	0.02*** (0.002)	0.05	0.04	0.01** (0.004)
Religion	0.40	0.40	0.28	0.12*** (0.005)	0.15	0.44	-0.29*** (0.008)
Welfare	0.21	0.21	0.27	-0.06*** (0.004)	0.37	0.15	0.22*** (0.008)
Other	0.01	0.01	0.01	0.00*** (0.001)	0.01	0.00	0.01*** (0.002)
Total assets*	3,882,732 (67,560,384)	3,901,813 (67,862,876)	1,791,290 (8,358,565)	2,110,523*** (647,180)	2,355,974 (10,622,547)	1,059,828 (3,642,049)	1,296,146*** (160,280)
Total Revenue*	2,764,850 (53,381,736)	2,774,382 (53,622,303)	1,720,046 (5,192,073)	1,054,336** (511,360)	2,198,910 (5,515,062)	1,099,752 (4,669,198)	1,099,157*** (99,305)
Total Expenditure*	2,689,166 (52,734,413)	2,698,265 (52,972,108)	1,691,900 (5,085,405)	1,006,364** (505,159)	2,175,373 (5,423,881)	1,065,636 (4,534,717)	1,109,736*** (97,231)

Table 3.1 cont.: Summary statistics and difference in means

	Mean (Std. Dev.) - percentage Full Sample			(4)	Mean (Std. Dev.) - percentage Indigenous sample		(7)
	Full sample	Sample A	Sample B		Sample C	Sample D	
	(1)	(2)	(3)		(5)	(6)	
	Full sample n=1,216,383	Non-Indigenous charities n=1,205,386	Indigenous charities n=10,997	Difference in means (A-B)	Indigenous charities off-reserve n=6,206	Indigenous charities on-reserve n=4,791	Difference in means (C-D)
Size<25K	0.27	0.27	0.21	0.06*** (0.004)	0.14	0.29	-0.15*** (0.008)
Size25K<100K	0.24	0.24	0.18	0.06*** (0.004)	0.11	0.26	-0.15*** (0.007)
Size100K<250K	0.18	0.18	0.12	0.07*** (0.004)	0.10	0.14	-0.04*** (0.006)
Size250K<500K	0.11	0.11	0.08	0.03*** (0.003)	0.10	0.07	0.03*** (0.005)
Size500K<1MIL	0.08	0.08	0.12	-0.04*** (0.003)	0.15	0.08	0.07*** (0.006)
Size1MIL<5MIL	0.08	0.08	0.24	-0.16*** (0.003)	0.32	0.14	0.19*** (0.008)
Size5MIL<10MIL	0.03	0.03	0.06	-0.03*** (0.002)	0.08	0.03	0.05*** (0.005)
Size>10MIL	0.00	0.00	0.00	0.00*** (0.001)	0.00	0.00	0.00 (0.000)
Prov median income*	32,825 (3,382)	32,819 (3,371)	33,467 (4,377)	-648*** (32)	33,675 (3,651)	33,198 (5,156)	477*** (84)
Prov median income (log)	10.39	10.39	10.41	-0.02*** (0.001)	10.42	10.40	0.02*** (0.002)
Rural	0.23	0.23	0.41	-0.18*** (0.004)	0.17	0.72	-0.55*** (0.008)
Urban	0.77	0.77	0.59	0.18*** (0.004)	0.83	0.28	0.55*** (0.008)
AB	0.11	0.11	0.10	0.00 (0.003)	0.14	0.06	0.08*** (0.006)
BC	0.14	0.14	0.23	-0.09*** (0.003)	0.23	0.22	0.01 (0.008)
MB	0.05	0.05	0.08	-0.03*** (0.002)	0.13	0.02	0.11*** (0.005)
NB	0.03	0.03	0.02	0.02*** (0.002)	0.01	0.03	-0.02*** (0.002)
NL	0.01	0.01	0.01	0.00** (0.001)	0.01	0.02	-0.01*** (0.002)
NS	0.05	0.05	0.01	0.03*** (0.002)	0.01	0.02	-0.01*** (0.002)
NT	0.00	0.00	0.04	-0.04*** (0.000)	0.01	0.08	-0.07*** (0.004)
NU	0.00	0.00	0.05	-0.05*** (0.000)	0.00	0.10	-0.10*** (0.004)
ON	0.35	0.36	0.28	0.08*** (0.005)	0.30	0.24	0.06*** (0.009)
PE	0.01	0.01	0.01	0.00** (0.001)	0.01	0.00	0.00*** (0.001)
QC	0.19	0.19	0.10	0.09*** (0.004)	0.06	0.16	-0.10*** (0.006)
SK	0.05	0.05	0.07	-0.02*** (0.002)	0.10	0.03	0.07*** (0.005)
YT	0.00	0.00	0.01	-0.01*** (0.000)	0.01	0.02	-0.01*** (0.002)

*These variables have not been used in the regressions. The standard deviation (in parenthesis) is not provided for dichotomous variables.
The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.2: Summary statistics and difference in means - Schedule 6

	Mean (Std. Dev.) - percentage Sample Schedule 6				Mean (Std. Dev.) - percentage Indigenous sample Schedule 6		
	Sample Schedule 6	Subsample A	Subsample B	(4)	Subsample C	Subsample D	(7)
	(1)	(2)	(3)		(5)	(6)	
	Sample n=856,626	Non-Indigenous charities n=848,157	Indigenous charities n=8,469	Difference in means (A-B)	Indigenous charities off-reserve n=5,309	Indigenous charities on-reserve n=3,160	Difference in means (C-D)
Private donations (Y/N)	0.80	0.81	0.60	0.21*** (0.004)	0.61	0.58	0.04*** (0.011)
Fundraising (Y/N)	0.40	0.40	0.38	0.01** (0.005)	0.41	0.35	0.06*** (0.011)
Gifts from other charities (Y/N)	0.28	0.28	0.27	0.01 (0.005)	0.32	0.18	0.14*** (0.010)
Private donations (\$)	262,446 (2,891,248)	264,337 (2,904,277)	73,142 (872,381)	191,194*** (31,573)	64,105 (419,393)	88,325 (1,320,662)	-24,220 (19,600)
Fundraising (\$)	45,675 (772,290)	45,864 (775,967)	26,822 (160,836)	19,041** (8,433)	29,529 (151,936)	22,274 (174,704)	7,254** (3,613)
Gifts from other charities (\$)	89,307 (2,287,991)	89,726 (2,299,245)	47,352 (250,776)	42,374* (24,985)	63,239 (275,119)	20,661 (200,653)	42,577*** (5,615)
Gov funding (Y/N)	0.41	0.41	0.69	-0.28*** (0.005)	0.79	0.52	0.27*** (0.010)
Fed funding (Y/N)	0.21	0.21	0.52	-0.31*** (0.004)	0.62	0.37	0.25*** (0.011)
Prov funding (Y/N)	0.30	0.30	0.55	-0.24*** (0.005)	0.66	0.36	0.29*** (0.011)
Mun funding (Y/N)	0.17	0.17	0.27	-0.10*** (0.004)	0.33	0.16	0.17*** (0.010)
Gov funding (\$)	2,632,811 (54,204,840)	2,642,979 (54,472,477)	1,614,580 (4,919,322)	1,028,398* (591,941)	1,828,776 (4,876,507)	1,254,717 (4,970,459)	574,059*** (110,358)
Fed funding (\$)	126,960 (3,328,388)	122,753 (3,339,865)	548,283 (1,798,470)	-425,529*** (36,344)	589,726 (1,773,032)	478,656 (1,838,597)	111,070*** (40,392)
Prov funding (\$)	2,332,185 (51,936,399)	2,345,624 (52,193,220)	986,327 (4,162,890)	1,359,296** (567,168)	1,133,677 (4,039,877)	738,771 (4,351,187)	394,906*** (93,439)
Mun funding (\$)	173,643 (7,497,343)	174,578 (7,534,560)	79,966 (418,227)	94,612 (81,874)	10,5374 (463,533)	37,279 (323,937)	68,095*** (9,368)
Public foundation	0.06	0.06	0.02	0.04*** (0.003)	0.01	0.03	-0.01*** (0.003)
Private foundation	0.06	0.06	0.02	0.04*** (0.003)	0.02	0.02	-0.01* (0.003)
Registered charity	0.88	0.88	0.96	-0.08*** (0.004)	0.97	0.95	0.02*** (0.004)
Benefits to community	0.14	0.14	0.25	-0.11*** (0.004)	0.30	0.18	0.12*** (0.010)
Education	0.16	0.16	0.17	-0.01*** (0.004)	0.13	0.23	-0.10*** (0.008)
Health	0.07	0.07	0.05	0.02*** (0.003)	0.05	0.05	0.01 (0.005)
Religion	0.39	0.39	0.21	0.18*** (0.005)	0.12	0.36	-0.24*** (0.009)
Welfare	0.23	0.23	0.31	-0.08*** (0.005)	0.39	0.18	0.20*** (0.010)
Other	0.01	0.01	0.01	0.00** (0.001)	0.01	0.00	0.01*** (0.002)
Total assets*	5,440,191 (80,343,457)	5,471,751 (80,737,425)	2,279,550 (9,460,478)	3,192,200*** (877,382)	2,739,636 (11,439,118)	1,506,578 (4,369,366)	1,233,057*** (212,148)
Total Revenue*	3,910,139 (63,571,589)	3,927,109 (63,885,353)	2,210,585 (5,776,451)	1,716,524** (694,229)	2,565,103 (5,884,530)	1,614,971 (5,540,233)	950,131*** (129,382)
Total Expenditure*	3,801,586 (62,803,341)	3,817,874 (63,113,373)	217,0384 (5,654,539)	1,647,489** (685,840)	2,535,666 (5,786,989)	1,556,688 (5,369,973)	978,978*** (126,607)

Table 3.2 cont.: Summary statistics and difference in means - Schedule 6

	Mean (Std. Dev.) - percentage Sample Schedule 6				Mean (Std. Dev.) - percentage Indigenous sample Schedule 6		
	Sample Schedule 6	Subsample A	Subsample B		Subsample C	Subsample D	
	(1)	(2)	(3)		(4)	(5)	(6)
	Sample n=856,626	Non-Indigenous charities n=848,157	Indigenous charities n=8,469	Difference in means (A-B)	Indigenous charities off-reserve n=5,309	Indigenous charities on-reserve n=3,160	Difference in means (C-D)
Size<25K	0.16	0.16	0.11	0.05*** (0.004)	0.07	0.17	-0.10*** (0.007)
Size25K<100K	0.15	0.15	0.10	0.05*** (0.004)	0.06	0.17	-0.11*** (0.007)
Size100K<250K	0.25	0.25	0.14	0.11*** (0.005)	0.11	0.20	-0.09*** (0.008)
Size250K<500K	0.16	0.16	0.11	0.05*** (0.004)	0.11	0.10	0.01** (0.007)
Size500K<1MIL	0.11	0.11	0.15	-0.04*** (0.003)	0.18	0.11	0.06*** (0.008)
Size1MIL<5MIL	0.12	0.12	0.31	-0.19*** (0.004)	0.38	0.20	0.17*** (0.010)
Size5MIL<10MIL	0.05	0.05	0.08	-0.03*** (0.002)	0.10	0.05	0.05*** (0.006)
Size>10MIL	0.01	0.01	0.00	0.01*** (0.001)	0.00	0.00	0.00 (0.000)
Prov median income*	32,574 (3,406)	32,566 (3,393)	33,401 (4,448)	-835*** (37)	33,628 (3,720)	33,020 (5,436)	608*** (99)
Prov median income (log)	10.39	10.39	10.41	-0.02*** (0.001)	10.42	10.39	0.02*** (0.003)
Rural	0.20	0.20	0.38	-0.18*** (0.004)	0.17	0.74	-0.57*** (0.009)
Urban	0.80	0.80	0.62	0.18*** (0.004)	0.83	0.26	0.57*** (0.009)
AB	0.11	0.11	0.11	-0.00 (0.003)	0.14	0.06	0.08*** (0.007)
BC	0.14	0.14	0.23	-0.09*** (0.004)	0.23	0.22	0.02* (0.009)
MB	0.05	0.05	0.09	-0.04*** (0.002)	0.13	0.02	0.10*** (0.006)
NB	0.03	0.03	0.01	0.02*** (0.002)	0.01	0.03	-0.02*** (0.003)
NL	0.01	0.01	0.01	0.00 (0.001)	0.01	0.02	-0.01*** (0.002)
NS	0.04	0.04	0.01	0.03*** (0.002)	0.01	0.02	-0.01*** (0.002)
NT	0.00	0.00	0.04	-0.04*** (0.000)	0.01	0.09	-0.09*** (0.004)
NU	0.00	0.00	0.04	-0.04*** (0.000)	0.00	0.11	-0.11*** (0.004)
ON	0.36	0.36	0.27	0.09*** (0.005)	0.30	0.23	0.07*** (0.010)
PE	0.01	0.01	0.00	0.00** (0.001)	0.01	0.00	0.00*** (0.002)
QC	0.20	0.20	0.10	0.10*** (0.004)	0.06	0.17	-0.11*** (0.007)
SK	0.05	0.05	0.07	-0.02*** (0.002)	0.09	0.02	0.07*** (0.006)
YT	0.00	0.00	0.01	-0.01*** (0.000)	0.01	0.01	-0.00 (0.002)

Schedule 6 applies to charities if: “a) the charity’s revenue exceeds \$100,000; or b) the amount of all property (for example, investments, rental properties) not used in charitable activities is more than \$25,000; or c) the charity has permission to accumulate funds during this fiscal period”.

*These variables have not been used in the regressions. The standard deviation (in parenthesis) is not provided for dichotomous variables. The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.3: Private donation regressions for Non-Indigenous and Indigenous charities

	Private donations (\$)	Private donations (\$)	Private donations (\$)
	(1)	(2)	(3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>			
Gov funding	-0.00* (0.00)	-0.00* (0.00)	-0.18*** (0.03)
Ind*Gov (\$)	-0.07*** (0.01)	-0.07*** (0.01)	-0.10*** (0.03)
F-test Gov fund		258.81	21.18
F-test abo*Gov fund		651.88	31.98
Kleibergen-Paap F-Stat		16.97	14.86
Observations	1,216,383	1,119,632	1,119,632
<i>Panel B: Federal funding</i>			
Fed funding	0.12*** (0.03)	0.15*** (0.03)	-0.09 (0.08)
Ind*Fed (\$)	-0.26*** (0.04)	-0.30*** (0.04)	-0.30*** (0.10)
F-test Fed fund		397.75	65.67
F-test abo*Fed fund		175.64	23.93
Kleibergen-Paap F-Stat		264.75	44.72
<i>Panel C: Provincial funding</i>			
Prov funding	-0.00* (0.00)	-0.00* (0.00)	-0.18*** (0.03)
Ind*Prov (\$)	-0.06*** (0.01)	-0.06*** (0.01)	-0.13*** (0.05)
F-test Prov fund		368.43	26.37
F-test abo* Prov fund		759.67	19.34
Kleibergen-Paap F-Stat		18.31	19.86
<i>Panel D: Municipal funding</i>			
Mun funding	-0.01** (0.01)	-0.02** (0.01)	-0.19*** (0.05)
Ind*Mun (\$)	-0.25*** (0.05)	-0.44*** (0.10)	-0.56** (0.22)
F-test Mun fund		53.62	28.76
F-test abo* Mun fund		57.48	17.94
Kleibergen-Paap F-Stat		20.44	26.06
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	856,626	768,774	768,774

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.4: Fundraising regressions for Non-Indigenous and Indigenous charities

	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)
	(1)	(2)	(3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>			
Gov funding	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Ind*Gov (\$)	-0.01*** (0.00)	-0.01*** (0.00)	-0.02*** (0.00)
F-test Gov fund		258.81	21.18
F-test abo*Gov fund		651.88	31.98
Kleibergen-Paap F-Stat		16.97	14.86
Observations	1,216,383	1,119,632	1,119,632
<i>Panel B: Federal funding</i>			
Fed funding	0.02* (0.01)	0.04** (0.02)	0.08*** (0.02)
Ind*Fed (\$)	-0.03** (0.01)	-0.05** (0.02)	-0.10*** (0.03)
F-test Fed fund		397.75	65.67
F-test abo*Fed fund		175.64	23.93
Kleibergen-Paap F-Stat		264.75	44.72
<i>Panel C: Provincial funding</i>			
Prov funding	-0.00 (0.00)	-0.00 (0.00)	-0.01** (0.00)
Ind*Prov (\$)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01** (0.01)
F-test Prov fund		368.43	26.37
F-test abo* Prov fund		759.67	19.34
Kleibergen-Paap F-Stat		18.31	19.86
<i>Panel D: Municipal funding</i>			
Mun funding	0.00 (0.00)	0.01 (0.01)	0.07*** (0.02)
Ind*Mun (\$)	-0.04*** (0.01)	-0.08*** (0.02)	-0.14** (0.06)
F-test Mun fund		53.62	28.76
F-test abo* Mun fund		57.48	17.94
Kleibergen-Paap F-Stat		20.44	26.06
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	856,626	768,774	768,774

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.5: Gifts from other charities regressions for Non-Indigenous and Indigenous charities

