CJNSER / ReCROES
Canadian Journal of Nonprofit and Social Economy Research
Revue canadienne de recherche sur les OSBL et l'économie sociale

CJNSER / ReCROES
Vol. 14, No. 1, 2023
pp. 1 – 20

Earnings Management in the Charitable Sector: A Canadian Study

Dominic Cyr, Université du Québec à Montréal
Suzanne Landry, HEC Montréal
Anne Fortin, Université du Québec à Montréal

ABSTRACT

This article examines whether charitable organizations use discretionary accruals to manage their surplus or deficit. Linear regression was used to analyze the financial data of a broad sample of Canadian charitable organizations. Results showed that discretionary accruals were used to manage these income figures. This approach is compounded by the magnitude of grants, public benefit, and leverage. The results hold whether the charity anticipates a surplus or a deficit, but not if it displays a high level of public benefit. In that case, charities with an anticipated surplus increase their use of discretionary accruals to decrease earnings, whereas charities that anticipate a deficit are not inclined to manage their deficit toward zero. This study complements prior literature on nonprofits and shows that even though tax laws differ among countries, charity managers in various contexts are motivated to manage earnings and are influenced by various factors in doing so.

RÉSUMÉ

Cet article examine si les œuvres de bienfaisance effectuent des ajustements discrétionnaires pour gérer leurs excédents ou leurs déficits. La régression linéaire a été utilisée pour analyser les données financières d'un large éventail d'œuvres de bienfaisance canadiens. L'étude a montré que les ajustements discrétionnaires étaient effectivement utilisés pour gérer les résultats. Cette approche était d'autant plus utilisée quand les subventions, le bienfait d'intérêt public et l'endettement étaient importants. Les résultats sont valables que l'œuvre de bienfaisance prévoie un excédent ou un déficit, mais pas s'il démontre un haut niveau de bienfait d'intérêt public. Dans ce cas-là, les œuvres de bienfaisance qui prévoient un excédent augmentent leur recours aux ajustements discrétionnaires pour réduire leurs résultats, tandis que ceux qui prévoient un déficit ne sont pas enclins à gérer leur déficit pour le ramener à zéro. Cette étude s'avère un complément à la littérature antérieure sur les organismes à but non lucratif et montre que, même si les lois fiscales diffèrent d'un pays à l'autre, les responsables d'organisations œuvrant dans divers contextes caritatives sont motivés à gérer leurs résultats, et divers facteurs les influencent quand ils le font.

Keywords / Mots clés: charities, earnings management, government grants, leverage, public benefit / œuvres de bienfaisance, gestion des résultats, subventions gouvernementales, endettement, bienfait d'intérêt public

INTRODUCTION

The nonprofit sector accounts for 8 percent of Canada's gross domestic product, generates about 1.5 million jobs (CanadaHelps, 2020), and involves almost 13 million volunteers (Hahmann, du Plessis, & Fournier-Savard, 2020). Canada is home to 86,000 charities, and these organizations raise more than CDN$18 billion in donations and receive CDN$183 billion in government grants annually (CanadaHelps, 2020). Canada ranked second, after the United States, for total donations to funds and public benefit organizations in 2018, and third for donations as a percentage of gross domestic product in 2016, with the United States and New Zealand ranking first and second (OECD, 2020).

Considering the charitable sector's economic importance and the volume of public and private funds invested in many jurisdictions, there is a need to better understand the phenomenon of financial disclosure management and the factors that impact this practice. When this opportunistic managerial behaviour occurs, it impairs the quality of the reported financial information and weakens its usefulness for decision-making purposes (Garven, Beck, & Parsons, 2018). It also impacts how limited resources are allocated between charities and other sectors and prevents optimal allocation of funds within the charitable sector itself.

The literature shows that nonprofit managers, like their for-profit counterparts, alter their organization's financial information to gain disproportionate benefits at the expense of stakeholders. A host of studies on the nonprofit sector indicate that charities strategically manage their program expense ratio, defined as total charitable activity expenses over total expenses, to attract donors (Garven, Hofmann, & McSwain, 2016; Parsons, Pryor, & Roberts, 2017), enhance executive compensation (Krishnan, Yetman, & Yetman, 2006), and satisfy rating agencies' performance criteria (Tinkelman, 2009). However, compared with the for-profit sector, which has so far provided the context for most of the research on earnings management (e.g., Burgstahler & Dichev, 1997; Dichev, Graham, Harvey, & Rajgopal, 2013), fewer studies address earnings management in the nonprofit sector (e.g., Jegers, 2013; Verbruggen & Christiaens, 2012), especially among charitable organizations (e.g., Nguyen & Soobaroyen, 2019).

