

A Guide to the Canadian T3010 for Users of the U.S. Form 990

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Abstract

This research note introduces nonprofit researchers accustomed to the U.S. Form 990 to the Canadian data captured on the T3010 financial form that will soon be available to researchers on a broad scale. Similar to the Internal Revenue Service (IRS) Form 990, the Canada Revenue Agency (CRA) T3010 is an annual information filing required of every Canadian charity that meets certain requirements. However, several elements in the data are unique to the Canadian context, while others are similar to the Form 990 but must be interpreted with attention to differences in definition and accounting practice that might otherwise complicate attempts at cross-national comparisons. Once these elements and the data's limitations are understood, however, the forthcoming datasets will allow rich analysis for researchers and practitioners in areas that are yet unexplored with large data sources.

Keywords

Canada, charity data, comparative

Introduction

When researchers look back on the nonprofit academic literature in a few decades, they are going to wonder what exciting events took place between 1998 and 2003 that generated so much research focused on that period. What current researchers know, though, is that those years are the period covered by the “Digitized Data” made available by the

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National Center on Charitable Statistics in the United States. The relative ease of acquiring detailed data from this period meant that almost every conceivable research question that could be answered with tax return data took place in the temporal window represented in that data set, especially questions that required detailed financial information.

During the last few decades, however, there continued to be articles in mainstream journals dedicated to the presentation and exploration of new data resources. Jalandoni et al. (2005) explained the utility of the Federal Audit Clearinghouse to readers of *Nonprofit and Voluntary Sector Quarterly* (NVSQ), followed shortly by Wilhelm's (2007) introduction of the Center on Philanthropy Panel Study (COPPS). More recently, Lecy and Thornton (2016) introduced the federal grant data in the Federal Assistance Award Data System (FAADS) dataset to the readers of this journal. Now, as the movement to democratize the Form 990 data in the United States grows stronger, even the Form 990 archives are available from several different locations.

The research community is making similar progress on charitable data in other national contexts. This research note is a step in the democratization of large-N archival charity registration data in Canada. The author team received funding from the Social Science and Humanities Research Council (SSHRC) of Canada to assemble a dataset that rivaled the U.S. Form 990 datasets in terms of accuracy and accessibility. We have done so, creating a shorter panel that can be easily downloaded by researchers (referred to as the "research panel") and a larger storage effort of annual waves with less curation, but more authenticity in the preservation of errors (referred to as the "curated panel"). This research note provides a mechanism for us to do two things: document the decisions made in the assembly of the research panel while also providing a list of best practices for those interested in using the Canadian data.

For the purposes of this research note, we assemble annual financial filings for the population of Canadian charities for 2009–2016.¹ Although the information has been publicly available by request for some time, the uptake by researchers has been slow. Not only does this research note cover some of the advantages and disadvantages of scholarly use of the Canadian data, but it also offers technical advice on the usage of the data and how it compares to data from the Form 990. In particular, the authors draw attention to some of the important variations in reporting requirements and definitions so that other researchers can avoid initial mistakes regarding comparability once the full datasets become public, currently scheduled for 2022.

This article proceeds as follows. First, we briefly describe the history of charity regulation and registration in Canada. Then, we describe the assembly of the dataset, followed by a tour of the form and some important differences with Form 990. We then offer suggestions on limitations and future research. We recommend having both forms available (the U.S. Form 990 and the Canadian T3010) so that the reader can view the elements we refer to in the article.

A History of Canadian Charitable Registration

Nonprofits in Canada can incorporate under federal or provincial jurisdictions; however, the creation of the corporate entity and the registration of the tax-exempt charity

are two distinct steps. The federal registration of Canada's charitable organizations began in 1967, designed as a mechanism for the government to reconcile suspected discrepancies between charitable deductions claimed by taxpayers and the donations reported as received by charitable organizations (Ontario Law Reform Commission, 1996); this is in contrast to the federal incorporation of nonprofit organizations, which began in 1917 as a part of the Companies Act (Corporations Canada, 2012). Changes to the Income Tax Act created a list of registered charities eligible to receive tax-exempt donations as well as the requirements for these organizations to maintain their status. While initial regulation of charities and donations was minimal, this established a foundation for future regulation of Canada's charities (Ontario Law Reform Commission, 1996).