	Gifts from other charities (\$) (1)	Gifts from other charities (\$) (2)	Gifts from other charities (\$) (3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>			
Gov funding	0.00* (0.00)	0.00** (0.00)	-0.04*** (0.01)
Ind*Gov (\$)	-0.03*** (0.00)	-0.03*** (0.00)	-0.03*** (0.01)
F-test Gov fund		258.81	21.18
F-test abo*Gov fund		651.88	31.98
Kleibergen-Paap F-Stat		16.97	14.86
Observations	1,216,383	1,119,632	1,119,632
<i>Panel B: Federal funding</i>			
Fed funding	0.03** (0.02)	0.06*** (0.02)	0.06 (0.06)
Ind*Fed (\$)	-0.09*** (0.02)	-0.13*** (0.02)	-0.15** (0.06)
F-test Fed fund		397.75	65.67
F-test abo*Fed fund		175.64	23.93
Kleibergen-Paap F-Stat		264.75	44.72
<i>Panel C: Provincial funding</i>			
Prov funding	0.00* (0.00)	0.00** (0.00)	-0.04*** (0.01)
Ind*Prov (\$)	-0.03*** (0.00)	-0.03*** (0.00)	-0.05*** (0.02)
F-test Prov fund		368.43	26.37
F-test abo* Prov fund		759.67	19.34
Kleibergen-Paap F-Stat		18.31	19.86
<i>Panel D: Municipal funding</i>			
Mun funding	-0.01** (0.00)	-0.01** (0.00)	-0.05 (0.03)
Ind*Mun (\$)	-0.06*** (0.02)	-0.11*** (0.04)	-0.17* (0.10)
F-test Mun fund		53.62	28.76
F-test abo* Mun fund		57.48	17.94
Kleibergen-Paap F-Stat		20.44	26.06
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	856,626	768,774	768,774

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: p<.10, ** p<.05, *** p<.01

Table 3.6: Private donation regressions for Indigenous charities off-reserve and on-reserve

	Private donations (\$)	Private donations (\$)	Private donations (\$)
	(1)	(2)	(3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>			
Gov funding	-0.03** (0.02)	-0.03* (0.02)	-0.26* (0.14)
On-reserve*Gov (\$)	0.01 (0.01)	0.01 (0.01)	0.09 (0.06)
F-test Gov fund		375.29	3.24
F-test on-reserve*Gov		365.59	9.70
Kleibergen-Paap F-Stat		301.80	3.81
Observations	10,997	10,111	10,111
<i>Panel B: Federal funding</i>			
Fed funding	-0.05 (0.03)	-0.07 (0.05)	-0.43* (0.22)
On-reserve*Fed (\$)	0.01 (0.05)	0.03 (0.05)	0.24* (0.14)
F-test Fed fund		135.01	10.45
F-test on-reserve*Fed		259.66	9.10
Kleibergen-Paap F-Stat		55.54	6.88
<i>Panel C: Provincial funding</i>			
Prov funding	-0.02** (0.01)	-0.02** (0.01)	-0.15** (0.06)
On-reserve*Prov (\$)	0.01 (0.01)	0.01 (0.01)	0.06 (0.05)
F-test Prov fund		667.19	8.44
F-test on-reserve*Prov		364.31	4.62
Kleibergen-Paap F-Stat		641.21	6.13
<i>Panel D: Municipal funding</i>			
Mun funding	-0.06** (0.03)	-0.09** (0.04)	-0.20 (0.17)
On-reserve*Mun (\$)	0.03 (0.02)	-0.34 (0.49)	0.38 (0.65)
F-test Mun fund		79.41	9.51
F-test on-reserve*Mun		0.87	2.66
Kleibergen-Paap F-Stat		0.76	2.25
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	8,469	7,641	7,641

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.7: Fundraising regressions for Indigenous charities off-reserve and on-reserve

	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)
	(1)	(2)	(3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>			
Gov funding	-0.00 (0.00)	-0.00* (0.00)	-0.01 (0.02)
On-reserve*Gov (\$)	0.00 (0.00)	0.00 (0.00)	0.01 (0.01)
F-test Gov fund		375.29	3.24
F-test on-reserve*Gov		365.59	9.70
Kleibergen-Paap F-Stat		301.80	3.81
Observations	10,997	10,111	10,111
<i>Panel B: Federal funding</i>			
Fed funding	-0.00 (0.01)	-0.00 (0.00)	0.00 (0.04)
On-reserve*Fed (\$)	0.02 (0.02)	0.03 (0.03)	0.01 (0.04)
F-test Fed fund		135.01	10.45
F-test on-reserve*Fed		259.66	9.10
Kleibergen-Paap F-Stat		55.54	6.88
<i>Panel C: Provincial funding</i>			
Prov funding	-0.00* (0.00)	-0.00* (0.00)	-0.00 (0.01)
On-reserve*Prov (\$)	0.00 (0.00)	0.00 (0.00)	0.02 (0.02)
F-test Prov fund		667.19	8.44
F-test on-reserve*Prov		364.31	4.62
Kleibergen-Paap F-Stat		641.21	6.13
<i>Panel D: Municipal funding</i>			
Mun funding	-0.02* (0.01)	-0.03** (0.02)	-0.11** (0.05)
On-reserve*Mun (\$)	0.01 (0.01)	-0.06 (0.10)	0.51 (0.49)
F-test Mun fund		79.41	9.51
F-test on-reserve*Mun		0.87	2.66
Kleibergen-Paap F-Stat		0.76	2.25
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	8,469	7,641	7,641

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.8: Gifts from other charities regressions for Indigenous charities off-reserve and on-reserve

	Gifts from other charities (\$) (1)	Gifts from other charities (\$) (2)	Gifts from other charities (\$) (3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>			
Gov funding	-0.01 (0.01)	-0.01 (0.01)	-0.03 (0.04)
On-reserve*Gov (\$)	0.00 (0.00)	0.00 (0.00)	0.01 (0.02)
F-test Gov fund		375.29	3.24
F-test on-reserve*Gov		365.59	9.70
Kleibergen-Paap F-Stat		301.80	3.81
Observations	10,997	10,111	10,111
<i>Panel B: Federal funding</i>			
Fed funding	-0.02** (0.01)	-0.03** (0.01)	-0.01 (0.05)
On-reserve*Fed (\$)	0.02* (0.01)	0.02* (0.01)	-0.01 (0.04)
F-test Fed fund		135.01	10.45
F-test on-reserve*Fed		259.66	9.10
Kleibergen-Paap F-Stat		55.54	6.88
<i>Panel C: Provincial funding</i>			
Prov funding	-0.01 (0.00)	-0.01 (0.00)	-0.05 (0.03)
On-reserve*Prov (\$)	0.00 (0.00)	0.00 (0.00)	0.02 (0.02)
F-test Prov fund		667.19	8.44
F-test on-reserve*Prov		364.31	4.62
Kleibergen-Paap F-Stat		641.21	6.13
<i>Panel D: Municipal funding</i>			
Mun funding	0.01 (0.02)	0.02 (0.04)	-0.01 (0.11)
On-reserve*Mun (\$)	-0.02 (0.02)	-0.10 (0.09)	0.08 (0.20)
F-test Mun fund		79.41	9.51
F-test on-reserve*Mun		0.87	2.66
Kleibergen-Paap F-Stat		0.76	2.25
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	8,469	7,641	7,641

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.9: Positive private donation regressions for Non-Indigenous and Indigenous charities

	Private donations (\$)	Private donations (\$)	Private donations (\$)	Private donations (\$)
	(1)	(2)	(3)	(4)
	OLS	TOBIT	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>				
Gov funding	-0.00* (0.00)	-0.00*** (0.00)	-0.00* (0.00)	-0.22*** (0.06)
Ind*Gov (\$)	-0.10*** (0.01)	-0.09*** (0.01)	-0.11*** (0.02)	-0.14*** (0.04)
F-test Gov fund			75.17	14.26
F-test abo*Gov fund			178.42	29.68
Kleibergen-Paap F-Stat			15.82	7.15
Observations	953,466	953,466	878,927	878,927
<i>Panel B: Federal funding</i>				
Fed funding	0.14*** (0.03)	-0.01*** (0.00)	0.12*** (0.04)	-0.39*** (0.12)
Ind*Fed (\$)	-0.33*** (0.05)	-0.41*** (0.03)	-0.35*** (0.06)	-0.25 (0.16)
F-test Fed fund			315.10	51.18
F-test abo*Fed fund			104.29	20.22
Kleibergen-Paap F-Stat			262.56	33.85
<i>Panel C: Provincial funding</i>				
Prov funding	-0.00* (0.00)	-0.00*** (0.00)	-0.01* (0.00)	-0.22*** (0.05)
Ind*Prov (\$)	-0.10*** (0.02)	-0.07*** (0.01)	-0.10*** (0.02)	-0.22*** (0.07)
F-test Prov fund			97.23	16.79
F-test abo* Prov fund			167.6	17.34
Kleibergen-Paap F-Stat			18.38	10.13
<i>Panel D: Municipal funding</i>				
Mun funding	-0.02** (0.01)	-0.01*** (0.00)	-0.03** (0.01)	-0.38*** (0.08)
Ind*Mun (\$)	-0.42*** (0.11)	-0.41*** (0.10)	-0.88*** (0.27)	-1.46*** (0.51)
F-test Mun fund			30.40	23.00
F-test abo* Mun fund			20.28	18.30
Kleibergen-Paap F-Stat			19.78	22.47
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	688,664	688,664	620,031	620,031

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. The tobit model is censored at zero at the lower bound and the number of observations reported refer to the uncensored ones. In *Panel B*, column 2, due to the error in Stata “initial values not feasible”, where the calculations were too large for the software to deal with accuracy, I dropped 43,249 observations for the year 2017. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.10: Positive fundraising regressions for Non-Indigenous and Indigenous charities

	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)
	(1)	(2)	(3)	(4)
	OLS	TOBIT	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>				
Gov funding	0.00 (0.00)	-0.00*** (0.00)	0.00 (0.00)	-0.07*** (0.02)
Ind*Gov (\$)	-0.04*** (0.01)	-0.03*** (0.00)	-0.03*** (0.01)	-0.03* (0.02)
F-test Gov fund			790.82	12.97
F-test abo*Gov fund			64.80	23.59
Kleibergen-Paap F-Stat			62.71	10.71
Observations	443,795	443,795	408,816	408,816
<i>Panel B: Federal funding</i>				
Fed funding	0.07** (0.03)	0.02*** (0.00)	0.08** (0.04)	-0.10 (0.07)
Ind*Fed (\$)	-0.10** (0.05)	-0.06*** (0.01)	-0.10 (0.07)	-0.03 (0.08)
F-test Fed fund			321.15	32.04
F-test abo*Fed fund			49.63	14.88
Kleibergen-Paap F-Stat			46.94	19.00
<i>Panel C: Provincial funding</i>				
Prov funding	0.00 (0.00)	-0.00*** (0.00)	0.00 (0.00)	-0.06*** (0.02)
Ind*Prov (\$)	-0.05*** (0.01)	-0.04*** (0.01)	-0.05*** (0.01)	-0.05* (0.03)
F-test Prov fund			46.38	18.12
F-test abo* Prov fund			28.26	17.80
Kleibergen-Paap F-Stat			21.14	15.89
<i>Panel D: Municipal funding</i>				
Mun funding	0.00 (0.01)	0.01*** (0.00)	-0.00 (0.01)	-0.01 (0.04)
Ind*Mun (\$)	-0.13*** (0.04)	-0.14*** (0.05)	-0.41** (0.17)	-0.57** (0.27)
F-test Mun fund			68.51	18.68
F-test abo* Mun fund			12.31	11.14
Kleibergen-Paap F-Stat			10.09	18.43
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	338,640	338,640	305,512	305,512

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. The tobit model is censored at zero at the lower bound and the number of observations reported refer to the uncensored ones. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.11: Positive gifts from other charities regressions for Non-Indigenous and Indigenous charities

	Gifts from other charities (\$) (1)	Gifts from other charities (\$) (2)	Gifts from other charities (\$) (3)	Gifts from other charities (\$) (4)
	OLS	TOBIT	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>				
Gov funding	0.00 (0.00)	0.00*** (0.00)	0.00* (0.00)	-0.11** (0.04)
Ind*Gov (\$)	-0.08*** (0.02)	-0.20*** (0.02)	-0.08*** (0.02)	-0.11*** (0.04)
F-test Gov fund			39.70	5.64
F-test abo*Gov fund			111.57	16.59
Kleibergen-Paap F-Stat			15.43	4.83
Observations	296,818	296,818	276,806	276,806
<i>Panel B: Federal funding</i>				
Fed funding	0.06*** (0.02)	0.04*** (0.00)	0.08*** (0.02)	-0.10 (0.12)
Ind*Fed (\$)	-0.18*** (0.04)	-0.59*** (0.05)	-0.24*** (0.06)	-0.15 (0.14)
F-test Fed fund			168.21	34.55
F-test abo*Fed fund			25.45	11.08
Kleibergen-Paap F-Stat			25.45	25.74
<i>Panel C: Provincial funding</i>				
Prov funding	0.00 (0.00)	0.00*** (0.00)	0.00* (0.00)	-0.10*** (0.04)
Ind*Prov (\$)	-0.09*** (0.02)	-0.16*** (0.02)	-0.09*** (0.02)	-0.20*** (0.07)
F-test Prov fund			60.25	8.40
F-test abo* Prov fund			129.00	9.90
Kleibergen-Paap F-Stat			19.16	7.26
<i>Panel D: Municipal funding</i>				
Mun funding	-0.01** (0.01)	-0.01*** (0.00)	-0.01** (0.01)	-0.18** (0.07)
Ind*Mun (\$)	-0.24*** (0.07)	-0.40*** (0.15)	-0.23* (0.13)	-0.94** (0.42)
F-test Mun fund			100.21	11.47
F-test abo* Mun fund			36.08	10.12
Kleibergen-Paap F-Stat			47.86	11.36
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	237,604	237,604	219,074	219,074

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. The tobit model is censored at zero at the lower bound and the number of observations reported refer to the uncensored ones. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.12: Positive private donation regressions for Indigenous charities off-reserve and on-reserve

	Private donations (\$) (1)	Private donations (\$) (2)	Private donations (\$) (3)	Private donations (\$) (4)
	OLS	TOBIT	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>				
Gov funding	-0.06** (0.03)	-0.05*** (0.00)	-0.07* (0.04)	-0.86 (0.72)
On-reserve*Gov (\$)	0.02 (0.02)	0.00 (0.01)	0.02 (0.02)	0.25 (0.24)
F-test Gov fund			85.25	1.19
F-test on-reserve*Gov			31.23	5.53
Kleibergen-Paap F-Stat			59.61	0.75
Observations	6,702	6,702	6,164	6,164
<i>Panel B: Federal funding</i>				
Fed funding	-0.08 (0.05)	-0.08*** (0.01)	-0.12* (0.07)	-0.78** (0.39)
On-reserve*Fed (\$)	0.06 (0.10)	-0.01 (0.02)	0.12 (0.12)	0.43 (0.26)
F-test Fed fund			64.62	7.63
F-test on-reserve*Fed			137.59	4.54
Kleibergen-Paap F-Stat			37.00	8.12
<i>Panel C: Provincial funding</i>				
Prov funding	-0.05** (0.02)	-0.03*** (0.00)	-0.05** (0.02)	-0.37** (0.17)
On-reserve*Prov (\$)	0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	0.09 (0.11)
F-test Prov fund			170.57	3.30
F-test on-reserve*Prov			11.24	3.72
Kleibergen-Paap F-Stat			10.15	2.68
<i>Panel D: Municipal funding</i>				
Mun funding	-0.14** (0.06)	-0.13*** (0.04)	-0.16 (0.16)	-0.69 (0.46)
On-reserve*Mun (\$)	0.07 (0.05)	0.05 (0.08)	10.74 (25.47)	0.57 (9.97)
F-test Mun fund			35.13	8.12
F-test on-reserve*Mun			0.68	0.91
Kleibergen-Paap F-Stat			0.10	0.90
Controls	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	5,079	5,079	4,574	4,574

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. The tobit model is censored at zero at the lower bound and the number of observations reported refer to the uncensored ones. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.13: Positive fundraising regressions for Indigenous charities off-reserve and on-reserve

	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)
	(1)	(2)	(3)	(4)
	OLS	TOBIT	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>				
Gov funding	-0.03 (0.02)	-0.01*** (0.00)	-0.03* (0.02)	-0.13 (0.13)
On-reserve*Gov (\$)	0.03 (0.03)	0.00 (0.00)	0.04 (0.04)	0.11*** (0.06)
F-test Gov fund			229.26	1.25
F-test on-reserve*Gov			1,585.42	3.63
Kleibergen-Paap F-Stat			21.66	1.43
Observations	3,832	3,832	3,513	3,513
<i>Panel B: Federal funding</i>				
Fed funding	-0.00 (0.02)	0.00 (0.00)	0.01 (0.01)	-0.18 (0.23)
On-reserve*Fed (\$)	0.12*** (0.03)	0.02*** (0.00)	0.22*** (0.06)	0.23 (0.15)
F-test Fed fund			76.83	3.02
F-test on-reserve*Fed			1,277.87	3.33
Kleibergen-Paap F-Stat			17.02	1.28
<i>Panel C: Provincial funding</i>				
Prov funding	-0.03 (0.02)	-0.01*** (0.00)	-0.04 (0.02)	-0.05 (0.05)
On-reserve*Prov (\$)	0.02 (0.01)	0.00 (0.00)	0.02 (0.02)	0.18 (0.16)
F-test Prov fund			213.57	10.68
F-test on-reserve*Prov			242.61	2.44
Kleibergen-Paap F-Stat			16.17	1.05
<i>Panel D: Municipal funding</i>				
Mun funding	-0.05 (0.04)	-0.04*** (0.01)	-0.22* (0.13)	-0.51** (0.23)
On-reserve*Mun (\$)	-0.03 (0.05)	0.06 (0.04)	0.14 (0.26)	3.37 (3.05)
F-test Mun fund			19.59	11.23
F-test on-reserve*Mun			14.63	3.30
Kleibergen-Paap F-Stat			14.67	2.57
Controls	Yes		Yes	Yes
Province fixed effects	Yes		Yes	Yes
Year fixed effects	Yes		Yes	Yes
Observations	3,257	3,257	2,949	2,949