Common motivations to manage earnings (e.g., reduce stock price volatility or maintain net growth) do not apply to the charitable sector (Graham, Harvey, & Rajgopal, 2005). Unlike the for-profit sector, the charitable sector does not aim to maximize shareholder wealth. In addition, the needs of users of charitable financial reports differ from those of shareholders. The first group is interested in charity reports that cover, not only financial matters, but also charitable program performance and fiduciary and procedural topics (Dhanani & Connolly, 2012). Charity annual reports are widely used by other parties as well. For instance, watchdog agencies such as Charity Intelligence Canada use them to rate the charities according to five criteria, including financial transparency and results reporting. This rating allows individual and corporate donors to make better informed giving decisions. Publications such as *MoneySense* and *Maclean's* also use the reports to carry out their annual charity rankings. Interested donors seeking more than just ratings may find charities' financial information on their websites. The Canada Revenue Agency (CRA), another important stakeholder, uses financial statements to assess whether charities spend their resources in accordance with their mission.

According to Leone and Van Horn (2005), earnings figures (surplus or deficit) are useful for stakeholders of nonprofit organizations when they make decisions regarding donations, evaluate man-

agement quality, and assess the organization's solvency. They also use them to ascertain compliance with contractual conditions and the organization's tax-exempt status (Leone & Van Horn, 2005).

To date, studies on earnings management in the nonprofit sector have looked mainly at nonprofit hospitals in the United States (Eldenburg, Gunny, Hee, & Soderstrom, 2011; Leone & Van Horn, 2005; Vansant, 2016). Although this literature provides insight on earnings management in the nonprofit sector, results cannot be generalized to charities without further investigation, as U.S. nonprofit hospital revenues are mainly derived from hospital services (Boris & Steuerle, 2006). In fact, in a report published in 2020, the OECD acknowledges that research in the philanthropic sector has only recently been undertaken in countries other than the United States. Some of this research includes Nguyen and Soobaroyen (2019), who report that U.K. charities use discretionary accruals to drive their financial results toward a zero surplus/deficit and commonly distribute reported earnings around that figure. Verbruggen and Christiaens (2012) document that large Belgian nonprofits use discretionary accruals to manage earnings toward zero.

Consisting of charitable organizations and foundations, charities differ from other nonprofits in that they operate exclusively for charitable purposes, i.e., they are established for the public benefit,[1] and have the privilege of providing charitable donation receipts for income tax purposes. For their part, charitable organizations differ from foundations[2] in that they dedicate most of their resources to the direct delivery of goods and services to the public (Income Tax Act, 1985, subsections 149.1(1) and (6)). Due to their nature and specific traits, charitable organizations experience pressure to maximize the quantity and quality of their output to the public. As they receive little money from beneficiaries, they depend on outside contributions from donations and government grants to carry out their charitable activities. As a result, their managers have common incentives to manage their organizations' surplus or deficit. These include demonstrating that the charity is highly beneficial to the public and encouraging capital providers to support it financially. This article focuses on charitable organizations; however, the term "charities" is used for brevity.

This study has four objectives. The first is to examine whether Canadian charities use discretionary accruals to manage their surplus or deficit. Managers could be led to strategically decrease their surplus or deficit by political-contractual pressures, or they may wish to satisfy donors' and government grantors' requirements. Since government aid is an important source of funds for many charities, the second objective is to assess whether the extent of government grants relative to the organizations' total revenues influences earnings management. Financial dependence on government aid creates additional stress in terms of reporting results that conform to the requirements of government authorities for retaining the funding. The third objective is to observe whether the level of public benefit (measured as total charitable expenses to total revenues) has an impact on charities' management of their surplus figure. The fourth objective is to provide evidence regarding the contention that leverage induces charities to manage earnings.

To answer these questions, linear regressions were used to analyze the financial data of a broad sample of 11,051 observation years of Canadian charities. The results suggest that charities use discretionary accruals to strategically decrease their surplus or deficit. In addition, they intensify this action in tandem with the magnitude of grants, public benefit, and leverage. The results hold

whether they anticipate a surplus or a deficit, but not for those with a high level of public benefit. In that case, contrary to expectations, charities with an anticipated surplus increase their use of discretionary accruals to decrease earnings, whereas charities that anticipate a deficit are not inclined to manage their deficit toward zero.