Legislated changes to the Income Tax Act initiated in 1976 required that the tax returns of charitable organizations be publicly disclosed rather than be considered confidential (Ontario Law Reform Commission, 1996). These returns were originally publicly available as paper documents, made available as stored data in the 1990s, available online in the 2000s, and provided via an open data portal in 2013 (McMurren et al., 2016). While Canada was later to implement annual returns than the United States (returns required since 1943), it has provided tax return data in an open data format much longer than the United States, which has done so for electronic filing charities through Amazon Web Services since 2016 (Howard, 2016). However, the Canadian data has not been released as an open research data set and has only been available either in small batches or by request from the Canada Revenue Agency (CRA) or an institution that has a curated database. For both countries, even large datasets of annual regulatory filings for registered charities only capture a portion of the nonprofit sector in each country, as nonprofits can be incorporated without seeking tax-exempt status in both countries.

We also expect Canadian data to become more readily available as more charities choose to file their annual forms electronically. This service began in June of 2019, and regulators are strongly encouraging organizations to use online filing by making it user-friendly. Unlike the written form, the online environment allows usability features such as enabling multiple people to work on the Form at once from multiple locations and having a progress bar on the screen to illustrate where in the Form they are. But to our knowledge, there are no plans to discontinue paper filings entirely—in a sector where only about half of registered charities have employment expenses, we suspect that the transparency benefits of having the filings are greater than the benefits of pushing those who might not have the capacity to e-file.

Form T3010 and Panel Assembly Overview

Form T3010 (version 23) has six sections (A–F) and seven schedules (1–7) comprising a total of nine pages. Unlike the United States, where charities of different sizes fill out different forms (i.e., Form 990, Form 990-EZ, or Form 990-N), Canadian charities fill out different pieces of the same form, depending on their size and capital structure.

Table 1. Duplicates and Composition of the Assembled Panel.

Tax year	Duplicate obs. (excess dropped)	Remaining obs.	Percentage of assembled dataset
2009	245	84,035	12.42%
2010	263	84,343	12.46%
2011	218	84,676	12.51%
2012	253	85,092	12.57%
2013	217	84,870	12.54%
2014	213	84,851	12.54%
2015	290	84,351	12.46%
2016	194	84,503	12.49%
Total	1,893	676,721	100%

One of the potential hazards of curated datasets arises from decisions made before the data becomes public. Although our philosophy of data curation minimized these types of modifications, we did make some decisions that may be of interest to other researchers or condition findings. These have been documented in this article and will be included as a part of the data repository for the research panel.

Our initial data were sourced by request from the Charities Directorate of the Canada Revenue Agency. It was provided in Excel files corresponding to tax years. This meant we needed to combine them to assemble a panel, similar to the Core files from the National Center on Charitable Statistics. Unlike the Core Files, however, there was substantially less duplication across years. Table 1 shows the number of duplicate observations per year and the final distribution of observations across years in the panel.

In some data processing software, non-numeric characters can lead to variables representing numeric concepts to be imported in a string format. For example, despite instructions, the Canadian data contain both minus signs and parenthetical conventions to denote values below zero. The user will save steps by taking care of such conversions and symbol cleaning (such as dollar signs and commas) if their software does not automatically handle this.

There are also three forms used over the 8 years of the study, an issue familiar to users of U.S. 990 data. These roughly correspond to years of implementation, although the bridge between Form 21 and Form 22 was not crisp: In 2010, 43% of reporting charities used Form 21, and 57% used Form 22. Years and form usage are shown in Table 2.

As with any data with form changes, users should watch for shifts across years. For example, in version 21, whether a charity has spent or transferred enduring property during the period meant that the more comprehensive Schedule 6 needed to be completed. In version 22, this fourth prong was dropped from what came to be known as the three-prong test on whether a charity should fill out Section D or Schedule 6. Furthermore, when transitioning from version 22 to version 23, the entire Schedule 7

Table 2. T3010 Form Usage by Fiscal Year.