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. In the 2SLS regressions, the Atlantic provinces have been grouped together and the three territories as well. This was necessary because the covariance matrix of moment conditions requires to be full rank. The tobit model is censored at zero at the lower bound and the number of observations reported refer to the uncensored ones. Robust standard errors in parentheses are clustered at the postal code level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 3.14: Positive gifts from other charities regressions for Indigenous charities off-reserve and on-reserve

	Gifts from other charities (\$) (1)	Gifts from other charities (\$) (2)	Gifts from other charities (\$) (3)	Gifts from other charities (\$) (4)
	OLS	TOBIT	IV Cumulative funding	IV Years of funding
<i>Panel A: Government funding</i>				
Gov funding	-0.03 (0.02)	-0.02*** (0.00)	-0.04 (0.03)	-0.14* (0.08)
On-reserve*Gov (\$)	0.03 (0.02)	-0.01 (0.01)	0.02 (0.02)	0.04 (0.04)
F-test Gov fund			73.50	5.66
F-test on-reserve*Gov			1,153.59	5.20
Kleibergen-Paap F-Stat			84.75	4.97
Observations	2,776	2,776	2,586	2,586
<i>Panel B: Federal funding</i>				
Fed funding	-0.07 (0.04)	-0.08*** (0.01)	-0.12* (0.07)	-0.12 (0.19)
On-reserve*Fed (\$)	0.09** (0.03)	0.08*** (0.01)	0.12*** (0.04)	0.12 (0.14)
F-test Fed fund			97.96	4.26
F-test on-reserve*Fed			1,144.06	2.54
Kleibergen-Paap F-Stat			21.44	5.29
<i>Panel C: Provincial funding</i>				
Prov funding	-0.03 (0.02)	-0.01*** (0.00)	-0.03 (0.02)	-0.19** (0.08)
On-reserve*Prov (\$)	-0.09* (0.05)	-0.10*** (0.03)	-0.12* (0.06)	-0.16 (0.19)
F-test Prov fund			96.25	6.44
F-test on-reserve*Prov			48.88	8.63
Kleibergen-Paap F-Stat			48.60	6.25
<i>Panel D: Municipal funding</i>				
Mun funding	-0.01 (0.06)	0.02 (0.02)	0.03 (0.13)	-0.72 (0.47)
On-reserve*Mun (\$)	-0.25 (0.22)	-0.10 (0.09)	-0.72 (0.81)	-0.59 (1.14)
F-test Mun fund			40.14	4.85
F-test on-reserve*Mun			3.36	4.53
Kleibergen-Paap F-Stat			3.12	5.04
Controls	Yes		Yes	Yes
Province fixed effects	Yes		Yes	Yes
Year fixed effects	Yes		Yes	Yes
Observations	2,297	2,297	2,118	2,118

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. In the 2SLS regressions, the Atlantic provinces have been grouped together and the three territories as well. 4 observations of the variable Other charities have been deleted. This was necessary because the covariance matrix of moment conditions requires to be full rank. The tobit model is censored at zero at the lower bound and the number of observations reported refer to the uncensored ones. Robust standard errors in parentheses are clustered at the postal code level.

Significance: * p<.10, ** p<.05, *** p<.01

Table 3.15: IV Regressions by program for Non-Indigenous and Indigenous charities

	Full sample		Sample Schedule 6					
	(1)		(2)		(3)		(4)	
	GvtFund	GvtFund *Ind	Fed Fund	FedFund *Ind	Prov Fund	ProvFund *Ind	MunFund	MunFund *Ind
Panel A: Private Donations (\$)								
Benefits to community	-0.15** (0.06)	-0.09* (0.05)	-0.14* (0.08)	-0.10 (0.10)	0.01 (0.04)	-0.18*** (0.05)	-0.15** (0.07)	-0.96 (0.72)
Observations	171,945		108,863		108,863		108,863	
Education	0.01 (0.01)	-0.03*** (0.01)	0.18*** (0.03)	-0.21*** (0.05)	0.01* (0.01)	-0.03*** (0.01)	-0.01** (0.01)	-2.72 (3.39)
Observations	179,877		121,555		121,555		121,555	
Health	-0.00 (0.00)	-0.05** (0.02)	0.41 (0.37)	-0.59* (0.35)	-0.00 (0.00)	-0.05** (0.02)	-0.03 (0.02)	-2.14** (0.88)
Observations	75,489		57,265		57,265		57,265	
Religion	-0.37*** (0.13)	-0.16 (0.14)	-1.61** (0.63)	-0.25 (0.66)	-0.35*** (0.12)	-0.29** (0.13)	-0.95** (0.39)	-2.34 (2.99)
Observations	442,811		296,376		296,376		296,376	
Welfare	-0.22*** (0.08)	0.09 (0.06)	0.17 (0.69)	-0.35 (0.66)	-0.21** (0.09)	0.09 (0.07)	-0.29*** (0.08)	-0.07 (0.09)
Observations	234,846		176,603		176,603		176,603	
Other	-1.22*** (0.26)	-2.26*** (0.44)	-2.59*** (0.64)	-0.25 (0.66)	-1.36*** (0.32)	-15.77 (22.82)	-0.28*** (0.04)	1,087.33 (964.14)
Observations	14,664		8,112		8,112		8,112	
Panel B: Fundraising (\$)								
Benefits to community	-0.02* (0.01)	-0.03** (0.01)	-0.01 (0.01)	-0.04** (0.02)	-0.02*** (0.01)	-0.03*** (0.01)	-0.02 (0.01)	-0.17 (0.16)
Observations	171,945		108,863		108,863		108,863	
Education	0.01* (0.00)	-0.00 (0.01)	0.05** (0.02)	-0.03 (0.04)	0.01** (0.00)	-0.01*** (0.00)	0.01 (0.01)	-0.72 (0.84)
Observations	179,877		121,555		121,555		121,555	
Health	-0.00 (0.00)	-0.02** (0.01)	0.09 (0.13)	-0.17 (0.13)	-0.00 (0.00)	-0.02** (0.01)	-0.01 (0.02)	-1.10*** (0.42)
Observations	75,489		57,265		57,265		57,265	
Religion	0.00 (0.00)	0.01 (0.02)	0.03*** (0.01)	-0.05* (0.03)	0.00 (0.00)	0.02 (0.03)	0.01** (0.01)	-0.07 (0.09)
Observations	442,811		296,376		296,376		296,376	
Welfare	-0.01 (0.01)	0.00 (0.01)	-0.05 (0.05)	0.03 (0.05)	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.04*** (0.01)
Observations	234,846		176,603		176,603		176,603	
Other	-0.12*** (0.02)	-0.29* (0.15)	-0.28*** (0.05)	-0.07 (0.18)	-0.10*** (0.02)	4.29 (4.39)	-0.08*** (0.01)	331.40 (299.47)
Observations	14,664		8,112		8,112		8,112	
Panel C: Gifts from other charities (\$)								
Benefits to community	-0.08 (0.07)	-0.02 (0.03)	-0.09 (0.07)	-0.00 (0.07)	-0.01 (0.01)	-0.05*** (0.02)	-0.06 (0.06)	0.10 (0.35)
Observations	171,945		108,863		108,863		108,863	
Education	0.01 (0.00)	-0.02*** (0.00)	0.09*** (0.02)	-0.12*** (0.02)	0.01* (0.00)	-0.02*** (0.00)	-0.00** (0.00)	-1.22 (1.62)
Observations	179,877		121,555		121,555		121,555	
Health	0.00* (0.00)	-0.02** (0.01)	0.36 (0.23)	-0.46** (0.22)	0.00* (0.00)	-0.03* (0.01)	0.09 (0.16)	-1.40** (0.55)
Observations	75,489		57,265		57,265		57,265	
Religion	-0.36* (0.21)	0.18 (0.20)	-1.64* (0.99)	1.01 (0.94)	-0.32* (0.19)	0.09 (0.21)	-0.95* (0.56)	0.13 (1.11)
Observations	442,811		296,376		296,376		296,376	
Welfare	-0.02** (0.01)	-0.01 (0.01)	-0.01 (0.06)	-0.04 (0.06)	-0.02** (0.01)	-0.01 (0.01)	-0.04** (0.02)	-0.02 (0.03)
Observations	234,846		176,603		176,603		176,603	
Other	-0.02* (0.01)	-0.11 (0.12)	0.05 (0.05)	-0.12 (0.14)	-0.06*** (0.02)	5.21 (4.17)	-0.05*** (0.01)	176.28 (176.49)
Observations	14,664		8,112		8,112		8,112	

The instrument used in this table is the “cumulative amount of government funding”. For the regressions in gray, the Kleibergen-Paap F-Statistic is below 10. Robust standard errors in parentheses are clustered at the postal code level, except for the sample of other charities. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.16: IV Regressions by program for Indigenous charities off-reserve and on-reserve

	Full sample		Sample Schedule 6					
	(1)		(2)		(3)		(4)	
	GvtFund	GvtFund *On-res	Fed Fund	FedFund *On-res	Prov Fund	ProvFund *On-res	MunFund	MunFund *On-res
Panel A: Private Donations (\$)								
Benefits to community	-0.23** (0.10)	-0.03 (0.04)	-0.26** (0.12)	0.01 (0.06)	-0.19** (0.09)	-0.08 (0.08)	-0.53* (0.29)	-1.91 (1.34)
Observations	2,285		1,963		1,963		1,963	
Education	-0.04** (0.01)	0.03** (0.01)	0.02* (0.01)	0.09* (0.05)	-0.06*** (0.02)	0.05*** (0.01)	-0.34 (1.21)	4.06 (13.57)
Observations	1,693		1,292		1,292		1,292	
Health	-0.00*** (0.00)	-0.01*** (0.00)	-0.06 (0.28)	0.05 (0.33)	-0.00*** (0.00)	-0.00 (0.00)	0.21** (0.09)	-0.09 (0.30)
Observations	462		401		401		401	
Religion	-0.15*** (0.03)	-0.77*** (0.16)	-0.49*** (0.09)	1.95 (5.55)	-0.17*** (0.04)	-0.51*** (0.17)	-3.18*** (0.94)	2.23** (0.96) 0.02
Observations	2,826		1,527		1,527		15,27	
Welfare	-0.02*** (0.01)	0.00 (0.00)	-0.03*** (0.01)	0.00 (0.01)	-0.02*** (0.01)	-0.00 (0.00)	-0.07*** (0.02)	0.01 (0.03)
Observations	2,755		2,399		2,399		2,399	
Panel B: Fundraising (\$)								
Benefits to community	-0.00** (0.00)	-0.00 (0.00)	-0.01*** (0.00)	0.01 (0.01)	-0.00 (0.00)	-0.00 (0.01)	0.04 (0.05)	-0.08 (0.05)
Observations	2,285		1,963		1,963		1,963	
Education	-0.02** (0.01)	0.02** (0.01)	0.00 (0.01)	0.08*** (0.02)	0.00 (0.01)	-0.01 (0.01)	-0.18 (0.96)	3.15 (10.78)
Observations	1,693		1,292		1,292		1,292	
Health	-0.01*** (0.00)	0.02** (0.01)	-0.12 (0.53)	0.13 (0.63)	-0.00*** (0.00)	0.00 (0.00)	-0.02 (0.03)	0.03 (0.21)
Observations	462		401		401		401	
Religion	0.02** (0.01)	0.05 (0.06)	0.01 (0.02)	-0.21 (1.02)	0.04** (0.01)	-0.12*** (0.04)	-0.14** (0.05)	0.20** (0.10)
Observations	2,826		1,527		1,527		15,27	
Welfare	-0.00*** (0.00)	0.00* (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00*** (0.00)	0.00** (0.00)	-0.03*** (0.01)	0.01 (0.01)
Observations	2,755		2,399		2,399		2,399	
Panel C: Gifts from other charities (\$)								
Benefits to community	-0.01 (0.01)	-0.06*** (0.01)	-0.02 (0.02)	-0.08*** (0.02)	-0.01 (0.01)	-0.08*** (0.02)	0.41 (0.27)	-0.55* (0.29)
Observations	2,285		1,963		1,963		1,963	
Education	-0.02*** (0.01)	0.01*** (0.00)	-0.00 (0.01)	0.02** (0.01)	-0.02*** (0.01)	0.02*** (0.00)	0.16 (0.42)	1.07 (4.49)
Observations	1,693		1,292		1,292		1,292	
Health	-0.01*** (0.00)	0.01 (0.01)	-0.11 (0.51)	0.11 (0.61)	-0.01** (0.00)	0.01* (0.00)	0.05 (0.09)	-0.06 (0.35)
Observations	462		401		401		401	
Religion	-0.42*** (0.11)	0.02 (0.13)	-1.38*** (0.46)	11.20 (8.87)	-0.57*** (0.14)	-0.25 (0.21)	-3.12*** (1.21)	3.11** (1.24)
Observations	2,826		1,527		1,527		15,27	
Welfare	-0.00 (0.00)	-0.00*** (0.00)	-0.01*** (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00*** (0.00)	0.02* (0.01)	-0.06*** (0.02)
Observations	2,755		2,399		2,399		2,399	

The instrument used in this table is the “cumulative amount of government funding”, which is always constructed based on the level of government funding used in the regression. As other charities on-reserve do not get any government funding, these are not reported. For the regressions in gray, the Kleibergen-Paap F-Statistic is below 10. Robust standard errors in parentheses are not clustered. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.17: Non-Indigenous and Indigenous charities including other sources of charitable revenue

	Private donations (\$)	Fundraising (\$)	Gifts from other charities (\$)		Private donations (\$)	Fundraising (\$)	Gifts from other charities (\$)
	(1)	(2)	(3)		(3)	(4)	(5)
	IV	IV	IV		IV	IV	IV
	Cumulative funding	Cumulative funding	Cumulative funding		Cumulative funding	Cumulative funding	Cumulative funding
<i>Panel A: Government funding</i>				<i>Panel B: Federal funding</i>			
Gov funding	-0.00** (0.00)	0.00 (0.00)	0.00** (0.00)	Fed funding	0.12*** (0.03)	0.04* (0.02)	0.06*** (0.02)
Ind*Gov (\$)	-0.06*** (0.01)	-0.01*** (0.00)	-0.03*** (0.00)	Ind*Fed (\$)	-0.26*** (0.04)	-0.04* (0.02)	-0.12*** (0.02)
Private donations		0.05*** (0.02)	0.04*** (0.01)	Private donations		0.05*** (0.02)	0.03** (0.01)
Fundraising	0.70*** (0.11)		0.05 (0.04)	Fundraising	0.66*** (0.12)		0.04 (0.04)
Gifts from other charities	0.07* (0.04)	0.00 (0.01)		Gifts from other charities	0.05 (0.03)	0.00 (0.00)	
F-stat Gov fund	215.06	186.26	221.47	F-stat Fed fund	393.83	405.51	396.32
F-stat abo*Gov fund	651.82	651.60	651.64	F-stat abo*Fed fund	172.23	168.70	170.54
K-P F-Stat	17.04	16.91	16.89	K-P F-Stat	260.32	277.12	267.67
Observations	1,119,632	1,119,632	1,119,632	Observations	768,774	768,774	768,774
<i>Panel C: Provincial funding</i>				<i>Panel D: Municipal funding</i>			
Prov funding	-0.00* (0.00)	0.00 (0.00)	0.00** (0.00)	Mun funding	-0.03** (0.01)	0.01 (0.01)	-0.01** (0.00)
Ind*Prov (\$)	-0.05*** (0.01)	-0.01*** (0.00)	-0.02*** (0.00)	Ind*Mun (\$)	-0.37*** (0.09)	-0.06*** (0.02)	-0.09** (0.04)
Private donations		0.05*** (0.02)	0.04*** (0.01)	Private donations		0.05*** (0.02)	0.04*** (0.01)
Fundraising	0.69*** (0.11)		0.06 (0.04)	Fundraising	0.71*** (0.11)		0.06 (0.04)
Gifts from other charities	0.07* (0.04)	0.01 (0.01)		Gifts from other charities	0.06 (0.04)	0.01 (0.01)	
F-stat Prov fund	300.64	273.23	335.90	F-stat Mun fund	54.92	48.85	51.35
F-stat abo* Prov fund	759.83	759.27	759.24	F-stat abo* Mun fund	57.49	57.60	58.29
K-P F-Stat	18.34	18.18	18.21	K-P F-Stat	20.79	20.49	20.87
Controls	Yes	Yes	Yes	Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Year fixed effects	Yes	Yes	Yes
Observations	768,774	768,774	768,774	Observations	768,774	768,774	768,774

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.18: Indigenous charities off-reserve and on-reserve including other sources of charitable revenue