This study contributes to the accounting literature in several ways. First, to the authors' knowledge, it is the first empirical study that examines earnings management in the context of Canadian charities. Second, it is the first to consider how a charity's level of dependence on government grants and public benefit influences its engagement in this accounting practice. Third, the results extend those of Nguyen and Soobaroyen (2019), concerning the impact of leverage on earnings management in the charity sector, and the findings of Verbruggen and Christiaens (2012), concerning the impact of government grants on nonprofits. Lastly, the study focused on a Canadian context, and is an important response to OECD's (2020) call for more research on the charitable economic sector throughout the world. Overall, the study shows that even though corporation and tax laws differ to some extent among countries, earnings management by managers of charities is a common practice everywhere. Various factors influence this practice, such as government subsidies, public benefit, and leverage.

This article has four further sections. The next section briefly discusses the theories of earnings management and presents hypotheses. The following section describes the research method and data. The last section presents and interprets the results of the analyses, followed by the authors' conclusion.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Theoretical framework

There are several theories regarding charity managers' earnings management motivations and how to predict this opportunistic behaviour. The political-contractual theory underscores contractual, economic, and political factors (Watts & Zimmerman, 1978). It assumes that individuals seek to maximize their own utility and minimize financing and political costs. For instance, managers' incentives include increasing their compensation, protecting their jobs, gilding their reputations, adhering to debt covenant restrictions, and maintaining their organizations' charitable status. Managers thus weigh the consequences of financial disclosure in light of contractual outcomes and economic and political costs.

According to the resource dependence theory (Pfeffer & Salancik, 1978), organizations must fulfill donors' and government grantors' expectations to ensure financial sustainability. The latter assess the value of their donations or grants according to their anticipated public benefit and the risk that the donations and grants may not materialize into charitable activities. As a result, managers manage earnings to make organizations appear more beneficial to the public and less financially risky than their counterparts, with the goal of impressing donors/grantors and influencing them to donate/give grants to their organization rather than to another one (Parsons, 2003). This perspective also holds that managers will anticipate how donations/grants will be impacted by their financial reporting decisions in light of their acceptability to donors/grantors.

This article combines the political-contractual theory and resource dependence theory to provide a detailed portrait of managers' predicament, whereby they must simultaneously deal with satisfying the expectations of regulators, donors, and government grantors, uphold contractual agreements, and improve their own personal circumstances.

Hypothesis development

Surplus or deficit management (Hypothesis 1)

Combining the two theories that depict managers' underlying motives allows us to predict that charity managers feel constrained to reduce their surplus or deficit to minimize the costs that will arise from their reporting behaviour. Given that any excessive surplus or deficit can exact a toll on the charity and its managers, managers should choose to report a marginal surplus or deficit. First, it is important to consider the consequences of reporting a deficit. This figure casts doubt on an executive's competency and ability to ensure the organization's longevity (Leone & Van Horn, 2005). The resulting negative repercussions on the manager's welfare are considerable and include a tarnished reputation and barriers to the manager's career progression, compensation, and employment status (Hofmann & McSwain, 2013). Studies show that nonprofit managers are more likely to be let go when their organization reports a deficit (Brickley & Van Horn, 2002; Eldenburg, Hermalin, Weisbach, & Wosinska, 2004). This figure also damages the organization by reducing its net assets, thereby increasing scrutiny by its creditors. It may also reduce the cash flow available for charitable activities. Lastly, because of uncertainty regarding the organization's longevity, donors will be less willing to donate if they are unsure whether the organization will be able to use the donation for future charitable activities (Parsons, 2003). In light of these deficit consequences, political-contractual and resource dependence theories predict that managers of charities will use positive discretionary accruals to decrease an anticipated deficit. Consistent with this statement, the literature suggests that a number of nonprofits manage this deficit upward to reduce it (e.g., Jegers, 2013; Leone & Van Horn, 2005; Nguyen & Soobaroyen, 2019; Verbruggen & Christiaens, 2012).