Form ID	Fiscal year								Total
	2009	2010	2011	2012	2013	2014	2015	2016	
21	84,035	36,687	0	0	0	0	0	0	120,722
22	0	47,656	84,676	85,092	1	0	0	0	217,425
23	0	0	0	0	84,869	84,851	84,351	84,503	338,574
Total	84,035	84,343	84,676	85,092	84,870	84,851	84,351	84,503	676,721

was added, plus variables separating added political activity gifts to qualified donees (*_5031*), amount from outside Canada spent on political activities (*_5032*), and tax receipted revenue from sources outside Canada (*_4571*). In later version changes, there was a change in labels and variable types for organizational identifiers between fiscal years 2016 and 2017. This was not captured in the scope of the current data but will be an issue that needs bridging in the public datasets.

The unique identifiers for Canadian charities are the Business Numbers (BN), which correspond to the Employer Identification Number (EIN) on Form 990. However, there are some differences. In both countries, businesses in both for- and nonprofit sectors need an identification number (Fritz, 2019). However, the EIN does not contain anything that identifies the organization as a charity. In the Canadian data, the variable labeled as “BN” is the registration number, which has three pieces: the BN (9-digit), the code “RR” that denotes a registered charity, and a reference number that distinguishes internal divisions of an organization from each other (Canada Revenue Agency, 2020). For example, the full BN for the Lillian Allbon Cumberland County Animal Shelter is 119257194RR0001: the first 9 digits are a unique identifier (119257194), followed by the RR denoting a charity, and then 0001, which denotes that they are the primary or only division of the organization. The “RR” is pre-filled out on the T3010. Without the internal division component, the business number alone will not serve as a unique identifier for panel data purposes. Future research will explore the ability to take different financial views within the same organization (similar, likely, to the federated return election on the 990).

When assembling the panel, it is very important to note that researchers should protect the “missing” status of variables when changing data formats or aggregating tax years. As currently recorded, the T3010 data does not differentiate between missing values and zero values—both are reported as missing. However, as certain pieces of the form are required and others are not, one cannot simply impute all missing observations as zeroes. For example, one section of the form asks for a total measure of government revenue, while another asks for information about different levels. If a researcher was to impute all missing values as zeroes (thereby assigning zero values to the part of the form that was not appropriate for the charity) and then attempted to gauge the average amount of funding from the government provided to charities in Canada, the summary statistics generated would over-report the zeroes because the

missing data from the part of the form that was not applicable would have been changed from the appropriate missing value to a zero value. It is very easy to get inaccurate representations of the field without proper data hygiene.

For the Canadian research datasets, we imputed zeroes only when we had applied the three-prong test that dictates which financial sections of the form a charity needs to fill out. There are two sections: Section D and Schedule 6, with the latter having more information required. A charity must fill out Schedule 6 if they meet any of the following three criteria:

1. The charity's revenues are greater than US\$100,000.
2. The amount of all property not used in charitable activities is more than US\$25,000.
3. The charity has permission from the government to accumulate funds.

If any of these three conditions exists, then the researcher can assume which section the charity should have filled out, assign zeroes to the missing information in that section, and keep the missing values as missing in the section which was not required. This is muddied slightly when creating longer datasets, as the fourth prong regarding selling property was dropped in 2009 with the implementation of version 22 of the form. However, it is possible to construct a valid assumption about the parts of the form which should have been filled out each year and to impute zero values accordingly.

Organizational Descriptions

Basic organizational descriptions are similar across national contexts, although there are notable and novel elements. For example, many organizations in the T3010 dataset are not Canadian in origin; this could be because such organizations wish to either raise funds or deliver services within Canada. If one was interested strictly in Canadian charities, however, relying solely on country code as an exclusion variable would remove far more observations as only 12.5% of the charities bother to report country. So, a best data practice would be to create an exclusion variable based on the province (which all charities in the data save 19 reported) and exclude anything that is not distinctly identifiable as a Canadian province (many organizations report the U.S. state abbreviation). Table 3 shows a comparison of the data from *Country_code* and *Province*.

Similar to Form 990, the address listed is the mailing address rather than where service is delivered. This means that the common mismatch critique of using geographical variables to explore service delivery in Form 990 research applies to Canada as well (see Table 4). Both Form 990 and T3010 allow organizations to note whether they are subordinate to a parent organization, although Canada does not currently have a question where one can denote when they are the parent organization (only the subordinate).