	Private donations (\$)	Fundraising (\$)	Gifts from other charities (\$)		Private donations (\$)	Fundraising (\$)	Gifts from other charities (\$)
	(1)	(2)	(3)		(3)	(4)	(5)
	IV	IV	IV		IV	IV	IV
	Cumulative funding	Cumulative funding	Cumulative funding		Cumulative funding	Cumulative funding	Cumulative funding
<i>Panel A: Government funding</i>				<i>Panel B: Federal funding</i>			
Gov funding	-0.03* (0.02)	-0.00 (0.00)	-0.01 (0.01)	Fed funding	-0.07 (0.05)	-0.00 (0.00)	-0.03* (0.01)
On-reserve*Gov (\$)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)	On-reserve*Fed (\$)	0.02 (0.04)	0.03 (0.03)	0.02 (0.01)
Private donations		0.01 (0.01)	0.01 (0.01)	Private donations		0.01 (0.01)	0.01 (0.01)
Fundraising	0.23** (0.09)		0.09 (0.07)	Fundraising	0.31*** (0.09)		0.10 (0.07)
Gifts from other charities	0.09 (0.11)	0.04 (0.04)		Gifts from other charities	0.10 (0.11)	0.04 (0.04)	
F-stat Gov fund	368.85	364.10	360.92	F-stat Fed fund	135.22	141.25	141.00
F-stat abo*Gov fund	366.04	363.68	364.69	F-stat abo*Fed fund	254.45	259.64	255.15
K-P F-Stat	296.34	295.63	288.47	K-P F-Stat	54.62	54.24	55.34
Observations	10,111	10,111	10,111	Observations	7,641	7,641	7,641
<i>Panel C: Provincial funding</i>				<i>Panel D: Municipal funding</i>			
Prov funding	-0.02** (0.01)	-0.00 (0.00)	-0.00 (0.00)	Mun funding	-0.09** (0.04)	-0.03** (0.02)	0.02 (0.04)
On-reserve*Prov (\$)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)	On-reserve*Mun (\$)	-0.31 (0.46)	-0.05 (0.09)	-0.09 (0.08)
Private donations		0.01 (0.01)	0.01 (0.01)	Private donations		0.01 (0.01)	0.01 (0.01)
Fundraising	0.24*** (0.09)		0.09 (0.07)	Fundraising	0.27*** (0.09)		0.10 (0.07)
Gifts from other charities	0.11 (0.10)	0.04 (0.04)		Gifts from other charities	0.13 (0.10)	0.04 (0.04)	
F-stat Prov fund	662.26	656.34	650.93	F-stat Mun fund	79.55	79.33	79.49
F-stat abo* Prov fund	366.42	365.64	366.21	F-stat abo* Mun fund	0.95	0.89	1.03
K-P F-Stat	641.37	634.33	626.23	K-P F-Stat	0.76	0.76	0.76
Controls	Yes	Yes	Yes	Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Year fixed effects	Yes	Yes	Yes
Observations	7,641	7,641	7,641	Observations	7,641	7,641	7,641

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3.19: Robustness check private donation for Non-Indigenous and Indigenous charities

	Private donations including other levels of gvt funding	Private donations with only positive gvt funding	Private donations 2008-2017	Private donations fundraising & gifts other charities combined	Private donations charity has observations in each year
	(1)	(2)	(3)	(4)	(5)
	IV Cumulative funding	IV Cumulative funding	IV Cumulative funding	IV Cumulative funding	IV Cumulative funding
<i>Panel A: Government funding</i>					
Gov funding	-	-0.00	-0.00*	0.00	-0.00
		(0.00)	(0.00)	(0.00)	(0.00)
Ind*Gov (\$)	-	-0.03***	-0.07***	-0.10***	-0.07***
		(0.00)	(0.01)	(0.01)	(0.01)
F-stat Gov fund		185.25	273.67	258.81	218.63
F-stat abo*Gov fund		611.86	678.28	651.88	640.90
Kleibergen-Paap F-Stat		16.71	16.66	16.97	16.72
Observations	-	396,827	826,880	1,119,632	779,324
<i>Panel B: Federal funding</i>					
Fed funding	0.15***	0.16***	0.15***	0.25***	0.16***
	(0.04)	(0.03)	(0.03)	(0.06)	(0.03)
Ind*Fed (\$)	-0.30***	-0.23***	-0.30***	-0.48***	-0.27***
	(0.04)	(0.04)	(0.04)	(0.07)	(0.04)
F-stat Gov fund	400.85	339.92	423.79	397.75	351.20
F-stat abo*Gov fund	175.14	151.33	138.09	175.64	134.41
Kleibergen-Paap F-Stat	267.64	253.41	315.51	264.76	258.13
Observations	768,774	167,770	467,123	768,774	565,070
<i>Panel C: Provincial funding</i>					
Prov funding	-0.01*	-0.00	-0.00*	-0.00	-0.00*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ind*Prov (\$)	-0.07***	-0.02***	-0.06***	-0.10***	-0.06***
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
F-stat Gov fund	150.03	148.63	293.29	368.43	472.95
F-stat abo*Gov fund	807.70	624.16	772.31	759.67	1,095.26
Kleibergen-Paap F-Stat	17.97	18.07	18.56	18.31	18.13
Observations	768,774	240,163	467,123	768,774	565,070
<i>Panel D: Municipal funding</i>					
Mun funding	-0.01*	-0.02*	-0.02**	-0.02***	-0.02**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Ind*Mun (\$)	-0.43***	-0.15***	-0.40***	-0.63***	-0.37***
	(0.10)	(0.03)	(0.09)	(0.14)	(0.09)
F-stat Gov fund	56.20	67.63	46.04	53.62	52.78
F-stat abo*Gov fund	55.06	96.11	52.28	57.48	54.55
Kleibergen-Paap F-Stat	21.77	81.24	12.33	20.44	21.21
Other levels of gvt funding	Yes	No	No	No	No
Controls	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	768,774	133,624	467,123	768,774	565,070

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The dependent variable in the column 4 is the amount of private donations, fundraising and gifts from other charities combined. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.20: Robustness check private donation for Non-Indigenous and Indigenous charities

	Private donations excluding religion	Private donations excluding education	Private donations Excluding health	Private donations excluding edu- cation & health	Private donations excluding other
	(1)	(2)	(3)	(4)	(5)
	IV	IV	IV	IV	IV
	Cumulative funding	Cumulative funding	Cumulative funding	Cumulative funding	Cumulative funding
<i>Panel A: Government funding</i>					
Gov funding	-0.00*	-0.01*	-0.01	-0.21***	-0.00*
	(0.00)	(0.00)	(0.01)	(0.07)	(0.00)
Ind*Gov (\$)	-0.06***	-0.08***	-0.07***	0.07	-0.07***
	(0.01)	(0.01)	(0.01)	(0.05)	(0.01)
F-stat Gov fund	234.39	259.14	737.74	390.31	257.50
F-stat abo*Gov fund	629.21	507.76	637.29	497.38	651.57
Kleibergen-Paap F-Stat	16.84	18.13	565.29	99.21	16.96
Observations	676,821	939,755	1,044,143	864,266	1,104,968
<i>Panel B: Federal funding</i>					
Fed funding	0.15***	0.10	0.12***	-0.18**	0.15***
	(0.03)	(0.15)	(0.04)	(0.09)	(0.03)
Ind*Fed (\$)	-0.29***	-0.30**	-0.28***	-0.05	-0.30***
	(0.04)	(0.14)	(0.04)	(0.09)	(0.04)
F-stat Gov fund	389.19	276.35	380.48	615.67	397.61
F-stat abo*Gov fund	168.04	231.50	166.93	238.67	175.55
Kleibergen-Paap F-Stat	263.65	78.93	346.58	410.78	264.73
<i>Panel C: Provincial funding</i>					
Prov funding	-0.00*	-0.01*	-0.02*	-0.18***	-0.00*
	(0.00)	(0.00)	(0.01)	(0.06)	(0.00)
Ind*Prov (\$)	-0.06***	-0.08***	-0.06***	0.06	-0.06***
	(0.01)	(0.01)	(0.01)	(0.05)	(0.01)
F-stat Gov fund	286.40	442.35	377.41	558.90	366.45
F-stat abo*Gov fund	743.48	857.49	660.33	656.71	759.81
Kleibergen-Paap F-Stat	18.21	18.18	49.16	179.43	18.31
<i>Panel D: Municipal funding</i>					
Mun funding	-0.02**	-0.10***	-0.03**	-0.23***	-0.02**
	(0.01)	(0.03)	(0.01)	(0.05)	(0.01)
Ind*Mun (\$)	-0.38***	-0.36***	-0.42***	-0.25***	-0.43***
	(0.09)	(0.08)	(0.10)	(0.09)	(0.10)
F-stat Gov fund	58.10	91.55	54.71	1767.83	53.66
F-stat abo*Gov fund	55.07	95.85	57.05	91.78	57.40
Kleibergen-Paap F-Stat	20.45	27.60	20.44	85.12	20.44
Controls	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	472,398	647,219	711,509	589,954	760,662

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.21: Robustness check private donation for Indigenous charities off-reserve and on-reserve

	Private donations including other levels of gvt funding	Private donations with only positive gvt funding	Private donations 2008-2017	Private donations fundraising & gifts other cha- rities combined	Private donations charity has observations in each year
	(1)	(2)	(3)	(4)	(5)
	IV Cumulative funding	IV Cumulative funding	IV Cumulative funding	IV Cumulative funding	IV Cumulative funding
<i>Panel A: Government funding</i>					
Gov funding	-	-0.02**	-0.03*	-0.04**	-0.02*
	-	(0.01)	(0.02)	(0.02)	(0.01)
On-reserve *Gov (\$)	-	0.01	0.01	0.02	0.01
	-	(0.01)	(0.01)	(0.01)	(0.01)
F-stat Gov fund		393.10	477.20	375.29	255.61
F-stat abo*Gov fund		360.88	388.94	365.59	373.53
Kleibergen-Paap F-Stat		324.40	413.96	301.80	114.38
Observations	-	5,726	7,498	10,111	6,370
<i>Panel B: Federal funding</i>					
Fed funding	-0.08	-0.04	-0.08	-0.10**	-0.01
	(0.05)	(0.03)	(0.05)	(0.05)	(0.01)
On-reserve *Fed (\$)	0.02	0.02	0.01	0.08	0.05
	(0.05)	(0.06)	(0.07)	(0.09)	(0.04)
F-stat Gov fund	112.08	110.40	144.53	135.01	144.77
F-stat abo*Gov fund	250.81	390.05	204.59	259.66	354.15
Kleibergen-Paap F-Stat	47.10	42.67	50.88	55.54	52.44
Observations	7,641	4,084	4,970	7,641	5,071
<i>Panel C: Provincial funding</i>					
Prov funding	-0.02**	-0.01**	-0.03**	-0.03***	-0.02*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
On-reserve *Prov (\$)	0.00	0.00	0.01	0.01	0.01
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
F-stat Gov fund	755.54	528.60	1027.73	667.19	749.14
F-stat abo*Gov fund	374.74	335.46	436.42	364.31	552.46
Kleibergen-Paap F-Stat	782.61	499.89	1024.26	641.21	434.35
Observations	7,641	4,277	4,970	7,641	5,071
<i>Panel D: Municipal funding</i>					
Mun funding	-0.15**	-0.07*	-0.09**	-0.11*	-0.04**
	(0.07)	(0.04)	(0.04)	(0.06)	(0.02)
On-reserve *Mun (\$)	-0.38	-0.00	-0.35	-0.50	-0.13
	(0.58)	(0.06)	(0.47)	(0.64)	(0.21)
F-stat Gov fund	73.87	74.15	63.99	79.41	74.33
F-stat abo*Gov fund	2.23	7.57	2.04	0.87	0.77
Kleibergen-Paap F-Stat	0.74	7.30	1.06	0.76	0.66
Other levels of gvt funding	Yes	No	No	No	No
Controls	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	7,641	2,108	4,970	7,641	5,071

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The dependent variable in the column 4 is the amount of private donations, fundraising and gifts from other charities combined. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

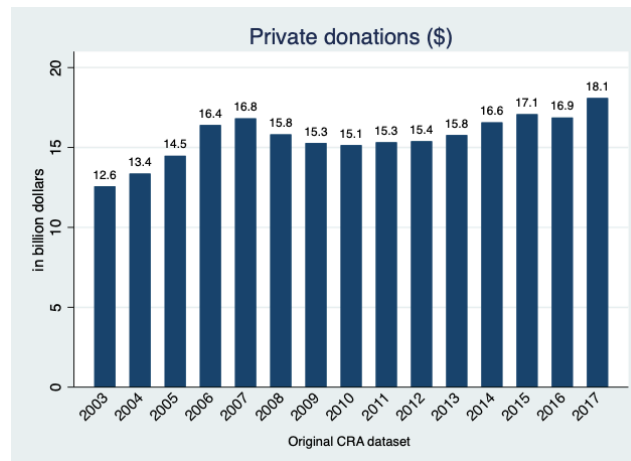
Table 3.22: Robustness check private donation for Indigenous charities off-reserve and on-reserve

	Private donations excluding religion	Private donations excluding education	Private donations excluding health	Private donations excluding edu- cation & health	Private donations excluding other
	(1)	(2)	(3)	(4)	(5)
	IV	IV	IV	IV	IV
	Cumulative funding	Cumulative funding	Cumulative funding	Cumulative funding	Cumulative funding
<i>Panel A: Government funding</i>					
Gov funding	-0.03*	-0.03*	-0.04*	-0.04*	-0.03*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
On-reserve *Gov (\$)	0.01	-0.00	0.01	0.00	0.01
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
F-stat Gov fund	390.23	926.80	328.58	761.60	375.50
F-stat abo*Gov fund	345.47	36,489.93	360.29	32,653.19	366.32
Kleibergen-Paap F-Stat	322.35	348.20	246.84	295.51	301.87
Observations	7,285	8,418	9,649	7,956	10,021
<i>Panel B: Federal funding</i>					
Fed funding	-0.07	-0.09*	-0.08	-0.10	-0.07
	(0.05)	(0.05)	(0.05)	(0.06)	(0.05)
On-reserve *Fed (\$)	0.02	-0.03	0.03	-0.03	0.03
	(0.06)	(0.05)	(0.05)	(0.05)	(0.05)
F-stat Gov fund	135.10	568.30	123.13	516.00	134.86
F-stat abo*Gov fund	272.24	2,806.99	240.07	2,810.26	259.02
Kleibergen-Paap F-Stat	54.20	90.23	57.00	101.18	55.57
<i>Panel C: Provincial funding</i>					
Prov funding	-0.02**	-0.03*	-0.03**	-0.03*	-0.02**
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
On-reserve *Prov (\$)	0.01	-0.00	0.01	0.00	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
F-stat Gov fund	656.39	1,829.95	564.74	1,547.74	667.81
F-stat abo*Gov fund	346.88	21,023.76	365.82	20,829.95	364.41
Kleibergen-Paap F-Stat	632.10	479.43	527.18	349.97	642.06
<i>Panel D: Municipal funding</i>					
Mun funding	-0.09**	-0.09**	-0.10**	-0.10**	-0.09**
	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)
On-reserve *Mun (\$)	-0.35	-0.13	-0.36	-0.14	-0.34
	(0.50)	(0.26)	(0.51)	(0.27)	(0.49)
F-stat Gov fund	79.57	86.83	78.10	86.22	79.42
F-stat abo*Gov fund	1.13	7.73	1.04	7.74	0.87
Kleibergen-Paap F-Stat	0.71	5.97	0.75	6.89	0.76
Controls	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	6,114	6,349	7,240	5,948	7,582

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The dependent variable in the column 4 is the amount of private donations, fundraising and gifts from other charities combined. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * $p < .10$, ** $p < .05$, *** $p < .01$