Second, the following ramifications of a large surplus must be considered. Leone and Van Horn (2005) note that nonprofits with a high surplus signal that managers are not making the required effort to provide additional charitable activities. It indicates that the organization is underperforming and failing to achieve the public benefit that its stakeholders wish to see. The organization therefore loses some of its legitimacy in its pursuit of society's resources, and therefore risks the loss of donations and grants. Leone and Van Horn report that a surplus comes with political costs because donors are less inclined to donate to organizations that make too much profit because they consider these organizations sufficiently wealthy to maintain appropriate charitable service delivery. The organizations would most likely lose their donations and grants to other organizations in greater financial need. In light of these surplus ramifications, political-contractual theory predicts that managers of charities that anticipate a surplus use negative discretionary accruals to reduce this figure. This prediction is echoed in the literature (e.g., Nguyen & Soobaroyen, 2019; Vansant, 2016; Vermeer, Edmonds, & Asthana, 2014). It should be noted that the accuracy of this prediction must be tested before any other hypothesis on the antecedents of earnings management can be investigated. This article's first hypothesis therefore states: *There is a negative relationship between discretionary accruals and earnings (surplus or deficit) before discretionary accruals.*

Dependence on government grants (Hypothesis 2)
According to resource dependence theory, organizations must consider the assessment criteria of their main capital providers and appropriately satisfy their requirements to continue receiving the capital they need to survive (Pfeffer & Salancik, 1978). Governments are one of the main capital providers for charities in Canada. Grants from the three levels of government (federal, provincial, and municipal) accounted for about 66 percent of the total revenue stream of Canadian charities in 2017, almost 87 percent of which went to education and health (CanadaHelps, 2020). For many of these organizations, losing this funding would significantly contract their budget for the subsequent year and jeopardize their charitable activities. These charities are therefore under intense pressure to report financials that demonstrate that they are appropriately responding to the requirements of their governmental stakeholders. Parsons, Pryor, and Roberts (2017) surveyed 200 nonprofit managers and found that their dependence on U.S. government grants increased their likelihood of managing their program expense ratio upward by 21 percent to retain the funding. The study shows that these managers are sensitive to government pressure and are ready to manipulate the financial information to show that they are complying with the grant evaluation criteria.

Resource dependence theory predicts that charity managers experience pressure regarding, not only efficiency ratios, but also their surplus or deficit and whether to manage this result. When the organization experiences repeated deficits, the charity's reputation suffers because its results signal that it lacks the capacity to carry out its charitable activities. Consistent with the theory, on the one hand, the government may decide not to grant funding if it becomes uncertain about the organization's longevity. On the other hand, an immoderate surplus conveys that the organization does not need government grants to deliver its charitable activities. In addition, for the sake of social equity, the government may be reluctant to allocate public funds to an organization with a large surplus when other organizations are in greater need. The extent of an organization's dependence on government grants and, therefore, the consequences of grant loss is conditioned on the ratio of the grant to the organization's total revenues. In other words, the repercussions for future cash flow are greater for highly subsidized organizations than for those with small grants. According to resource dependence theory, an organization's heavy reliance on public aid increases the cost of reporting a large deficit or surplus. Managers may react to the prospect of these additional costs by using more discretionary accruals to reduce the anticipated deficit or surplus to the extent possible. Verbruggen and Christiaens (2012) investigated the impact of government grants on the earnings management practices of large Belgian nonprofit organizations and found that these practices increase when there is a high level of grants, but only for organizations with a pre-managed surplus (i.e., a surplus before accruals). Jegers (2013), also for a sample of large Belgian nonprofits, noted no significant impact of government grants on earnings management. In light of these theoretical arguments, the second hypothesis states: *Assuming a negative relationship between discretionary accruals and earnings (surplus or deficit) before discretionary accruals, the relationship intensifies with a high level of government grants.*

Public benefit (Hypothesis 3)
Regulatory pressures compel charities to manage an anticipated surplus to slightly above zero. Regulators expect that the activity surplus will be reinvested in charitable activities that aid society,

given that accumulating wealth is not acceptable for a charity (CRA, 2019). By posting an immoderate surplus, the organization is indicating that it is not maximizing public benefit. Consequently, this increases the political costs assumed by the charity. Regulators are attuned to the organization's profitability, and their decision to sanction or control it further depends on this figure. For example, the CRA stipulates that it may revoke the charitable status of organizations that maintain an unjustified level of reserves (CRA, 2019).[3]

Stakeholders' perceptions of the organization's level of public benefit also appear to affect decisions regarding the appropriateness of sanctions. After surveying tax specialists, Wilkicki (2001) found that situations in which nonprofit hospitals delivered a low volume of charitable care and posted a high surplus negatively influenced participants' perceptions of the soundness of maintaining the organization's tax-exempt status. However, when the organization's charity care was high, the revenue figure did not affect participants' disposition to maintain this status. The study's results indicate that the government's decision to revoke an organization's status is influenced by the organization's profitability only in cases of weak public benefit. In addition, the level of benefits that an organization provides to the public also appears to influence managers' perceptions of the likelihood of being sanctioned by regulators for an excessively high surplus. For instance, Vansant (2016) found that U.S. nonprofit hospitals providing a high level of public benefit are less inclined to revise their numbers downward to slightly above zero.