Charities also indicate on the T3010 whether they are also designated as a charitable organization, private foundation, or public foundation. A charitable organization primarily carries out its own charitable activities, while foundations focus more on

Table 3. Country Listing for Charities (2009–2016).

Country	# Observations based on Country_code	# Observations based on province
Canada	84,477	676,450
Great Britain	1	0
United States	25	252
Missing	592,218	19
Total	676,721	676,721

Table 4. Charities Subordinate to Another Organization (2009–2016).

Organization Status	# Observations	%
Charity is a subordinate	100,057	14.79
Not a subordinate	469,530	69.38
Unknown	107,134	15.83
Total	676,721	100

transferring funds to qualified donees (which are other charities). A public foundation receives funding from many sources, while a private foundation often receives funding primarily from those involved in its governance (Canada Revenue Agency, 2016). The majority of the organizations are charities, as seen in Table 5. It will be important to note which variable the researcher uses to determine organization type, however. In the data, two variables indicate whether an organization is a type of foundation: an administrative designation (*designation code*) and an election by the charity filling out the form (variable *_1600*). The two variables offer similar (but not identical) results.

There are also several ways to categorize the activities and mission of Canadian charities. The Canadian program areas and field codes are roughly equivalent to the U.S. NTEE and activity codes combined. There are 9 overarching groups and 71 field codes used in the current data. The Canadian category codes are a parallel classification somewhere between the U.S. NTEE and activity codes. There are 53 categories used in the data in the sample. Many of the categories in this dataset are religious denominations (23 codes), although this classification was significantly changed in 2019 when the Canada Revenue Agency (CRA) stopped reporting the denomination of the most commonly practiced religion (Blumberg, 2019). This change was a part of a comprehensive update that, among other things, reduced the number of categories to 31 while introducing new subcategories.

Both Form 990 and the T3010 have space to indicate whether the organization is concluding operations in the present year and whether it was inactive. Interestingly, neither is predictive of the other in the T3010: There are more active dissolving charities than there are inactive dissolving charities. Furthermore, there are almost 52,000 charity-year observations that claim to be inactive yet expect to persist in the future

Table 5. Inconsistencies in Identifying Foundations (2009–2016).

Administrative Designation	Variable_1600				
	Form	Unknown	Foundation: N	Foundation: Y	Total
Designation code	Public foundation	862	9,530	29,752	40,144
	Private foundation	680	5,497	34,915	41,092
	Charity	16,176	563,299	16,010	595,485
	Total	17,718	578,326	80,677	676,721

and are not dissolving. Given that the number of active but not dissolving charities is almost 7.6% of the entire dataset, future researchers should explore what the implications are for having such a large “zombie” charity population (Searing, 2020, p. 361). The intersection of the two variables is shown in Table 6.

Canadian charities are also required to fill out a section of the form which contains or links to a worksheet of information on their directors and trustees. This worksheet has public and confidential sections. For each member of the charity’s board of directors or trustees, they must publicly disclose the first and last name, term start and ending dates, position, and arm’s length relationship status to other directors. “Arm’s length” status describes whether two parties are related enough to potentially cause a conflict of interest. Charities must also report the director’s or trustee’s physical address, phone number, and birth date, although these items will not be disclosed publicly.

Programs and Operating Information

The third section of the T3010 (Section C: Programs and General Information) is the largest and most diverse, mapping generally to the multiple pages of checklists that form the middle of Form 990. Some lines on this section are quick checkboxes while others exist to let the filer know that they need to fill out supplementary forms. There are free-response text boxes to fill in program information (similar to the 990), although these are divided into ongoing and new programs. Although not of particular interest to accountants, these fields will likely provide as much value to researchers interested in text analysis as similar fields have on Form 990.

The bulk of the section contains questions that represent the particular regulatory interests of the Canadian government and society. Like Form 990, many of these questions are simple binary indicators, serving to indicate when charities should fill out a supplementary schedule or a form with more details. For example, Canadian charities are subject to different regulations surrounding their political involvement, and questions are asked about political expenses both domestically and in foreign affairs. Although <1% of charities in this article’s sample spent any money on political activities, 3,838 charity-year observations spent an average of C\$115,500, and 32 charities received money from donors outside of Canada that was directed to be spent on Canadian political activities.

Table 6. The Confluence of Dissolution and Inactivity (2009–2016).