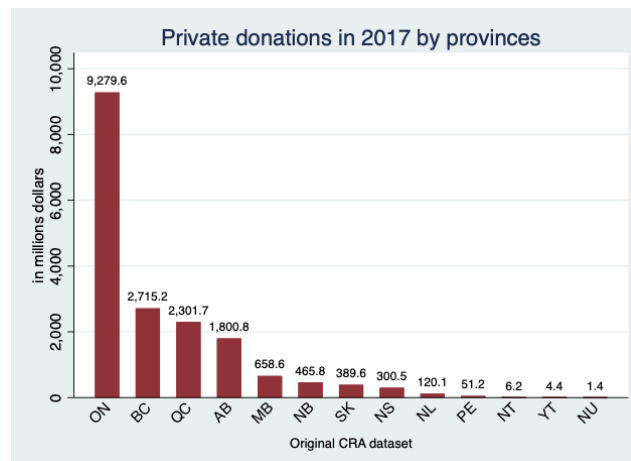
Appendix 3A: Figures and tables

Figure 3.1A: Total private donations by year



Source: CRA - T3010

Figure 3.2A: Private donations by provinces for the year 2017



Source: CRA - T3010

Table 3.3A: Summary statistics and difference in means for charities by program

	Mean (Std. Dev.) - percentage			Mean (Std. Dev.) - percentage			
	Program sample	Subsample A	Subsample B	Subsample C	Subsample D		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Benefits to Community							
	Benefits sample n=186,502	Non-Indigenous charities n=184,024	Indigenous charities n=2,478	Difference in means (A-B)	Indigenous charities off-reserve n=1,724	Indigenous charities on-reserve n=754	Difference in means (C-D)
Private donations (Y/N)	0.71	0.71	0.50 (1)	0.21*** (0.009)	0.55	0.39	0.16*** (0.022)
Fundraising (Y/N)	0.47	0.47	0.44	0.03*** (0.010)	0.49	0.33	0.16*** (0.021)
Gifts from other charities (Y/N)	0.22	0.22	0.23	-0.01 (0.008)	0.27	0.12	0.15*** (0.018)
Private donations (\$)	71,413 (1,493,788)	71,165 (1,493,584)	89,791 (1,509,031)	-18,626 (30,209)	52,753 (577,082)	174,478 (2,591,997)	-121,725* (65,854)
Fundraising (\$)	26,945 (368,652)	27,000 (370,985)	22,797 (87,728)	4,203 (7,455)	27,361 (97,829)	12,359 (57,103)	15,002*** (3,819)
Gifts from other charities (\$)	30,494 (855,522)	30,415 (860,797)	36,373 (244,013)	-5,958 (17,301)	36,577 (176,433)	35,908 (353,039)	668 (10,656)
Gov funding (Y/N)	0.56	0.56	0.77	-0.21*** (0.010)	0.85	0.59	0.26*** (0.018)
Fed funding (Y/N)	0.24	0.24	0.60	-0.36*** (0.009)	0.70	0.36	0.35*** (0.020)
Prov funding (Y/N)	0.35	0.35	0.63	-0.28*** (0.010)	0.72	0.42	0.30*** (0.020)
Mun funding (Y/N)	0.27	0.27	0.28	-0.01 (0.009)	0.32	0.18	0.14*** (0.019)
Gov funding (\$)	342,975 (3,334,551)	333,465 (3,346,969)	1,049,230 (2,110,390)	-715,765*** (67,415)	1,338,914 (2,432,412)	386,876 (693,467)	952,038*** (90,153)
Fed funding (\$)	61,175 (1,835,546)	55,383 (1,841,262)	491,257 (1,273,413)	-435873.34*** (37,107)	624,795 (1,482,693)	185,925 (411,995)	438,870*** (54,906)
Prov funding (\$)	168,441 (1,621,314)	163,972 (1,625,330)	500,312 (1,244,710)	-336,340*** (32,779)	648,434 (1,441,799)	161,637 (418,004)	486,797*** (53,468)
Mun funding (\$)	112,070 (2,111,546)	112,808 (2,125,549)	57,335 (222,204)	55,472 (42,702)	65,363 (249,542)	38,977 (139,450)	26,386*** (9,689)
Panel B: Education							
	Education sample n=195,556	Non-Indigenous charities n=193,703	Indigenous charities n=1,853	Difference in means (A-B)	Indigenous charities off-reserve n=880	Indigenous charities on-reserve n=973	Difference in means (C-D)
Private donations (Y/N)	0.68	0.68	0.40	0.28*** (0.011)	0.51	0.31	0.20*** (0.022)
Fundraising (Y/N)	0.43	0.43	0.30	0.13*** (0.012)	0.34	0.26	0.08*** (0.021)
Gifts from other charities (Y/N)	0.23	0.23	0.17	0.06*** (0.010)	0.20	0.14	0.06*** (0.017)
Private donations (\$)	169,673 (1,784,904)	170,919 (1,793,124)	39,466 (307,511)	131,452*** (41,661)	27,880 (116,052)	49,945 (409,590)	-22,065 (14,300)
Fundraising (\$)	56,160 (805,007)	56,409 (808,548)	30,127 (224,042)	26,282 (18,790)	11,282 (36,273)	47,170 (306,328)	-35,888*** (10,391)

Gifts from other charities (\$)	59,866 (862,936)	60,232 (866,961)	21,626 (123,670)	38,606* (20,142)	22,027 (98,983)	21,264 (142,409)	762 (5,754)
Gov funding (Y/N)	0.46	0.46	0.63	-0.17*** (0.012)	0.68	0.59	0.10*** (0.022)
Fed funding (Y/N)	0.21	0.21	0.49	-0.28*** (0.009)	0.55	0.43	0.12*** (0.023)
Prov funding (Y/N)	0.32	0.32	0.47	-0.15*** (0.011)	0.51	0.42	0.09*** (0.023)
Mun funding (Y/N)	0.19	0.19	0.21	-0.02** (0.009)	0.28	0.15	0.13*** (0.019)
Gov funding (\$)	4,305,764 (47,241,107)	4,329,340 (47,462,715)	1,841,250 (5,633,191)	2,488,089** (1,102,669)	1,357,627 (3,002,675)	2,278,648 (7,204,547)	-921,021*** (261,251)
Fed funding (\$)	317,412 (5,695,157)	313,300 (5,718,179)	747,292 (2,187,181)	-433,991*** (132,930)	780,587 (2,059,324)	717,179 (2,297,340)	63,407 (101,764)
Prov funding (\$)	3,490,399 (35,744,885)	3,513,688 (35,911,304)	1,055,939 (5,016,007)	2,457,748*** (834,324)	541,135 (1,505,813)	1,521,538 (6,740,308)	-980,403*** (232,292)
Mun funding (\$)	497,194 (15,014,409)	501,594 (15,085,945)	37,269 (357,221)	464,324 (350,458)	34,892 (153,590)	39,419 (470,949)	-4,526 (16,622)

Panel C: Health

	Health sample n=82,063	Non-Indigenous charities n=81,562	Indigenous charities n=501	Difference in means (A-B)	Indigenous charities off-reserve n=308	Indigenous charities on-reserve n=193	Difference in means (C-D)
Private donations (Y/N)	0.74	0.74	0.53	0.20*** (0.020)	0.61	0.41	0.19*** (0.045)
Fundraising (Y/N)	0.45	0.45	0.33	0.12*** (0.022)	0.32	0.35	-0.03 (0.043)
Gifts from other charities (Y/N)	0.32	0.33	0.25	0.08*** (0.021)	0.37	0.05	0.32*** (0.037)
Private donations (\$)	362,892 (3,004,290)	364,956 (3,013,382)	26,790 (66,480)	338,166** (134,629)	37,087 (81,737)	10,357 (19,630)	26,729*** (5,990)
Fundraising (\$)	159,412 (1,893,918)	160,123 (1,899,635)	43,685 (206,259)	116,438 (84,873)	64,322 (260,291)	10,750 (26,153)	53,572*** (18,802)
Gifts from other charities (\$)	293,946 (4,751,508)	295,457 (4,766,008)	47,946 (224,060)	247,510 (212,932)	77,111 (281,941)	1,403 (9,612)	75,707*** (20,309)
Gov funding (Y/N)	0.44	0.43	0.81	-0.37*** (0.022)	0.89	0.67	0.22*** (0.035)
Fed funding (Y/N)	0.16	0.16	0.63	-0.47*** (0.016)	0.67	0.58	0.09** (0.044)
Prov funding (Y/N)	0.35	0.35	0.56	-0.22*** (0.021)	0.74	0.28	0.46*** (0.041)
Mun funding (Y/N)	0.12	0.12	0.29	-0.17*** (0.015)	0.39	0.15	0.24*** (0.040)
Gov funding (\$)	14,094,573 (158,148,634)	14,164,459 (158,630,220)	2,717,257 (6,726,080)	11,447,201 (7,087,157)	3,697,293 (8,366,861)	1,153,261 (1,370,860)	2,544,032*** (607,521)
Fed funding (\$)	204,046 (5,236,454)	201,142 (5,249,541)	676,727 (2,205,425)	-475,585** (234,660)	560,204 (2,640,835)	862,681 (1,207,772)	-302,477 (202,218)
Prov funding (\$)	13,699,403 (157,510,213)	13,771,409 (157,989,824)	1,977,056 (6,114,425)	11,794,352* (7,058,539)	3,049,579 (7,579,531)	265,465 (843,073)	2,784,113*** (547,898)
Mun funding (\$)	190,648 (6,144,255)	191,430 (6,163,053)	63,270 (268,686)	128,159 (275,348)	87,450 (315,225)	24,683 (163,347)	62,766** (24,530)

Panel D: Religion

	Religion sample n=480,674	Non-Indigenous charities n=477,599	Indigenous charities n=3,075	Difference in means (A-B)	Indigenous charities off-reserve n=948	Indigenous charities on-reserve n=2,127	Difference in means (C-D)
Private donations (Y/N)	0.93	0.93	0.87	0.06*** (0.005)	0.85	0.87	-0.02* (0.013)
Fundraising (Y/N)	0.30	0.30	0.28	0.01 (0.008)	0.20	0.32	-0.12*** (0.017)
Gifts from other charities (Y/N)	0.22	0.22	0.31	-0.09*** (0.008)	0.46	0.24	0.22*** (0.018)

Private donations (\$)	175,941 (1,118,027)	176,722 (1,121,525)	54,733 (136,734)	121,988*** (20,225)	79,603 (173,522)	43,648 (114,988)	35,954*** (5,300)
Fundraising (\$)	6,342 (48,808)	6,357 (48,947)	4,054 (16,332)	2,302*** (882)	4,546 (21,939)	3,835 (13,081)	711 (637)
Gifts from other charities (\$)	38,909 (2,085,506)	38,877 (2,092,071)	43,790 (299,165)	-4,913 (37,729)	131,813 (528,059)	4,559 (14,302)	127,254*** (11,456)
Gov funding (Y/N)	0.15	0.15	0.14	0.01 (0.006)	0.21	0.11	0.09*** (0.014)
Fed funding (Y/N)	0.10	0.10	0.07	0.02*** (0.005)	0.11	0.06	0.06*** (0.010)
Prov funding (Y/N)	0.05	0.05	0.05	0.00 (0.004)	0.09	0.03	0.06*** (0.008)
Mun funding (Y/N)	0.02	0.02	0.03	-0.01*** (0.002)	0.04	0.02	0.02** (0.007)
Gov funding (\$)	24,241 (963,282)	24,263 (966,249)	20,831 (196,746)	3,431 (17,427)	62,813 (349,624)	2,120 (19,612)	60,693*** (7,606)
Fed funding (\$)	4,127 (201,369)	4,125 (201,971)	4,475 (53,245)	-349 (3,643)	14,255 (95,198)	115 (837)	14,139*** (2,063)
Prov funding (\$)	15,846 (807,919)	15,855 (810,429)	14,344 (147,869)	1511 (14,616)	44,800 (262,944)	769 (14,822)	44,030*** (5,720)
Mun funding (\$)	4,188 (216,223)	4,204 (216,913)	1,803 (17,617)	2,400 (3,911)	3,364 (25,362)	1,107 (12,675)	2,256*** (686)

Panel E: Welfare

	Welfare sample n=255,702	Non-Indigenous charities n=252,712	Indigenous charities n=2,990	Difference in means (A-B)	Indigenous charities off-reserve n=2,269	Indigenous charities on-reserve n=721	Difference in means (C-D)
Private donations (Y/N)	0.67	0.67	0.58	0.09*** (0.009)	0.61	0.51	0.10*** (0.021)
Fundraising (Y/N)	0.34	0.34	0.38	-0.03*** (0.009)	0.38	0.36	0.02 (0.021)
Gifts from other charities (Y/N)	0.30	0.30	0.27	0.03*** (0.008)	0.31	0.14	0.17*** (0.019)
Private donations (\$)	264,367 (4,294,361)	266,808 (4,319,369)	58,110 (437,927)	208,697*** (78,997)	65,049 (374,506)	36,273 (594,743)	28,775 (18,717)
Fundraising (\$)	29,906 (491,406)	29,922 (493,967)	28,539 (167,891)	1,382 (9,039)	33,216 (190,694)	13,821 (46,723)	19,395*** (7,169)
Gifts from other charities (\$)	65,521 (1,000,269)	65,828 (1,006,047)	39,631 (141,233)	26,196 (18,400)	46,866 (142,145)	16,863 (135,929)	30,002*** (6,013)
Gov funding (Y/N)	0.48	0.48	0.75	-0.27*** (0.009)	0.78	0.64	0.14*** (0.018)
Fed funding (Y/N)	0.19	0.19	0.52	-0.34*** (0.007)	0.56	0.43	0.13*** (0.021)
Prov funding (Y/N)	0.37	0.37	0.62	-0.25*** (0.009)	0.66	0.51	0.15*** (0.021)
Mun funding (Y/N)	0.19	0.19	0.33	-0.14*** (0.007)	0.37	0.22	0.15*** (0.020)
Gov funding (\$)	715,567 (6,729,416)	698,980 (6,734,329)	2,117,417 (6,141,465)	-1,418,437*** (123,761)	2,203,341 (6,096,868)	1847,013 (6,276,365)	35,6328 (26,2519)
Fed funding (\$)	64,468 (964,300)	58,548 (943,912)	564,866 (1,991,498)	-506,317*** (17,710)	514,547 (1,750,931)	723,219 (2,602,777)	-208,671** (85,068)
Prov funding (\$)	598,916 (6,576,207)	589,336 (6,590,832)	1,408,631 (5,129,930)	-819,294*** (120,963)	1,518,268 (5,190,244)	1,063,601 (4,922,896)	454,667** (219,190)
Mun funding (\$)	51,492 (591,225)	50,401 (591,072)	143,706 (596,969)	-93,304*** (10,874)	170,319 (651,852)	59,953 (362,926)	110,366*** (25,445)

<i>Panel F: Other</i>							
	Other sample n=15,886	Non-Indigenous charities n=15,786	Indigenous charities n=100	Difference in means (A-B)	Indigenous charities off-reserve n=77	Indigenous charities on-reserve n=23	Difference in means (C-D)
Private donations (Y/N)	0.62	0.62	0.44	0.18*** (0.049)	0.39	0.61	-0.22* (0.117)
Fundraising (Y/N)	0.37	0.37	0.24	0.13*** (0.048)	0.21	0.35	-0.14 (0.102)
Gifts other char. (Y/N)	0.11	0.11	0.06	0.05 (0.031)	0.05	0.09	-0.04 (0.057)
Private donations (\$)	130,399 (2,153,788)	131,130 (2,160,579)	15,081 (30,624)	116,049 (216,064)	15,742 (33,778)	12,867 (16,499)	2,875 (7,308)
Fundraising (\$)	26,339 (144,146)	26,403 (144,465)	16,185 (78,575)	10,218 (14,460)	18,280 (89,167)	9,171 (15,813)	9,109 (18,743)
Gifts from other charities (\$)	8,817 (103,379)	8,785 (103,546)	13,809 (72,598)	-5,023 (10,370)	17,932 (82,405)	6 (23)	17,926 (17,243)
Gov funding (Y/N)	0.11	0.11	0.36	-0.25*** (0.031)	0.47	0.00	0.47*** (0.105)
Fed funding (Y/N)	0.05	0.04	0.34	-0.30*** (0.021)	0.44	0.00	0.44*** (0.105)
Prov funding (Y/N)	0.06	0.06	0.09	-0.03 (0.024)	0.12	0.00	0.12* (0.068)
Mun funding (Y/N)	0.03	0.03	0.02	0.01 (0.016)	0.03	0.00	0.03 (0.034)
Gov funding (\$)	29,948 (251,116)	29,227 (251,004)	143,744 (243,907)	-114,516*** (25,175)	186,680 (263,388)	0.00 (0)	186,680*** (55,116)
Fed funding (\$)	11,275 (122,523)	10,452 (120,944)	141,279 (243,467)	-130,826*** (12,247)	183,479 (263,383)	0.00 (0)	183,479*** (55,115)
Prov funding (\$)	15,263 (177,360)	15,347 (177,916)	2,006 (8,191)	13,341 (17,792)	2,606 (9,264)	0.00 (0)	2,606 (1,938)
Mun funding (\$)	3,235 (81,361)	3,252 (81,617)	458 (4,466)	2,794 (8,162)	595 (5,089)	0.00 (0)	595 (1,065)

The standard deviation (in parenthesis) is not provided for dichotomous variables. The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.4A: Summary statistics and difference in means conditional on private donations