These studies by Wilkicki and Vansant suggest that the political cost associated with reporting an immoderate surplus diminishes when the organization's level of public benefit satisfies the expectations of stakeholders. As providing a high level of public benefit is an explicit demonstration that the organization is conforming to society's requirements, regulators are less sensitive to the organization's profitability. We therefore suggest that, as organizations provide higher levels of public benefit, managers experience less regulatory pressure to reduce the surplus they will publish in their financial reports. Therefore, this article's third hypothesis states: *Assuming a negative relationship between discretionary accruals and surplus before discretionary accruals, the relationship decreases with a high level of public benefit.*

Leverage (Hypothesis 4)

Few studies on the nonprofit sector have investigated the impact of leverage on earnings management. As for grants, resource dependence theory suggests that organizations must appropriately satisfy the requirements of the main capital providers to survive (Pfeffer & Salancik, 1978). In addition, political-contractual theory posits that an organization that depends on debt financing will face higher scrutiny from its stakeholders (Watts & Zimmerman, 2006). Also, under this theory, managers will seek to minimize financing costs. A charity's incentive to manage earnings upwards may stem from its desire to show its debtholders that it is financially viable enough to repay the debt with interest and/or that it has the capacity to borrow. The incentive to manage earnings downwards may be due to debt providers acting as a governance monitor, limiting charities' ability to report too high of a surplus.

For large Belgian nonprofit organizations, Jegers (2013) asserts that earnings management increases with level of indebtedness, while Verbruggen and Christiaens (2012) note no impact for new debt

contracting. For U.K. charities, Nguyen and Soobaroyen (2019) find that the greater their leverage, the more charities use discretionary accruals to manage earnings, regardless of whether they are pre-managing a surplus or a deficit. We test whether a high level of leverage compels more intense earnings management by charity managers. Therefore, the fourth hypothesis of this article states: *Assuming a negative relationship between discretionary accruals and earnings (surplus or deficit) before discretionary accruals, the relationship intensifies with a high level of leverage.*

METHODOLOGY

Sample

To test the four hypotheses, the authors used financial data from Appendix 6: Detailed Financial Information in the T3010 Registered Charity Information Return (Government of Canada, 2021).[4] The charity's financials can be accessed on the CRA's website and are part of the public domain. After submitting a formal request to the CRA, a CD of T3010 forms in Excel format for the 2010–2015 period was obtained. Table 1 summarizes the sampling procedure, starting with the number of observations classified as charitable organizations (i.e., excluding foundations) in the CRA database for the 2010–2015 period. As mentioned in the introduction, foundations were excluded because they do not dedicate their resources mainly to the direct delivery of goods and services to the public.

Table 1: Sampling procedure

Sample selection criteria	Number of observations	
Number of observations listed in CRA database from 2010 to 2015		448,463
Less:		
Hospitals (category code 10)	2,378	
Institutions of learning (category code 20)	9,508	
Total revenues less than CDN$500,000	362,988[a]	
Total assets less than CDN$100,000	2,459	
Cash-basis accounting	6,288	
Total donations/total revenues less than 10%	33,109	
Total expenditures on charitable activities/total revenues greater than 2	102	
Organizations with missing years or that merged during the period	13,835	
Outliers for the Jones (1991) model computations	870	
Sub-total		(431,537)
Total number of observations from 2010 to 2015 for the Jones (1991) model computations (2,821 charities)		16,926
Less:		
Year 2010 and year 2011	5,642	
Outliers from the main regression (standardized residuals exceeding -3 or 3)	233	
Sub-total		(5,875)
Total number of observations from 2012 to 2015		11,051

Note: [a] According to CanadaHelps (2020), 80 percent of charities have revenues less than CDN$500,000.