Organization Status	Active	Inactive	Unknown	Total
Surviving	597,429	51,730	11,389	660,548
Dissolving	3,363	2,592	199	6,154
Unknown	6,405	375	3,239	10,019
Total	607,197	54,697	14,827	676,721

Table 7. Negation Versus Non-Report in Fundraising Methods (2009–2016).

Media ad used?	Form ID			Total
	21	22	23	
Unknown	105,600	193,848	300,698	600,146
No	83	149	144	376
Yes	15,039	23,428	37,732	76,199
	120,722	217,425	338,574	676,721

Fundraising also receives more attention in the Canadian form than the U.S. form. For example, there are 16 different types of fundraising that a charity can indicate that they use, though this is simply a qualitative marker and not the amount spent. There is more detail if outside fundraisers are involved, which requires a supplementary form and disclosures on the main form of how much the external fundraisers brought in, what and how they were paid, and whether they issued receipts.

There are fewer concerns equating “no” and missing data on the variables which indicate fundraising methods, even without the three-prong test regarding which pieces of the form to fill out. This section is a portion of the form which every charity should complete, without any instructions that permit some organizations to opt-out. There should also only be two options for a checkbox: checked and not checked. However, some charities do report a “No” answer, although the mechanics of how this is done is unknown as there is only a checkbox (and it does not appear correlated with the Form ID or Fiscal Year). Although the number is not large, it is nonetheless curious how this was accomplished. This result is reported across Form ID in Table 7.

Even more perplexing is that almost 80% of the charities which claim that fundraisers issued tax receipts on their behalf report that they did not pay external fundraisers (see Table 8). This could mean that the latter question is being interpreted to apply to both internal and external fundraisers, or perhaps that if a fundraiser keeps a percentage, perhaps that isn’t considered payment (though technically it is.) There is also the possibility that external fundraisers were volunteers, which could be interpreted by those completing Form T3010 as external to the organization. Finally, there is substantial literature in the U.S. context regarding incentives to minimize and misrepresent the true size of spending on administrative and fundraising costs (Barber et al., 2022;

Table 8. Compensation and Actions of Fundraisers (2009–2016).

External fundraiser paid	Fundraiser issued receipts?			Total
	Missing	No	Yes	
Missing	7,933	2,480	261	10,674
No	454,947	192,543	10,486	657,976
Yes	364	5,079	2,628	8,071
Total	463,244	200,102	13,375	676,721

Table 9. Accounting Method (2009–2016).

Method	# Observations	%
Accrual	385,551	56.97
Cash	236,045	34.88
Other	55,125	8.15
Total	676,721	100

Krishnan et al., 2006; Lecy & Searing, 2015). Given the possibilities, this warrants further investigation.

Political activities also warrant special attention in the T3010, although this has recently been changed. Only 3,993 observations report political activities, which is about 0.5% of the reporting population.

Financial Information

As mentioned previously, there are two places in the T3010 where financial information is listed, but a charity should only fill out one of the two based on the three-prong test. Ideally, this would provide some basis by which to impute zeroes for data reported as missing. However, many variables are shared across the two forms, and a researcher could be more comfortable imputing these as zeroes if no information is given for either location.

One of the variables common to both financial portions of the form is the choice of accounting method. The distribution in the sample is shown in Table 9. Curiously, there are only two options (one checkbox for accrual and one for cash), but more than 8% of the sample have found a way to report “other.” We suspect this is the label assigned to missing values by the CRA. In comparison to the U.S. 2016 e-filing 501c3 data, 52.5% of nonprofits used accrual, 46.3% used cash, and 1.3% used “other” from a sample of 278,865 charities. These samples are not directly comparable, given the year and filing method differences, but they seem to indicate a larger degree of accrual accounting for the Canadian charities. However, given that “other” may simply be missing or erroneous data, this observation requires further exploration.

Revenues and Expenditures

The T3010 is particularly rich in revenue information, regardless of whether an organization is filling out the shorter Section D portion (containing 10 different revenue variables) or the longer Schedule 6 portion (containing sixteen different revenue variables). Information on expenditures² is more limited, with four-line item expenses and two functional categories for Section D. Schedule 6 has 16-line item expenses and five functional categories. Both sections of the form reserve the line item describing gifts to qualified donees³ until right before the final total, showing the emphasis that the Canadian regulators place on keeping support between charities separate from other types of spending.