	Mean (Std. Dev.) - percentage				Mean (Std. Dev.) - percentage		
	Full Sample				Indigenous sample		
	Full sample	Sample A	Sample B		Sample C	Sample D	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Full sample n=953,466	Non-Indigenous charities n=946,764	Indigenous charities n=6,702	Difference in means (A-B)	Indigenous charities off-reserve n=3,790	Indigenous charities on-reserve n=2,912	Difference in means (C-D)
Private donations (Y/N)	1.00	1.00	1.00	0.00 (0.000)	1.00	1.00	0.00 (0.000)
Fundraising (Y/N)	0.40	0.40	0.40	0.00 (0.006)	0.42	0.36	0.06*** (0.012)
Gifts from other charities (Y/N)	0.28	0.28	0.34	-0.06*** (0.005)	0.42	0.23	0.18*** (0.011)
Private donations (\$)	241,772 (2,741,211)	242,794 (2,749,635)	97,377 (979,396)	145,417*** (33,602)	92,659 (493,660)	103,518 (1,375,065)	-10,859 (24,136)
Fundraising (\$)	38,818 (719,387)	38,908 (721,792)	26,064 (166,905)	12,844 (8,818)	30,917 (156,784)	19,748 (179,054)	11,170*** (4,111)
Gifts from other charities (\$)	59,874 (1,716,630)	59,949 (1,722,571)	49,299 (245,244)	10,649 (21,043)	78,449 (311,713)	11,361 (97,125)	67,088*** (5,988)
Gov funding (Y/N)	0.34	0.34	0.51	-0.17*** (0.006)	0.68	0.29	0.39*** (0.011)
Fed funding (Y/N)	0.17	0.17	0.37	-0.20*** (0.005)	0.52	0.18	0.34*** (0.011)
Prov funding (Y/N)	0.22	0.22	0.40	-0.18*** (0.005)	0.57	0.18	0.39*** (0.011)
Mun funding (Y/N)	0.13	0.13	0.22	-0.09*** (0.004)	0.32	0.08	0.23*** (0.010)
Gov funding (\$)	1,562,334 (47,592,582)	1,565,598 (47,759,584)	1,101,218 (3915,807)	464,380 (583,403)	1,570,141 (4,345,041)	490,909 (3,172,478)	1,079,232*** (95,598)
Fed funding (\$)	91,221 (2,776,149)	89,576 (2,783,634)	323,482 (1,332,064)	-233,906*** (34,030)	455,952 (1,472,344)	151,072 (1,100,166)	304,879*** (32,616)
Prov funding (\$)	1,346,594 (45,465,249)	1,350,994 (45,624,969)	724,979 (3,382,530)	626,015 (557,326)	1,031,995 (3,808,710)	325,395 (2,678,406)	706,600*** (82,912)
Mun funding (\$)	124,057 (6,732,652)	124,563 (6,756,379)	52,494 (332,508)	72,070 (82,531)	81,934 (372,336)	14,176 (267,325)	67,759*** (8,153)
Public foundation	0.05	0.05	0.02	0.03*** (0.003)	0.02	0.03	-0.01** (0.004)
Private foundation	0.04	0.04	0.02	0.02*** (0.002)	0.02	0.03	-0.01** (0.004)
Registered charity	0.91	0.91	0.95	-0.05*** (0.004)	0.96	0.95	0.02*** (0.005)
Benefits to community	0.14	0.14	0.19	-0.05*** (0.004)	0.25	0.10	0.15*** (0.009)
Education	0.14	0.14	0.11	0.03*** (0.004)	0.12	0.10	0.01* (0.008)
Health	0.06	0.06	0.04	0.02*** (0.003)	0.05	0.03	0.02*** (0.005)
Religion	0.47	0.47	0.40	0.07*** (0.006)	0.21	0.64	-0.43*** (0.011)
Welfare	0.18	0.18	0.26	-0.08*** (0.005)	0.36	0.13	0.24*** (0.010)
Other	0.01	0.01	0.01	0.00*** (0.001)	0.01	0.00	0.00 (0.002)
Total assets*	3,604,477 (64,315,877)	3,619,017 (64,541,326)	1,550,468 (5,330,055)	2,068,549*** (788,400)	2,187,417 (6,505,024)	721,473 (3,017,204)	1,465,944*** (130,130)
Total Revenue*	2,475,994 (55,115,913)	2,482,290 (55,309,152)	1,586,622 (4,751,823)	895,668 (675,626)	2,251,333 (5,344,473)	721,494 (3,670,875)	1,529,839*** (115,605)
Total Expenditure*	2,401,964 (54,982,234)	2,408,027 (55,175,078)	1,545,375 (4,625,144)	862,652 (673,987)	2,219,540 (5,264,587)	667,942 (3,436,001)	1,551,598*** (112,397)

Table 3.4A cont.: Summary statistics and difference in means conditional on private donations

	Mean (Std. Dev.) - percentage Full Sample				Mean (Std. Dev.) - percentage Indigenous sample		
	Full sample	Sample A	Sample B	(4)	Sample C	Sample D	(7)
	(1)	(2)	(3)		(5)	(6)	
	Full sample n=953,466	Non-Indigenous charities n=946,764	Indigenous charities n=6,702	Difference in means (A-B)	Indigenous charities off-reserve n=3,790	Indigenous charities on-reserve n=2,912	Difference in means (C-D)
Size<25K	0.21	0.21	0.17	0.04*** (0.005)	0.10	0.26	-0.15*** (0.009)
Size25K<100K	0.26	0.26	0.24	0.02*** (0.005)	0.14	0.36	-0.23*** (0.010)
Size100K<250K	0.20	0.20	0.15	0.06*** (0.005)	0.12	0.18	-0.07*** (0.009)
Size250K<500K	0.12	0.12	0.08	0.04*** (0.004)	0.10	0.06	0.04*** (0.007)
Size500K<1MIL	0.08	0.08	0.10	-0.01*** (0.003)	0.14	0.04	0.10*** (0.007)
Size1MIL<5MIL	0.09	0.08	0.20	-0.12*** (0.003)	0.31	0.07	0.24*** (0.009)
Size5MIL<10MIL	0.03	0.03	0.06	-0.03*** (0.002)	0.10	0.02	0.08*** (0.006)
Size>10MIL	0.00	0.00	0.00	0.00*** (0.001)	0.00	0.00	0.00 (0.000)
Prov median income*	32,896 (3,390)	32,892 (3,382)	33,481 (4,345)	-589*** (41)	33,658 (3,588)	33,250 (5,159)	407*** (106)
Prov median income (log)	10.40	10.40	10.41	-0.02*** (0.001)	10.42	10.40	0.02*** (0.003)
Rural	0.24	0.24	0.41	-0.18*** (0.005)	0.18	0.72	-0.54*** (0.010)
Urban	0.76	0.76	0.59	0.18*** (0.005)	0.82	0.28	0.54*** (0.010)
AB	0.11	0.11	0.10	0.01*** (0.004)	0.14	0.05	0.09*** (0.007)
BC	0.14	0.14	0.21	-0.07*** (0.004)	0.21	0.21	-0.00 (0.010)
MB	0.06	0.06	0.08	-0.03*** (0.003)	0.12	0.02	0.10*** (0.007)
NB	0.03	0.03	0.02	0.02*** (0.002)	0.01	0.03	-0.02*** (0.003)
NL	0.01	0.01	0.01	0.00 (0.001)	0.01	0.02	-0.01*** (0.003)
NS	0.05	0.05	0.01	0.04*** (0.003)	0.01	0.01	-0.00 (0.003)
NT	0.00	0.00	0.04	-0.04*** (0.000)	0.01	0.08	-0.07*** (0.005)
NU	0.00	0.00	0.05	-0.05*** (0.000)	0.00	0.10	-0.10*** (0.005)
ON	0.37	0.37	0.29	0.08*** (0.006)	0.30	0.27	0.03*** (0.011)
PE	0.01	0.01	0.01	0.00 (0.001)	0.01	0.00	0.00 (0.002)
QC	0.17	0.17	0.10	0.07*** (0.005)	0.07	0.14	-0.08*** (0.007)
SK	0.06	0.05	0.08	-0.02*** (0.003)	0.12	0.03	0.08*** (0.007)
YT	0.00	0.00	0.01	-0.01*** (0.000)	0.00	0.02	-0.02*** (0.003)

*These variables have not been used in the regressions. The standard deviation (in parenthesis) is not provided for dichotomous variables.
The standard errors are provided for the difference in means. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.5A: Private donation OLS regressions for Non-Indigenous and Indigenous charities

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Private donations (\$)	Private donations (\$)	Private donations (\$)	Private donations (\$)
Gov funding (\$)	-0.00* (0.00)			
Ind*Gov (\$)	-0.07*** (0.01)			
Fed funding (\$)		0.12*** (0.03)		
Ind*Fed (\$)		-0.26*** (0.04)		
Prov funding (\$)			-0.00* (0.00)	
Ind*Prov(\$)			-0.06*** (0.01)	
Mun funding (\$)				-0.01** (0.01)
Ind*Mun (\$)				-0.25*** (0.05)
Indigenous charity	-104,596.29*** (17,865.99)	-126,408.11*** (24,910.31)	-157,028.24*** (24,499.80)	-195,704.58*** (26,342.17)
Benefits to community	-153,587.47*** (9,772.99)	-228,427.52*** (14,785.08)	-221,696.18*** (14,337.51)	-218,919.43*** (14,340.60)
Education	-239,252.02*** (18,963.60)	-369,342.97*** (27,600.71)	-347,590.92*** (27,822.86)	-341,411.99*** (27,126.31)
Health	-399,717.94*** (45,839.37)	-535,276.65*** (63,396.39)	-552,397.38*** (61,392.26)	-581,763.96*** (64,463.87)
Welfare	-134,957.63*** (21,483.40)	-192,842.79*** (28,675.53)	-189,323.52*** (28,811.22)	-189,935.68*** (28,816.84)
Other	-210,750.73*** (50,443.85)	-283,039.17*** (84,969.10)	-276,159.89*** (84,007.24)	-279,396.64*** (84,311.92)
Registered charity	-529,178.79*** (58,380.78)	-766,759.40*** (83,791.45)	-754,673.67*** (82,156.69)	-763,919.76*** (83,148.80)
Private foundation	-207,935.54*** (64,166.52)	-300,913.69*** (91,240.86)	-300,120.09*** (89,643.41)	-306,660.97*** (90,455.87)
Size25K<100K	10,719.67*** (2,521.61)	-538.58 (3,802.46)	300.52 (3,762.01)	736.83 (3,759.72)
Size100K<250K	59,781.12*** (3,177.54)	83,477.33*** (6,797.30)	83,873.21*** (6,865.93)	86,190.01*** (6,810.79)
Size250K<500K	134,933.00*** (3,812.79)	160,612.56*** (7,259.41)	161,503.29*** (7,315.89)	163,868.44*** (7,245.52)
Size500K<1MIL	231,152.04*** (6,585.69)	259,741.05*** (9,240.71)	262,513.64*** (9,160.12)	265,295.64*** (9,138.97)
Size1MIL<5MIL	484,865.17*** (8,326.11)	510,891.66*** (11,769.79)	522,790.17*** (10,963.55)	526,159.32*** (11,000.01)
Size5MIL<10MIL	2,077,335.39*** (92,122.74)	2,017,141.88*** (94,144.19)	2,133,313.32*** (93,066.06)	2,110,968.16*** (90,477.70)
Size>10MIL	8,282,249.71*** (1,445,725.83)	5,992,420.53*** (1,081,469.60)	8,410,793.32*** (1,449,744.46)	7,682,726.87*** (1,193,912.28)
Rural	-14,827.76* (8,190.23)	-22,254.08* (11,863.77)	-24,397.49** (11,812.99)	-23,764.38** (11,949.08)
Prov median income (log)	19,563.69 (75,188.81)	-329,139.76** (138,023.08)	-301,041.66** (140,087.35)	-322,929.74** (142,171.30)
Constant	419,149.78 (764,818.84)	4,265,985.82*** (1,408,748.19)	3,965,631.82*** (1,429,124.77)	4,195,417.59*** (1,452,120.65)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,216,383	856,626	856,626	856,626

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance:

* p<.10, ** p<.05, *** p<.01

Table 3.6A: Fundraising OLS regressions for Non-Indigenous and Indigenous charities

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)
Gov funding (\$)	-0.00 (0.00)			
Ind*Gov (\$)	-0.01*** (0.00)			
Fed funding (\$)		0.02* (0.01)		
Ind*Fed (\$)		-0.03** (0.01)		
Prov funding (\$)			-0.00 (0.00)	
Ind*Prov(\$)			-0.01*** (0.00)	
Mun funding (\$)				0.00 (0.00)
Ind*Mun (\$)				-0.04*** (0.01)
Indigenous charity	-4,171.64 (4,467.36)	-10,210.86* (5,843.09)	-10,041.05 (6,784.73)	-15,533.34** (7,101.24)
Benefits to community	13,964.81*** (2,628.43)	18,576.79*** (4,070.08)	19,669.10*** (3,951.81)	18,953.13*** (4,018.71)
Education	8,036.73 (5,218.58)	6,506.89 (7,074.65)	10,072.76 (7,594.25)	8,528.33 (7,189.23)
Health	39,170.00*** (14,655.87)	53,962.68*** (17,803.86)	49,953.66*** (19,249.08)	51,010.90*** (18,015.10)
Welfare	-4,698.76 (3,228.78)	-4,089.17 (4,222.47)	-3,568.95 (4,188.32)	-3,704.78 (4,194.53)
Other	-5,056.69 (6,928.96)	-3,121.91 (9,847.51)	-2,216.98 (9,724.28)	-2,557.06 (9,858.89)
Registered charity	-111,676.80*** (21,108.14)	-155,310.78*** (29,949.86)	-153,887.65*** (29,468.15)	-154,685.48*** (29,927.30)
Private foundation	-119,077.05*** (19,949.94)	-165,157.39*** (28,267.52)	-165,308.86*** (27,869.66)	-165,378.80*** (28,198.87)
Size25K<100K	8,151.44*** (397.79)	8,544.81*** (539.34)	8,691.45*** (518.87)	8,611.23*** (523.35)
Size100K<250K	15,086.50*** (566.38)	15,842.72*** (1,790.83)	16,005.35*** (1,658.51)	15,922.89*** (1,717.72)
Size250K<500K	21,792.07*** (726.37)	21,830.83*** (1,911.39)	22,073.03*** (1,766.54)	21,997.91*** (1,823.24)
Size500K<1MIL	30,921.22*** (1,008.03)	29,661.09*** (2,086.09)	30,188.15*** (1,895.19)	30,080.25*** (1,943.93)
Size1MIL<5MIL	68,674.05*** (2,200.69)	64,216.81*** (3,120.10)	66,218.69*** (2,718.99)	65,680.62*** (2,774.24)
Size5MIL<10MIL	310,619.66*** (23,856.51)	290,324.32*** (24,652.22)	307,624.32*** (23,492.08)	299,116.03*** (23,622.08)
Size>10MIL	1,909,954.71*** (401,951.20)	1,640,606.36*** (352,055.08)	1,965,296.26*** (401,700.80)	1,775,444.39*** (357,883.08)
Rural	-1,220.45 (1,594.82)	-2,789.54 (2,447.10)	-3,079.60 (2,437.13)	-2,993.02 (2,432.01)
Prov median income (log)	-39,073.60 (24,430.38)	-111,995.91** (43,758.07)	-108,434.12** (44,115.10)	-107,660.50** (43,775.29)
Constant	490,647.41* (252,232.73)	1,277,017.53*** (456,176.03)	1,238,838.35*** (459,356.54)	1,231,959.40*** (456,678.87)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,216,383	856,626	856,626	856,626

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance:

* p<.10, ** p<.05, *** p<.01

Table 3.7A: Gifts from other charities OLS regressions for Non-Indigenous and Indigenous charities

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Gifts from other charities (\$)	Gifts from other charities (\$)	Gifts from other charities (\$)	Gifts from other charities (\$)
Gov funding (\$)	0.00* (0.00)			
Ind*Gov (\$)	-0.03*** (0.00)			
Fed funding (\$)		0.03** (0.02)		
Ind*Fed (\$)		-0.09*** (0.02)		
Prov funding (\$)			0.00* (0.00)	
Ind*Prov(\$)			-0.03*** (0.00)	
Mun funding (\$)				-0.01** (0.00)
Ind*Mun (\$)				-0.06*** (0.02)
Indigenous charity	-3,299.09 (8,032.58)	-10,056.38 (11,687.48)	-19,392.84* (11,205.31)	-41,911.37*** (12,433.31)
Benefits to community	-26,282.51*** (7,238.38)	-39,989.45*** (10,623.10)	-37,935.42*** (10,711.80)	-36,559.68*** (10,561.35)
Education	-83,551.04*** (13,709.32)	-127,062.95*** (19,291.40)	-119,232.79*** (19,732.15)	-117,608.56*** (19,372.97)
Health	-21,929.28 (34,611.90)	-8,317.28 (49,510.76)	-42,607.93 (45,224.05)	-24,346.11 (49,016.09)
Welfare	-32,280.54*** (8,128.82)	-45,654.04*** (11,441.17)	-45,687.74*** (11,480.82)	-44,796.06*** (11,452.92)
Other	-58,625.48*** (9,357.70)	-82,098.58*** (13,553.21)	-84,893.37*** (13,312.18)	-81,080.99*** (13,566.27)
Registered charity	-112,038.78*** (20,255.38)	-149,654.44*** (29,013.75)	-158,602.14*** (28,896.26)	-149,012.95*** (28,867.97)
Private foundation	-115,602.85*** (20,645.30)	-157,135.86*** (29,421.28)	-164,131.92*** (29,569.99)	-159,265.35*** (29,312.12)
Size25K<100K	-2,441.39 (1,694.46)	-7,368.51*** (2,277.15)	-6,973.53*** (2,267.11)	-6,926.41*** (2,261.90)
Size100K<250K	238.58 (1,817.24)	-15,045.78*** (5,288.53)	-12,968.06*** (4,789.88)	-14,066.89*** (5,227.85)
Size250K<500K	9,561.25*** (1,523.22)	-5,557.98 (5,478.29)	-3,322.94 (4,957.77)	-4,426.56 (5,412.60)
Size500K<1MIL	29,236.48*** (1,736.08)	14,663.96** (6,129.06)	17,380.94*** (5,580.92)	16,540.66*** (6,023.02)
Size1MIL<5MIL	117,076.78*** (4,636.84)	102,631.85*** (9,043.54)	106,758.42*** (8,475.23)	107,461.15*** (8,675.41)
Size5MIL<10MIL	750,847.59*** (65,124.89)	752,854.31*** (62,782.89)	744,976.79*** (66,204.56)	782,516.32*** (61,521.54)
Size>10MIL	3,413,587.33*** (868,428.48)	4,196,401.90*** (897,584.03)	3,450,243.75*** (858,921.65)	4,762,972.38*** (892,536.34)
Rural	-14,211.12* (8,061.85)	-19,964.52* (11,578.07)	-19,875.38* (11,764.24)	-20,443.51* (11,566.83)
Prov median income (log)	126,038.14 (116,222.26)	144,457.62 (223,616.06)	128,729.78 (225,558.98)	143,765.37 (222,864.71)
Constant	-1,154,986.50 (1,197,247.00)	-1,278,732.83 (2,302,318.60)	-1,112,045.01 (2,323,366.31)	-1,273,768.86 (2,294,459.56)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,216,383	856,626	856,626	856,626

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance:

* p<.10, ** p<.05, *** p<.01

Table 3.8A: Private donation OLS regressions for Indigenous charities off-reserve and on-reserve