In Canada, hospitals (category code 10) and universities/colleges (category code 20) are public institutions funded for the most part by the State, according to its rules. Despite their charitable status, many of them do not conduct charitable activities themselves but have constituted foundations to accumulate funds to support their organization's charitable activities. Since the database provides all the financial data for regular operations (i.e., not exclusively for charitable activities), these organizations were excluded. Also excluded were smaller organizations (total revenues less than CDN$500,000[5] or total assets less than CDN$100,000), organizations that use cash-basis accounting, those with marginal reliance on donations (less than 10%), those with an unreasonably high program expense ratio (greater than 2), organizations with missing years or that merged during the period under study, and those with outliers for the Jones (1991) model computations. The years 2010 and 2011 were excluded because the regression model (1) uses two-year lagged data. To mitigate the effect of outliers, observations with standardized residuals from the regression exceeding -3 or 3 were also excluded.

The final sample consisted of a total of 11,051 observation-years covering the 2012–2015 period and falling into five activity sectors labelled according to CRA classification codes: Welfare (2,450), Health (805), Education (945), Religion (5,585), and Benefits to Community (1,266). Of these observations, 6,391 observations show a surplus before discretionary accruals and 4,660 a deficit before discretionary accruals.

Empirical model

To test the hypotheses, the following multi-linear regression was used:

$$DA_{it} = \alpha + B_1 EBDA_{it} + B_2 GVD_{it} + B_3 EBDA{\times}GVD_{it} + B_4 PB_{it} + B_5 EBDA{\times}PB_{it} + B_6 LEV_{it} + B_7 EBDA{\times}LEV_{it} + \sum \Upsilon_j Controls_{it} + \sum \delta_j Years_{it} + €_{it} \quad (1)$$

This model examines the relationship between discretionary accruals (DA_{it}) and surplus or deficit before discretionary accruals ($EBDA_{it}$), developed from Leone and Van Horn (2005), Nguyen and Soobaroyen (2019), and Verbruggen and Christiaens (2012). It also considers the interaction between dependence on government grants, public benefit, and leverage and earnings before discretionary accruals. The regression variables are defined below and summarized in the Appendix.

Measurement of dependent variable—discretionary accruals

As in the aforementioned studies, discretionary accruals (DA) were evaluated using the Jones (1991) model.[6] The discretionary accruals (DA_{it}) in period *t* scaled by total assets in period *t-1* for charity *i* correspond to the residual ($€_{it}$ term) from the following regression:

$$AC_{it} = b_1 1/TA_{it-1} + b_2 \Delta REV_{it} + b_3 PPE_{it} + €_{it} \quad (2)$$

Where:

AC_{it} Total accruals calculated as the change in amounts receivable, inventories, and other assets minus the change in accounts payable and accrued liabilities from period *t-1* to *t*, minus amortization of capitalized assets, all scaled by total assets at *t-1* for charity *i* (i.e., change in working capital minus amortization).

ΔREV_{it} Revenues adjusted for net profit/loss from asset sales in period *t* minus revenues adjusted for net profit/loss from asset sales in period *t*-1 scaled by total assets at *t*-1 for charity *i* (i.e., change in contribution and other revenue).

PPE_{it} Land and buildings in Canada, other capital assets in Canada, and capital assets outside Canada in period *t* scaled by total assets at *t*-1 for charity i (i.e., the level of fixed assets).

TA_{it-1} Total assets at *t-1* for charity *i*.

Before proceeding to computations for each charity, coefficients b_1, b_2, and b_3 in model 2 were estimated. They were calculated within the sample on the basis of all the observations in a particular sector using model 2. Then, the regression was performed on each charity's data to compute its DA_{it} (the residual in model 2).

Measurement of independent variables

Surplus or deficit before discretionary accruals. $EBDA_{it}$ is the difference between the surplus or deficit (earnings) from the T3010 return for period *t* scaled by total assets at *t-1* for charity *i* and DA estimated by model 2. Based on Hypothesis 1, it was predicted that charity managers will use discretionary accruals to reduce any anticipated surplus or deficit. Consequently, the authors predicted a negative relationship between variables DA_{it} and $EBDA_{it}$ in model 1, represented by a negative B_1 coefficient.[7]

Dependence on government grants. GVD_{it} was coded 1 when the total of federal, provincial, and municipal grants to total revenues in period *t* for charity *i* was above the sector median, 0 otherwise. The interaction term $EBDA \times GVD_{it}$ made it possible to determine whether dependence on government grants intensifies the expected negative relationship between discretionary accruals and EBDA. Consistent with Hypothesis 2, it was expected that the interaction term's B_3 coefficient would be negative in model 1. This means that dependence on government grants intensifies the use of discretionary accruals to manage the income figure. In addition, it suggests that the charity managers will tend to use more discretionary accruals to manage earnings to appear less profitable (or to have less of a deficit) in surplus (deficit) situations when the proportion of government grants in total revenues is larger than the sector median.