The presence of separate schedules within the same document is particularly problematic when they share the same concepts and variables. For example, government revenues are captured on Section D for smaller charities (variable 4570) but then split into three different levels of government on Schedule 6 for larger charities. Schedule 6 does not have a government subtotal. The researcher must be aware and create another omnibus government variable to make sector-wide observations. If the data are missing in all government variables, then the researcher needs to rely on the three-prong test for which portion should have been filled out to determine which government revenue is zero and which is truly missing.

More problematic is the treatment of “Other Revenue,” which is the same variable for both Section D and Schedule 6. This is despite Section D containing eight contributing revenue accounts and Schedule 6 having 13 contributing revenue accounts, further complicated by the variations in the categories of revenues reported in each area of the form. For example, non-receipted revenues from memberships and dues (4620) are a line item in Schedule 6 but lumped into “Other Revenue” in Section D. This makes sector-wide generalizations about both memberships and other revenue sources more difficult, so it needs to be noted even in descriptive reports of sector revenues.

Also, the T3010 tends to keep the revenues and expenses separate. While this might seem intuitive, we encourage researchers to consider the revenues reported on Form 990: Five expense categories are included to provide five net revenue entries, which are the ones traditionally used by researchers. By comparison, the only netted proceeds in Schedule 6 of the T3010 are for the disposition of assets (and the gross figure is also available). Ignorance of this is a quick way to introduce bias to comparative findings, and the structure of the expenses prevents meaningful replication of the U.S. format on the Canadian side. So we would encourage the use of gross revenue figures for comparative work (although some researchers, such as Searing (2015), have been using this approach as standard even for Form 990 studies).

Although this touches on both revenues and assets, there is a significant difference in the way that pledges are translated into revenue. In the United States, pledges are recognized (under accrual accounting) at the point where a credible promise is made. This is one of the difficulties in U.S. nonprofit financial management and revenue recognition that necessitates a close watch of cash flows. In Canada, however, there is a difference between Generally Accepted Accounting Principles and the guidelines for the T3010. Although in practice, Canadian charities recognize pledge revenue at the

point of credible promise (Chartered Professional Accountants of Canada, 2019), the T3010 instructions are explicit that pledges are counted as revenue during the period in which the pledge is honored and the cash paid (with pledges dedicated to activities in future periods recorded as deferred revenue under liabilities). Not only does this have implications for managers balancing two competing sources of financial information but also needs to be kept in mind by comparative researchers as this may have a drastic effect if using these data for comparative purposes.

Assets and Liabilities

The balance sheet portion of the T3010, by contrast, is much less detailed than the revenues and expenses. Section D only provides total assets and total liabilities, plus two additional binary questions. Schedule 6 contains significantly more detail, with 12 specific types of assets, but only four types of liabilities. Of particular interest, there is no place to note net assets on the T3010. This means that the balance sheet components will not equal each other, so there is no convenient visual balance representing the fundamental equation of accounting like there is on Form 990. We are curious as to how this impacts the error rate for those filling out the form; since the instructions for the T3010 on page 11 take special care to note that they do not balance and why we expect that there is a nontrivial amount of error due to this form structure.

Canadians do have a more straightforward way of handling investments in Schedule 6 (only total assets and the presence of land or buildings are captured in Section D). Both the 990 and the T3010 distinguish between publicly traded investments that mature before or after 1 year. However, Canada puts these in a “Cash, bank accounts, and short-term investments” category (as opposed to “Long-term investments”), while the United States uses “Savings and temporary cash investments” (as opposed to cash and three investment categories.)

For both forms, inventories are valued at the current market value.⁴ For land and buildings, both nations require the reporting of such assets at cost basis (although the U.S. instructions simply state “cost basis” while Canada explains that this means the original cost to the charity or value at donation).⁵ However, Canada splits capital assets other than land and buildings out (and still has them recorded at cost) in Section D, while the United States splits land from buildings, leasehold improvements, equipment, and “other” in Schedule D. This section of T3010, similar to others, also focuses on what happens outside of Canadian borders and has a category for capital assets outside of Canada.