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Private donations (\$)	Private donations (\$)	Private donations (\$)	Private donations (\$)
Gov funding (\$)	-0.03** (0.02)			
On-reserve*Gov (\$)	0.01 (0.01)			
Fed funding (\$)		-0.05 (0.03)		
On-reserve*Fed (\$)		0.01 (0.05)		
Prov funding (\$)			-0.02** (0.01)	
On-reserve*Prov(\$)			0.01 (0.01)	
Mun funding (\$)				-0.06** (0.03)
On-reserve*Mun (\$)				0.03 (0.02)
Charity on-reserve	55,415.24 (56,166.18)	85,025.59 (98,328.50)	72,367.84 (76,147.82)	77,291.88 (78,548.59)
Benefits to community	-34,217.26 (39,708.73)	-57,814.59 (47,853.58)	-67,402.72 (43,788.20)	-65,724.11 (44,459.82)
Education	-88,505.89*** (29,958.09)	-118,372.47*** (32,646.68)	-133,592.32*** (41,667.35)	-138,112.76*** (43,338.59)
Health	-133,249.64*** (40,201.48)	-201,950.83*** (54,561.87)	-177,970.76*** (48,286.89)	-202,215.75*** (54,979.72)
Welfare	-64,022.55** (26,285.89)	-115,973.99*** (37,635.75)	-107,861.78*** (38,696.55)	-116,351.90*** (41,212.45)
Other	-58,431.91* (33,734.93)	-101,296.98** (47,127.54)	-108,674.24** (44,213.44)	-107,893.81** (44,423.71)
Registered charity	-90,463.90 (76,299.64)	-178,419.06 (110,357.07)	-173,658.51 (109,872.88)	-186,962.16* (109,621.15)
Private foundation	142,253.06 (159,494.23)	229,241.87 (269,420.75)	221,803.73 (269,066.39)	220,852.20 (274,549.75)
Size25K<100K	-6,733.03 (21,928.62)	-17,714.19 (42,810.56)	-18,224.26 (41,467.83)	-16,853.00 (41,388.90)
Size100K<250K	55,662.77*** (11,070.86)	74,444.33*** (28,520.99)	61,672.90** (28,239.41)	70,085.54** (28,910.11)
Size250K<500K	78,559.12*** (15,931.29)	106,670.26*** (30,235.56)	90,633.19*** (29,922.18)	101,021.55*** (30,629.96)
Size500K<1MIL	93,323.53*** (28,464.72)	129,063.06*** (43,260.12)	110,157.81*** (32,028.94)	116,313.46*** (34,451.60)
Size1MIL<5MIL	153,246.25*** (40,624.46)	172,402.33*** (53,268.23)	144,221.72*** (35,490.48)	143,092.17*** (36,100.97)
Size5MIL<10MIL	860,733.39** (399,126.88)	677,074.68** (335,668.58)	687,074.91** (283,436.72)	514,082.84** (209,816.48)
Size>10MIL	0.00 (.)	0.00 (.)	0.00 (.)	0.00 (.)
Rural	-61,541.52* (35,018.06)	-71,959.45* (42,093.05)	-87,045.80 (55,849.42)	-83,850.30 (54,730.31)
Prov median income (log)	107,015.02 (196,002.05)	79,339.98 (266,656.80)	57,079.48 (255,432.00)	69,523.75 (259,945.85)
Constant	-1017061.48 (2,012,907.33)	-649,116.99 (2,752,486.70)	-410,255.34 (2,618,724.97)	-527,105.63 (2,662,938.94)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	10,997	8,469	8,469	8,469

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance:

* p<.10, ** p<.05, *** p<.01

Table 3.9A: Fundraising OLS regressions for Indigenous charities off-reserve and on-reserve

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)	Fundraising (\$)
Gov funding (\$)	-0.00 (0.00)			
On-reserve*Gov (\$)	0.00 (0.00)			
Fed funding (\$)		-0.00 (0.01)		
On-reserve*Fed (\$)		0.02 (0.02)		
Prov funding (\$)			-0.00* (0.00)	
On-reserve*Prov(\$)			0.00 (0.00)	
Mun funding (\$)				-0.02* (0.01)
On-reserve*Mun (\$)				0.01 (0.01)
Charity on-reserve	8,418.85 (7,110.78)	1,736.67 (7,057.04)	12,140.26 (12,391.89)	12,836.48 (12,805.83)
Benefits to community	2,831.90 (6,406.48)	5,127.79 (7,514.90)	5,017.68 (7,668.50)	5,194.83 (7,585.46)
Education	12,179.78 (11,943.22)	10,865.47 (10,880.07)	16,325.71 (15,980.45)	15,064.84 (15,475.61)
Health	21,626.36 (32,876.09)	20,062.42 (39,077.06)	27,448.37 (37,895.64)	22,898.43 (37,792.78)
Welfare	10,597.01 (8,478.86)	9,143.30 (10,538.15)	14,430.60 (10,242.65)	13,392.50 (10,225.84)
Other	4,634.18 (10,488.21)	2,205.76 (13,733.92)	5,684.38 (15,761.38)	5,466.75 (15,613.15)
Registered charity	3,857.85 (7,171.78)	-169.50 (8,538.73)	4,940.20 (9,584.12)	2,845.47 (8,648.11)
Private foundation	3,036.07 (10,781.09)	-2,352.83 (18,815.27)	697.49 (17,472.90)	348.63 (16,831.51)
Size25K<100K	5,971.99*** (2,068.95)	6,715.08** (3,175.35)	5,540.20** (2,517.43)	5,808.64** (2,532.86)
Size100K<250K	7,610.89** (3,150.46)	6,680.17* (3,624.03)	6,019.42 (3,731.54)	7,567.63** (3,675.53)
Size250K<500K	11,216.95** (4,867.21)	8,889.81* (4,556.02)	9,728.76* (5,330.96)	11,645.56** (5,789.51)
Size500K<1MIL	14,579.09*** (5,420.45)	9,416.34* (4,901.50)	12,465.49** (5,959.33)	13,577.97** (6,215.83)
Size1MIL<5MIL	50,378.60*** (13,532.95)	38,553.04*** (12,372.17)	47,167.04*** (11,989.76)	47,559.85*** (12,240.04)
Size5MIL<10MIL	115,975.09* (69,666.96)	50,811.23* (30,383.82)	107,203.96 (68,692.32)	76,633.48 (51,472.47)
Size>10MIL	0.00 (.)	0.00 (.)	0.00 (.)	0.00 (.)
Rural	290.93 (6,922.90)	-1,956.65 (6,406.77)	639.92 (9,093.16)	948.90 (9,509.71)
Prov median income (log)	-77,755.58* (41,184.67)	-115,044.43 (75,817.65)	-116,772.72 (77,182.05)	-112,267.06 (75,240.89)
Constant	774,208.86* (410,942.55)	1,163,242.25 (773,854.01)	1,166,427.16 (776,075.46)	1,121,751.04 (757,062.38)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	10,997	8,469	8,469	8,469

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance:

* p<.10, ** p<.05, *** p<.01

Table 3.10A: Gifts from other charities OLS regressions Indigenous charities off-reserve and on-reserve

	Full sample (1)	Sample Schedule 6 (2)	Sample Schedule 6 (3)	Sample Schedule 6 (4)
	Gifts from other charities (\$)	Gifts from other charities (\$)	Gifts from other charities (\$)	Gifts from other charities (\$)
Gov funding (\$)	-0.01 (0.01)			
On-reserve*Gov (\$)	0.00 (0.00)			
Fed funding (\$)		-0.02** (0.01)		
On-reserve*Fed (\$)		0.02* (0.01)		
Prov funding (\$)			-0.01 (0.00)	
On-reserve*Prov(\$)			0.00 (0.00)	
Mun funding (\$)				0.01 (0.02)
On-reserve*Mun (\$)				-0.02 (0.02)
Charity on-reserve	-18,178.61 (14,829.87)	-28,827.66 (18,627.20)	-23,926.05 (18,589.47)	-22,681.47 (18,134.67)
Benefits to community	-79,600.54** (40,091.13)	-117,791.68** (58,759.33)	-120,605.10** (60,105.02)	-119,779.61** (60,381.06)
Education	-70,981.42** (34,871.33)	-108,665.94** (53,351.04)	-110,544.61** (55,472.21)	-110,903.16** (56,218.40)
Health	-77,402.25 (51,485.16)	-121,848.77* (73,913.24)	-113,725.35 (71,004.14)	-118,418.69 (74,082.26)
Welfare	-69,382.77* (38,881.43)	-110,865.87* (59,744.45)	-107,579.41* (58,784.43)	-111,022.01* (59,759.30)
Other	-65,470.30* (37,679.00)	-104,718.86* (56,634.67)	-103,841.26* (57,528.36)	-102,905.73* (57,441.23)
Registered charity	6,560.01 (23,791.22)	21,581.01 (40,350.88)	22,719.85 (40,267.49)	18,782.89 (40,164.44)
Private foundation	-12,375.61 (27,673.38)	-6,026.74 (42,802.64)	-6,120.34 (42,798.55)	-5,677.61 (42,308.34)
Size25K<100K	-8,477.04 (7,928.54)	-14,193.66 (12,704.42)	-14,925.60 (12,865.73)	-14,643.12 (12,828.34)
Size100K<250K	12,999.57** (5,099.80)	5,076.22 (9,012.58)	2,300.24 (9,183.53)	4,353.82 (9,084.69)
Size250K<500K	35,443.69*** (11,653.52)	37,156.10** (18,716.48)	34,793.99** (17,467.94)	37,142.52** (18,435.45)
Size500K<1MIL	49,041.96*** (15,222.94)	51,906.77** (23,198.18)	49,064.62** (21,484.81)	50,613.91** (22,149.32)
Size1MIL<5MIL	116,967.52*** (29,897.13)	116,424.48*** (35,719.22)	110,852.80*** (32,922.81)	108,901.32*** (33,294.06)
Size5MIL<10MIL	249,245.25** (117,463.36)	209,292.27** (97,452.86)	203,903.86** (95,141.16)	158,349.84** (74,072.51)
Size>10MIL	0.00 (.)	0.00 (.)	0.00 (.)	0.00 (.)
Rural	-19,919.47** (9,828.15)	-22,891.68** (10,681.34)	-24,724.70** (11,941.63)	-22,873.16* (11,959.59)
Prov median income (log)	-64,155.15 (66,815.13)	-68,639.60 (121,235.71)	-78,420.33 (122,669.64)	-77,692.70 (123,406.86)
Constant	699,719.93 (717,030.58)	765,776.21 (1,292,895.34)	863,210.29 (1,306,956.07)	859,826.52 (1,316,349.48)
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	10,997	8,469	8,469	8,469

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance:

* p<.10, ** p<.05, *** p<.01

Table 3.11A: Reduced form for Non-Indigenous and Indigenous charities

	Private donations (\$)	Fundraising (\$)	Gifts from other charities (\$)
	(1)	(2)	(3)
	OLS Reduced form	OLS Reduced form	OLS Reduced form
<i>Panel A: Government funding</i>			
Cumulative	-0.00**	0.00	0.00**
government funding	(0.00)	(0.00)	(0.00)
Ind*cumulative	-0.01***	-0.00***	-0.00***
government funding	(0.00)	(0.00)	(0.00)
Observations	1,119,632	1,119,632	1,119,632
<i>Panel B: Federal funding</i>			
Cumulative	0.02***	0.00**	0.01***
federal funding	(0.00)	(0.00)	(0.00)
Ind*cumulative	-0.03***	-0.01***	-0.01***
federal funding	(0.00)	(0.00)	(0.00)
<i>Panel C: Provincial funding</i>			
Cumulative	-0.00**	-0.00	0.00**
provincial funding	(0.00)	(0.00)	(0.00)
Ind*cumulative	-0.01***	-0.00***	-0.00***
Provincial funding	(0.00)	(0.00)	(0.00)
<i>Panel D: Municipal funding</i>			
Cumulative	-0.00*	0.00	-0.00*
municipal funding	(0.00)	(0.00)	(0.00)
Ind*cumulative	-0.05***	-0.01***	-0.01***
municipal funding	(0.01)	(0.00)	(0.00)
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	768,774	768,774	768,774

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.12A: Reduced form for Indigenous charities off-reserve and on-reserve

	Private donations (\$)	Fundraising (\$)	Gifts from other charities (\$)
	(1)	(2)	(3)
	OLS Reduced form	OLS Reduced form	OLS Reduced form
<i>Panel A: Government funding</i>			
Cumulative	-0.00**	-0.00	-0.00
government funding	(0.00)	(0.00)	(0.00)
On-reserve*cumulative	0.00	0.00	0.00
government funding	(0.00)	(0.00)	(0.00)
Observations	10,111	10,111	10,111
<i>Panel B: Federal funding</i>			
Cumulative	-0.01*	-0.00	-0.00**
federal funding	(0.00)	(0.00)	(0.00)
On-reserve *cumulative	0.00	0.00	0.00
federal funding	(0.01)	(0.00)	(0.00)
<i>Panel C: Provincial funding</i>			
Cumulative	-0.00**	-0.00*	-0.00
provincial funding	(0.00)	(0.00)	(0.00)
On-reserve *cumulative	0.00	0.00	0.00
provincial funding	(0.00)	(0.00)	(0.00)
<i>Panel D: Municipal funding</i>			
Cumulative	-0.01**	-0.00**	-0.01
municipal funding	(0.00)	(0.00)	(0.00)
On-reserve *cumulative	-0.02	-0.00	-0.01
municipal funding	(0.02)	(0.00)	(0.00)
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	7,641	7,641	7,641

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. Robust standard errors in parentheses are clustered at the postal code level. Significance:

* p<.10, ** p<.05, *** p<.01

Table 3.13A: Sample Indigenous charities

	(1)	(2)	(3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Private Donations & Government funding</i>			
Gov (\$)	-0.03* (0.02)	-0.03* (0.02)	-0.23* (0.13)
<i>Panel B: Private Donations & Levels of government funding</i>			
Fed (\$)	-0.04 (0.04)	-0.06 (0.05)	-0.31* (0.16)
Prov (\$)	-0.02** (0.01)	-0.02** (0.01)	-0.14** (0.06)
Mun (\$)	-0.05** (0.02)	-0.11** (0.05)	-0.15 (0.21)
<i>Panel C: Fundraising & Government funding</i>			
Gov (\$)	-0.00** (0.00)	-0.00*** (0.00)	-0.01 (0.02)
<i>Panel D: Fundraising & Levels of government funding</i>			
Fed (\$)	0.01 (0.01)	0.01 (0.01)	0.01 (0.03)
Prov (\$)	-0.00* (0.00)	-0.00* (0.00)	0.00 (0.01)
Mun (\$)	-0.02* (0.01)	-0.03** (0.02)	-0.02 (0.08)
<i>Panel E: Gifts from other charities & Government funding</i>			
Gov (\$)	-0.01* (0.00)	-0.01 (0.00)	-0.03 (0.03)
<i>Panel F: Gifts from other charities & Levels of government funding</i>			
Fed (\$)	-0.01 (0.01)	-0.02 (0.01)	-0.01 (0.04)
Prov (\$)	-0.01* (0.00)	-0.01 (0.00)	-0.04 (0.03)
Mun (\$)	0.00 (0.02)	0.01 (0.04)	0.00 (0.09)
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations <i>A, C & E</i>	10,997	10,111	10,111
Observations <i>B, D & F</i>	8,469	7,641	7,641

The analysis in this table based on the sample of Indigenous charities only. The independent of variable of interest is government funding and the various levels of government funding, which are used individually in each regression. *Panel B, D* and *F* employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. For the regressions in gray, the Kleibergen-Paap F-Statistic is below 10. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.14A: Sample Indigenous charities on-reserve

	(1)	(2)	(3)
	OLS	IV Cumulative funding	IV Years of funding
<i>Panel A: Private Donations & Government funding</i>			
Gov (\$)	-0.09 (0.06)	-0.08** (0.04)	-0.29** (0.12)
<i>Panel B: Private Donations & Levels of government funding</i>			
Fed (\$)	-0.15 (0.15)	-0.16 (0.10)	-0.26** (0.11)
Prov (\$)	-0.06 (0.04)	-0.05*** (0.02)	-0.19* (0.10)
Mun (\$)	-0.05 (0.05)	-0.93* (0.56)	0.14 (0.40)
<i>Panel C: Fundraising & Government funding</i>			
Gov (\$)	-0.01 (0.01)	-0.01*** (0.00)	0.02* (0.01)
<i>Panel D: Fundraising & Levels of government funding</i>			
Fed (\$)	0.01 (0.01)	0.03*** (0.01)	0.03** (0.01)
Prov (\$)	-0.01 (0.01)	-0.01*** (0.00)	0.04* (0.02)
Mun (\$)	-0.01 (0.01)	-0.17* (0.09)	0.52*** (0.19)
<i>Panel E: Gifts from other charities & Government funding</i>			
Gov (\$)	-0.01 (0.01)	-0.01* (0.00)	-0.07** (0.03)
<i>Panel F: Gifts from other charities & Levels of government funding</i>			
Fed (\$)	-0.00 (0.01)	-0.00 (0.01)	-0.05*** (0.02)
Prov (\$)	-0.01* (0.00)	-0.01** (0.00)	-0.05** (0.02)
Mun (\$)	-0.01* (0.01)	-0.13* (0.07)	0.02 (0.08)
Controls	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations <i>A, C & E</i>	4,791	4,397	4,397
Observations <i>B, D & F</i>	3,160	2,797	2,797