Public benefit. PB was coded 1 when total charitable expenses to total revenues adjusted for net profit/loss from asset sales for charity *i* in period *t* was above the sector median, 0 otherwise. Boateng, Akamavi, and Ndoro (2016) surveyed 105 chief executive officers of U.K. charities and found that the highest-ranked performance measure is charitable expenses to total revenues. Obviously, charitable activities provide the output that boosts the welfare of beneficiaries and supports the organization's mission. A high ratio of expenses for charitable activities to total revenues shows that the charity delivers a high volume of charitable care. It therefore suggests the charity provides a high level of public benefit. $EBDA \times PB_{it}$ was used to analyze whether level of public benefit mitigates the relationship between discretionary accruals and EBDA. Consistent with Hypothesis 3, the authors predicted that when the charity anticipates a surplus (EBDA>0), the interaction term's B_5 coefficient will be positive. This means that charity managers make less use of discretionary accruals and are therefore less concerned with managing their surplus when the organization's level of public benefit is greater than the sector median.

Leverage. LEV_{it} was coded 1 when the total of short- and long-term debt in period *t* scaled by total assets in period *t* for charity *i* was above the sector median, 0 otherwise. The interaction term $EBDA \times LEV_{it}$ made it possible to determine whether a high level of leverage intensifies the expected negative relationship between discretionary accruals and EBDA. Consistent with Hypothesis 4, it was expected that the interaction term's B_7 coefficient would be negative in model 1. This means that charity managers use more discretionary accruals when the organization's leverage is greater than the sector median.

Control Variables. Similar to Leone and Van Horn (2005), the authors incorporated the variable EARNINGS *t-1* in the model. It corresponds to the surplus or deficit in period *t*-1 for charity *i* scaled by total assets at *t-2*. Kothari, Leone, and Wasley (2005) show that past earnings are associated with discretionary accruals in the current period. In addition, variable DA*t*-1 is included in the model to control for the likely autocorrelation in discretionary accruals in periods *t* and *t*-1 (Leone & Van Horn, 2005). Like Jegers (2013) and Nguyen and Soobaroyen (2019), the authors controlled for size (REV), since the size of discretionary accruals could be related to organizational size. REV corresponds to the natural log of revenues. Lastly, the variable YEARS controlled for temporal effects. Since panel data were used, the *t* statistics are based on cluster-robust standard errors by organization.

RESULTS AND DISCUSSION

Descriptive statistics

Characteristics of charities

Table 2 presents the descriptive statistics for the charities in the sample for the 2010–2015 period. The mean (median) of total assets is 7,360,000 (2,143,000), while the mean (median) of total revenues is 3,748,000 (1,319,000), with all monetary figures being presented in CDN$. The extensive gap between the mean and median for both total assets and total revenues indicates that the sample contains relatively few large charities. The total assets in the first and third quartiles are, respectively, $874,000 and $5,187,000, and total revenues are $832,000 and $2,636,000, indicating that most of the organizations are medium-sized.

Table 2: Descriptive statistics on charities (2010-2015)

Variables (in thousands of Canadian dollars)	Mean	Standard deviation	Q1	Median	Q3
Total assets	7,360	38,304	874	2,143	5,187
Total liabilities	2,524	15,216	97	356	1,313
Leverage	33.5%	33.8%	6.4%	23.8%	52.2%
Total revenues	3,748	14,473	832	1,319	2,636
Total grants	639	4,034	0	5	377
Total donations	2,258	10,214	470	777	1,561
Earnings	155	2,015	-32	30	162
Total grants/total revenues	14.7%	23.1%	0%	0.4%	24.1%
Total donations/total revenues	62.3%	29.8%	33.9%	66.2%	91.8%
Earnings/total revenues	4.2%	20.1%	-2.4%	2.2%	10.2%

Notes: Item numbers are from the T3010. Total assets are #4200. Total liabilities are total short- and long-term debt (#4350). Leverage (LEV) is total short- and long-term debt (#4350) in period *t* scaled by total assets (#4200) in period *t*. Total revenues (#4700). Total grants are total municipal (#4560), provincial (#4550), and federal grants (#4540). Total donations are total amount for which the charity has issued tax receipts (#4500), or which it received from other registered charities (#4510), for which a tax receipt was not issued by the charity (#4530) and total tax-receipted revenue from all sources outside of Canada (#4575). Earnings (surplus or deficit) are the difference between revenues (#4700) and expenses (#5100). *N* = 16,926.