The forms also differ in their treatment of accumulated depreciation. First, the T3010 calls this accumulated amortization of capital assets, while the Form 990 calls this accumulated depreciation. Also, similar to the inclusion of certain expenses in the revenues section of Form 990, Form 990 also reduces the value of the capital assets (which have been recognized at cost) before reporting the net value on the form. We suspect this section of the T3010 form may create error, as the form does not clarify how these lines should be used, given that both the cost basis capital assets and the accumulated amortization are being recorded, but they appear to be added together in creating Total Assets. It is only when reading the instruction booklet that the reader is

Table 10. Distribution of Charities Whose Expenditures Match the Total (2009–2016).

	Sum is < Reported total expenditures	Sum = Reported total expenditures	Sum is > Reported total expenditures	Total
# observations in sample from charities who should file Schedule 6	166,915	63,473	121,838	352,226

informed that accumulated amortization should be a negative number that offsets the capital assets; this is likely why more than 8% of charities that provided a value for this item provided a positive value (9,670 out of 115,887 observations reporting accumulated amortization). Why the CRA did not choose to left-adjust this column as it did for other values needing special treatment is unknown, but we suspect this also contributes to errors in this section of the form. In addition, the rate of amortization is not specified on the form or the instructions, so the life span of assets and the depreciation of their value are likely to vary, at the least, across organizations.

In many of the best practices for cleaning the Form 990 data (such as Prentice, 2016 or Calabrese, 2011), they recommend dropping all observations that report negative asset or liability values. Were the same advice applied to this T3010 dataset, we would drop 713 negative total asset values and 1,539 negative total liability values. Dropping missing observations on total assets (which researchers believe can be safely imputed as zeroes given their appearance on both Section D and Schedule 6) would result in the loss of 39,180 observations.

There is no correlate to the Form 990 Statement of Functional Expenses on the T3010. However, there are subtotals for the six different functional types of expenses: charitable activities (5000), management and administration (5010), fundraising (5020), political activities (5030), gifts made to qualified donees (5050), and expenditures not included in these categories (also known as “other,” but listed as 5040). These should all aggregate to total expenditures (5100), at least on Schedule 6 (Section D only requires the reporting of charitable activities [5000], management and administration [5010], and gifts made to qualified donees [5050]). Unfortunately, when we impute zeroes based on the charities that should be filling out Schedule 6, the number of organizations whose figures add up is less than inspiring (Table 10); we expect this will be worse following the elimination of the political activities expense item in the 2020 version of the T3010 form. How much of this is due to data recording or curation error and how much is an actual error due to human or form should be examined in future research.

Additional Guidance

We would suggest that users do not assume that binary indicator variables will match with the supporting information. Often, these types of indicators (e.g., an indication of support in the form of tax-receipted in-kind donations) are useful in helping determine who attempted to respond to an optional section of the form; in situations like this one where missing and zero are identical, this can build confidence in your imputation

Table 11. In-Kind Donations (2009–2016).

Response to binary indicator of in-kind	Response to numerical value question on in-kind				
	Obs	M	SD	Minimum	Maximum
Missing	781	109,117.9	264,2524	10	73,832,050
No	8,242	78,839.47	1,352,909	1	107,779,370
Yes	95,785	169,238.9	4,164,538	-4,500	826,344,170

Table 12. Select In-Kind Donation Responses (2009–2016).

Type of in-kind gift	Response (N = 676,721)		
	Yes	No	Missing
Artwork/wine/jewelry	23,174	2	653,545
Building materials	11,881	1	664,839
Clothing/furniture/food	39,055	2	637,664
Vehicles	4,014	1	672,706
Cultural properties	2,203	1	674,517
Ecological properties	432		676,289
Life insurance policies	5,156		671,565
Medical equipment/supplies	4,772	987	670,962
Privately-held securities	946		675,775
Publicly traded securities/commodities/mutual funds	15,239	8	661,474
Books	12,337	2	664,382
Other	50,640	5	626,076

decisions. But there is a notable disjoint in some of these indicators. Using the in-kind information, we can see in Table 11 that 8,242 charities that responded “N” to the question of whether they had tax-receipted in-kind then provided a positive numerical value for their in-kind donations later in the T3010.