The analysis in this table is based on the sample of Indigenous charities on reserve only. The independent of variable of interest is government funding and the various levels of government funding, which are used individually in each regression. *Panel B, D and F* employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. For the regressions in gray, the Kleibergen-Paap F-Statistic is below 10. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.15A: Regressions for Non-Indigenous and Indigenous charities with independent variable size of the charities based on total assets

	Private donations (\$) (1) OLS	Private donations (\$) (2) IV Cumulative funding	Fundraising (\$) (3) OLS	Fundraising (\$) (4) IV Cumulative funding	Gifts from other charities (\$) (5) OLS	Gifts from other charities (\$) (6) IV Cumulative funding
<i>Panel A: Government funding</i>						
Gov funding	-0.00* (0.00)	-0.00* (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00* (0.00)	0.00* (0.00)
Ind*Gov (\$)	-0.03*** (0.00)	-0.03*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)
F-test Gov fund		405.92		405.92		405.92
F-test abo*Gov fund		654.25		654.25		654.25
Kleibergen-Paap F-Stat		20.53		20.53		20.53
Observations	1,216,383	1,119,632	1,216,383	1,119,632	1,216,383	1,119,632
<i>Panel B: Federal funding</i>						
Fed funding	0.13*** (0.03)	0.16*** (0.04)	0.02** (0.01)	0.05** (0.02)	0.04*** (0.01)	0.07*** (0.02)
Ind*Fed (\$)	-0.18*** (0.04)	-0.22*** (0.04)	-0.02* (0.01)	-0.04* (0.02)	-0.06*** (0.01)	-0.10*** (0.02)
F-test Fed fund		416.27		416.27		416.27
F-test abo*Fed fund		213.80		213.80		213.80
Kleibergen-Paap F-Stat		21.56		21.56		21.56
<i>Panel C: Provincial funding</i>						
Prov funding	-0.00* (0.00)	-0.00** (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00** (0.00)	0.00** (0.00)
Ind*Prov (\$)	-0.03*** (0.01)	-0.03*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)
F-test Prov fund		494.28		494.28		494.28
F-test abo* Prov fund		758.17		758.17		758.17
Kleibergen-Paap F-Stat		21.56		21.56		21.56
<i>Panel D: Municipal funding</i>						
Mun funding	-0.01** (0.00)	-0.02*** (0.01)	0.01 (0.01)	0.01 (0.01)	-0.01** (0.00)	-0.01* (0.00)
Ind*Mun (\$)	-0.13*** (0.04)	-0.20** (0.09)	-0.03*** (0.01)	-0.05*** (0.02)	-0.01 (0.01)	-0.00 (0.03)
F-test Mun fund		55.51		55.51		55.51
F-test abo* Mun fund		59.16		59.16		59.16
Kleibergen-Paap F-Stat		23.04		23.04		23.04
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	856,626	768,774	856,626	768,774	856,626	768,774

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.16A: Regressions for Indigenous charities off-reserve and on-reserve with independent variable size of the charities based on total assets

	Private donations (\$)	Private donations (\$)	Fundraising (\$)	Fundraising (\$)	Gifts from other charities (\$)	Gifts from other charities (\$)
	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	IV	OLS	IV	OLS	IV
		Cumulative funding		Cumulative funding		Cumulative funding
<i>Panel A: Government funding</i>						
Gov funding	-0.01* (0.01)	-0.01** (0.01)	-0.00 (0.00)	-0.00* (0.00)	-0.00 (0.00)	-0.00 (0.00)
On-reserve*Gov (\$)	0.00 (0.01)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
F-test Gov fund		558.27		558.27		558.27
F-test on-reserve*Gov		412.45		412.45		412.45
Kleibergen-Paap F-Stat		482.02		482.02		482.02
Observations	10,997	10,111	10,997	10,111	10,997	10,111
<i>Panel B: Federal funding</i>						
Fed funding	-0.02 (0.01)	-0.03 (0.02)	0.00 (0.00)	-0.00 (0.00)	-0.01** (0.01)	-0.02** (0.01)
On-reserve*Fed (\$)	-0.00 (0.00)	0.01 (0.06)	0.02 (0.02)	0.03 (0.03)	0.01 (0.01)	0.02 (0.01)
F-test Fed fund		203.06		203.06		203.06
F-test on-reserve*Fed		367.04		367.04		367.04
Kleibergen-Paap F-Stat		75.76		75.76		75.76
<i>Panel C: Provincial funding</i>						
Prov funding	-0.01** (0.01)	-0.01** (0.01)	-0.00* (0.00)	-0.00* (0.00)	-0.00 (0.00)	-0.00 (0.00)
On-reserve*Prov (\$)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
F-test Prov fund		812.75		812.75		812.75
F-test on-reserve*Prov		420.71		420.71		420.71
Kleibergen-Paap F-Stat		830.09		830.09		830.09
<i>Panel D: Municipal funding</i>						
Mun funding	-0.04* (0.02)	-0.06* (0.03)	-0.02* (0.01)	-0.03** (0.01)	0.01 (0.02)	0.02 (0.04)
On-reserve*Mun (\$)	0.01 (0.03)	-0.17 (0.24)	0.01 (0.01)	-0.05 (0.07)	-0.02 (0.02)	-0.03 (0.06)
F-test Mun fund		80.29		80.29		80.29
F-test on-reserve*Mun		0.82		0.82		0.82
Kleibergen-Paap F-Stat		0.77		0.77		0.77
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,469	7,641	8,469	7,641	8,469	7,641

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variables are always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.17A: Private donation for Non-Indigenous and Indigenous charities including provincial marginal tax credit rates on donations

	Private donations (\$)	Private donations (\$)	Private donations (\$) excluding QC	Private donations (\$) positive amount	Private donations (\$) positive amount
	(1)	(2)	(3)	(4)	(5)
	OLS	IV Cumulative funding	IV Cumulative funding	OLS	IV Cumulative funding
<i>Panel A: Government funding</i>					
Gov funding	-0.00* (0.00)	-0.00* (0.00)	-0.00* (0.00)	-0.00* (0.00)	-0.00* (0.00)
Ind*Gov (\$)	-0.07*** (0.01)	-0.07*** (0.01)	-0.08*** (0.01)	-0.10*** (0.01)	-0.11*** (0.02)
Marginal tax rate	22,377.64*** (8,550.71)	24,947.62*** (9,231.26)	22,331.47** (9,088.36)	29,527.78*** (10,948.26)	31,788.50*** (11,780.91)
F-stat Gov fund		259.42	169.46		75.19
F-stat abo*Gov fund		651.86	518.51		178.42
Kleibergen-Paap F-Stat		16.97	16.44		15.82
Observations	1,216,383	1,119,632	906,009	953,466	878,927
<i>Panel B: Federal funding</i>					
Fed funding	0.12*** (0.03)	0.15*** (0.03)	0.16*** (0.04)	0.14*** (0.03)	0.12*** (0.04)
Ind*Fed (\$)	-0.26*** (0.04)	-0.30*** (0.04)	-0.31*** (0.05)	-0.33*** (0.05)	-0.35*** (0.06)
Marginal tax rate	12,220.85 (11,806.74)	15,069.74 (12,619.08)	18,331.64 (11,979.48)	28,714.38* (14,867.41)	30,224.01* (15,712.62)
F-stat Fed fund		397.83	301.03		315.04
F-stat abo*Fed fund		175.10	154.61		103.88
Kleibergen-Paap F-Stat		264.74	185.84		262.56
<i>Panel C: Provincial funding</i>					
Prov funding	-0.00* (0.00)	-0.00* (0.00)	-0.00* (0.00)	-0.00* (0.00)	-0.01* (0.00)
Ind*Prov (\$)	-0.06*** (0.01)	-0.06*** (0.01)	-0.07*** (0.01)	-0.10*** (0.02)	-0.10*** (0.02)
Marginal tax rate	9,382.01 (12,036.30)	11,068.18 (12,923.93)	16,068.06 (12,550.50)	27,502.59* (15,220.86)	29,022.16* (16,299.74)
F-stat Prov fund		370.01	190.97		97.40
F-stat abo* Prov fund		759.71	476.68		167.69
Kleibergen-Paap F-Stat		18.32	18.20		18.38
<i>Panel D: Municipal funding</i>					
Mun funding	-0.01** (0.01)	-0.02** (0.01)	-0.02** (0.01)	-0.02** (0.01)	-0.03** (0.01)
Ind*Mun (\$)	-0.25*** (0.05)	-0.44*** (0.10)	-0.46*** (0.12)	-0.42*** (0.11)	-0.88*** (0.27)
Marginal tax rate	9,153.31 (11,952.30)	10,906.61 (12,791.91)	15,256.34 (12,240.16)	27,007.61* (15,022.40)	28,439.32* (15,948.96)
F-stat Mun fund		53.76	48.59		30.50
F-stat abo* Mun fund		56.51	50.74		20.14
Kleibergen-Paap F-Stat		20.44	20.90		19.78
Controls	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	856,626	768,774	616,545	688,664	620,031

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Table 3.18A: Private donation for Indigenous charities off-reserve and on-reserve including provincial marginal tax credit rates on donations

	Private donations (\$)	Private donations (\$)	Private donations (\$) excluding QC	Private donations (\$) positive amount	Private donations (\$) positive amount
	(1)	(2)	(3)	(4)	(5)
	OLS	IV Cumulative funding	IV Cumulative funding	OLS	IV Cumulative funding
<i>Panel A: Government funding</i>					
Gov funding	-0.03** (0.02)	-0.03** (0.02)	-0.05* (0.03)	-0.06** (0.03)	-0.07* (0.04)
On-reserve *Gov (\$)	0.01 (0.01)	0.01 (0.01)	0.02 (0.01)	0.02 (0.02)	0.02 (0.02)
Marginal tax rate	17,297.65 (23,326.54)	21,169.43 (29,753.75)	28,594.73 (34,629.90)	26,140.86 (35,352.20)	39,724.45 (49,528.32)
F-stat Gov fund		372.87	271.68		85.22
F-stat abo*Gov fund		364.38	357.93		31.20
Kleibergen-Paap F-Stat		300.33	114.29		59.47
Observations	10,997	10,111	9,097	6,702	6,164
<i>Panel B: Federal funding</i>					
Fed funding	-0.05 (0.03)	-0.07 (0.05)	-0.08 (0.05)	-0.08 (0.05)	-0.12* (0.07)
On-reserve *Fed (\$)	0.01 (0.05)	0.03 (0.05)	0.04 (0.05)	0.06 (0.10)	0.12 (0.12)
Marginal tax rate	16,408.35 (35,481.72)	26,975.30 (48,703.93)	32,076.08 (55,130.81)	21,024.18 (52,971.46)	42,670.64 (75,345.38)
F-stat Fed fund		134.86	129.13		64.74
F-stat abo*Fed fund		259.22	250.37		137.62
Kleibergen-Paap F-Stat		55.49	53.93		37.01
<i>Panel C: Provincial funding</i>					
Prov funding	-0.02** (0.01)	-0.02** (0.01)	-0.03** (0.02)	-0.05** (0.02)	-0.05** (0.02)
On-reserve *Prov (\$)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	-0.01 (0.01)
Marginal tax rate	20,342.76 (34,516.46)	30,449.97 (47,231.32)	37,869.54 (54,439.91)	33,426.67 (53,568.99)	60,381.96 (77,734.08)
F-stat Prov fund		674.63	436.06		171.26
F-stat abo* Prov fund		369.56	361.57		11.20
Kleibergen-Paap F-Stat		645.14	184.26		10.17
<i>Panel D: Municipal funding</i>					
Mun funding	-0.06** (0.03)	-0.09** (0.04)	-0.12 (0.10)	-0.14** (0.06)	-0.18 (0.14)
On-reserve *Mun (\$)	0.03 (0.02)	-0.34 (0.49)	-9.78 (31.31)	0.07 (0.05)	10.68 (25.22)
Marginal tax rate	13,073.41 (32,523.30)	35,946.21 (55,623.63)	246,709.96 (890,749.94)	21,794.04 (50,781.67)	-403,174.39 (734,321.75)
F-stat Mun fund		80.23	78.51		35.09
F-stat abo* Mun fund		0.78	0.71		0.53
Kleibergen-Paap F-Stat		0.76	0.05		0.10
Controls	Yes	Yes	Yes	Yes	Yes
Province fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	8,469	7,641	6,884	5,079	4,574

Panel B, C and D employs the sample Schedule 6 which differentiates between federal, provincial and municipal funding. The instrumental variable is always constructed based on the level of government funding used in the regression. Robust standard errors in parentheses are clustered at the postal code level. Significance: * p<.10, ** p<.05, *** p<.01

Data appendix – Summary for the T3010 data

Chapter one:

In order to have a match with the 5-year interval of the Census data and the CWB Index, I restrict the use of the T3010 data to the years 2000, 2005 and 2010. The address and postal code of the charity allowed me to place a charity inside the borders of an Indigenous community.

Chapter two:

In this chapter, the period covered is from 2003 to 2017. All monetary variables are adjusted for inflation using the provincial CPI and with 2017 as the base year. The analysis starts from 2003, as there were significant changes in the T3010 format in that year. Before that, government funding was split among four different categories and this would have hampered the comparison of variables over a longer period of time.

Charities are defined as Indigenous if at least one of three conditions applies: 1) they have an Indigenous reference in their legal name (from the T3010); 2) their primary concern is the needs of Indigenous peoples, determined by activity code A9 - *Services for Aboriginal Peoples* (from the T3010); 3) they are located on an Indigenous reserve, as identified so by the federal department Aboriginal Affairs and Northern Development (AANDC).

First, I dropped charities who filed the T3010 twice a year (6,900 observations from 3,400 charities).⁷⁷ Then, I dropped 4 outliers charities which reported abnormally high amounts of revenue.

I created a subsample that I called “Schedule 6”. This includes all charities that specify between federal, provincial and municipal funding. More specifically, it includes all charities till 2008 and afterwards only those which were subject to fill out Schedule 6. The table here below summarizes the number of observations (n) and the number of charities (N) of the various samples.

	Non-Indigenous charities	Indigenous charities	Indigenous charities off-reserve	Indigenous charities on-reserve
Observations full sample: n=1,237,450	n=1,226,173	n=11,277	n=6,301	n=4,976
Number of charities: N=107,291	N= 106,197	N= 1,022	N=564	N= 458
Observations sample Schedule 6: n=870,093	n=861,423	n=8,670	n=5,360	n=3,310
Number of charities: N=94,338	N=93,418	N= 920	N=512	N=408

⁷⁷ Some charities would report exactly the same amounts in the two filings. Some charities had increased values for the same variable in the second filing as compared to the first one. Others had decreased values for the same variable in the second filing. Charities are allowed to file more than once the return, but some are also required to make readjustments to their previous return if the CRA sees the need for it. The impossibility to know the exact reason for the two filings led me to drop those charities rather than keep, for instance, one of the two filings.

I recalculated line 4570, namely the amounts of revenue from any level of government in Canada, which are the sum of lines 4540 for federal, 4550 for provincial/territorial and 4560 for municipal/regional funding. If a charity had to fill out Schedule 6 and specify between the three government revenue sources, line 4570 would have been empty. I replaced the recalculated variable 4570 if the charity had to fill out Schedule 6 and if the two variables amounts were not already the same. Over 80% matched previously. I could see from the data if there were zero values reported for line 4570 but positive government funds were obtained. I thus recorded these government funds in line 4570. Lastly, I replaced negative values of line 4570 with those of my recalculated government funding numbers if the recalculated numbers had the same absolute value. A total matching of 96.28% could be achieved, leaving only 46,000 values as they originally were. In a similar manner, I employed this approach to line 4700 for total revenue.

Chapter three:

All the steps that I followed in chapter two apply also for this chapter. Basically the final samples of chapter two are the initial samples for chapter three. Other considerations in this chapter are related to negative values. A very small percentage of charities (0.02%) report a negative value for the total revenues, which at first sight appears to be bizarre. However, the CRA requires to report a negative amount for the variable *net proceeds from disposition of assets* in the revenue section of the statement of operations, which can lead to a final negative amount of total revenues. Furthermore, 166 Non-Indigenous charities and six Indigenous charities reported negative government revenues. I did not drop these charities, as a charity that does not use a grant and returns it, can report a negative amount.

The same explanation cannot be applied to negative values for private donations, fundraising revenues⁷⁸ or for gifts from other charities; these observations are dropped. Thirty-nine observations from 37 different charities have negative private donations, 349 observations from 301 charities report negative fundraising and 46 observations from 43 charities have negative gifts from other charities. It is rarely the case that the same charity reports negative values repeatedly over the years or that it reports two negative values (e.g. private donations and fundraising) in the same fiscal year. Lastly, in order to have a stronger balanced dataset, I exclude charities with three

⁷⁸ Revenue from fundraising (line 4630) could be negative if the costs of fundraising is larger than the fundraising revenue. This can be excluded, as charities need to indicate exactly in the T3010 their expenditures on fundraising (line 5020), if they paid external fundraisers (line 2700), the gross revenue collected by fundraisers on behalf of charity (line 5450) and the amounts paid to or retained by the fundraisers (line 5460).

or fewer years of data (20,633 observations). The table here below summarizes the number of observations (n) and the number of charities (N) of the various samples.

	Non-Indigenous charities	Indigenous charities	Indigenous charities off-reserve	Indigenous charities on-reserve
Observations full sample: n=1,216,383	n=1,205,386	n=10,997	n=6,206	n=4,791
Number of charities: N=96,751	N=95,865	N=886	N=492	N=394
Observations sample Schedule 6: n=856,626	n=848,157	n=8,469	n=5,309	n=3,160
Number of charities N=87,852	N=87,024	N=828	N=465	N=363