This form struggles most with these types of simple questions: Although they are in place likely to ease the administrative burden on managers, the resulting confusion may not be worth the supposed ease. Another example is found in the boxes for types of in-kind donation, where users should “tick” the applicable boxes (Table 12). This should be a binary variable, but in the codified data, there are yes, no, and missing values.

Limitations and Directions for Future Research

Despite the new opportunities offered by the Canadian T3010 data, there continue to be shortcomings. Many of the problems which existed with the Form 990 data—such as overreliance on accounting ratios and issues with proper reporting—will persist in the T3010 data. There is also the potential hazard that over-reliance on accounting ratios could worsen, causing the nonprofit starvation cycle to take hold in Canada (if

it has not yet already; Lecy & Searing, 2015). Furthermore, this short research note cannot possibly capture all of the different changes, avenues, and opportunities made possible by the availability of the new datasets. However, we do consider the easy access to the Canadian panel will enable hundreds of additional research questions to be asked and answered by experts in finance, accounting, law, and other specialties. This article only serves as an initial guide for those scholars who have been trained under the nonprofit data hegemony of the U.S. IRS.

There are certainly new frontiers in nonprofit research that can be better explored with the T3010 data than other existing large-N datasets. For example, many questions regarding houses of worship and other religious institutions can be explored as Canada does not treat these organizations differently from other tax-exempt entities. Additional details on in-kind donations and political contributions are also available in the T3010 data. Finally, scholars have already capitalized on the ability to tease apart different levels of government funding when looking at phenomena such as revenue crowd-out (Grasse et al., 2022). Future changes to the form, such as those recommended by the recent Advisory Committee on the Charitable Sector, may allow users to examine additional questions, such as those on the diversity of organizations' directors (Canada Revenue Agency, 2022). We are also particularly enthused by the opportunities this may provide for the further democratization of data, outside of North America. Other countries are also working toward free and accessible data on their charities, such as researchers in England, Wales, and Scotland. The opportunities for collaborative teams and research questions are plentiful.

Beyond simply the knowledge of the T3010 and its applicability to modern research questions, this article can also serve as a generalizable guide to any large-N data curation project. We cannot overemphasize the importance of good data hygiene, especially when working with a new context: painstaking documentation during dataset assembly, the preservation of errors for research purposes, and the acknowledgment of different regulatory standards (that often have roots in different institutional and cultural standards; Searing et al., 2021). Researchers and data curators should also note extensively where there is ambiguity, such as the missing/zero data issue in the T3010. Not only will this documentation assist in transparency during data curation, but it will help in identifying further research questions in accounting, regulation, and the broader institutional context.

Finally, the continued publication of research notes such as this will help us move beyond simple access to data and allow the dissemination of best practices. While the academy and field of nonprofit studies could do more to reward this kind of knowledge pooling among scholars, we consider it essential to the furtherance of the field, especially as the role of charities and organizations in the broader social economy continue to internationalize. Conclusions are only as solid as the data they rely on, which includes not only the accuracy of the numbers, but also the understanding of the legal, institutional, and cultural context from which they came.

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Notes

1. At least two repositories for the Canadian data are being established: the GrasSear Research Dataset on Canadian Charities and the GrasSear Open Dataset on Canadian Charities. The former is a cleaned panel of T3010 filings stretching from 2009 to 2016, while the latter will be annual waves (2000–2017) currently with documentation and minimal cleaning to facilitate more advanced research.
2. We recognize that the items described as expenditures by the T3010 more closely conform to the definition of expenses rather than expenditures. However, as this Note focuses on the Form T3010, we choose to retain the phrasing used by the form and leave exploration of the term's appropriateness to future research.
3. A qualified donee is an organization that can issue official donation receipts under the Income Tax Act (Canada) which is valuable for some donors when filing their income tax returns. About 86,000 are Canadian registered charities. However, there are nine other categories including municipalities, provincial and Federal governments, the United Nations, certain foreign universities, and so on (Canada Revenue Agency, 2017). In broad terms, this line item expense captures the transfer of assets from one charity to other charities.
4. For purposes of financial statements, however, Canadian charities consistent with International Financial Reporting Standards (IFRS) are not permitted to utilize last in, first out (LIFO) inventory valuation.
5. While this has the potential to dramatically undervalue real estate, it may simplify cross-national comparisons.

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