Mean (median) leverage is 33.5 percent (23.8%), while the mean (median) total grants/total revenues is 14.7 percent (0.4%) and for total donations/total revenues is 62.3 percent (66.2%). Earnings (surplus/deficit) in the first and third quartiles and the median are respectively $-32,000, $162,000, and $30,000, representing respectively -2.4, 10.2, and 2.2 percent of total revenues. Hence, more than half of the sample charities reported a surplus.

Empirical model variables

Table 3 presents descriptive statistics for the variables used in the empirical model. As reported in panel A, mean and median discretionary accruals (DA) are respectively 0.0001 and 0.0051. The mean and median EBDAs are respectively 0.0333 and 0.0131, indicating that most of the sample charities made a profit before their use of discretionary accruals. Table 3, panel B, shows an increase in earnings between mean pre-managed earnings (EBDA) ($110,000) and earnings after discretionary accruals ($169,000).

Table 3: Descriptive statistics on empirical model variables and earnings (2012-2015)

Panel A: Descriptive statistics on empirical model variables					
Variables	Mean	Std dev.	Min.	Median	Max.
DA	0.0001	0.0769	-0.5866	0.0051	0.5764
EBDA	0.0333	0.1505	-0.7896	0.0131	0.9871
GVD	0.4017	0.4903	0.0000	0.0000	1.0000
PB	0.5004	0.5000	0.0000	1.0000	1.0000
LEV	0.4956	0.5000	0.0000	0.0000	1.0000
$EARNINGS_{t-1}$	0.0400	0.1732	-1.8870	0.0165	3.9554
DA_{t-1}	-0.0001	0.1011	-0.9668	0.0052	0.9224
REV	14.3579	0.9571	12.9275	14.1147	19.9077
Panel B: Descriptive statistics on earnings					
Variables (in thousands of Canadian dollars)			Mean	Median	Std dev.
Surplus or deficit after DA (Earnings)			169	30	1,913
Surplus or deficit before DA (EBDA)			110	24	2,076

Notes: The sample consists of 11,051 observations for the years 2012 to 2015. Variables are defined in the Appendix.

Table 4 presents Pearson correlations. They show that levels of collinearity between the explanatory variables are low. Further, all variance inflation factors (VIF) are lower than 3.22, indicating multi-collinearity is not a problem in regression model 1 (Shearer & Clark, 2016). Consistent with

our first hypothesis, the relationship between DA and EBDA is negative and significant. The inverse relationship between the two variables suggests that charities use discretionary accruals to reduce their anticipated surplus or deficit.

Table 4: Pearson correlations (2012–2015)

(11)	-.008	.050**	.088**	.022*	-.024*	.035**	.138**	.036**	.010	-.012	1
(10)	-.225**	.110**	-.024*	.100**	-.015	.090**	-.064**	.096**	.088**	1	
(9)	-.014	.161**	-.042**	.073**	-.088**	.063**	-.089**	.092**	1		
(8)	-.523**	.707**	.017	.537**	-.150**	.523**	.126**	1			
(7)	-.077**	-.039**	.125**	.005	.033**	.015	1				
(6)	-.417**	.635**	.017	.482**	-.044**	1					
(5)	-.038*	-.277**	.126**	-.143**	1						
(4)	-.420**	.636**	.153**	1							
(3)	-.037**	-.014	1								
(2)	-.496**	1									
(1)	1										
	(1) DA	(2) EBDA	(3) GVD	(4) EBDA ×GVD	(5) PB	(6) EBDA ×PB	(7) LEV	(8) EBDA ×LEV	(9) EARNINGSt-1	(10) DAt-1	(11) REV

Notes: The sample consists of 11,051 observations for the years 2012 to 2015. * $p < 0.05$; ** $p < 0.01$ (two-tailed). Variables are defined in the Appendix.

Multivariate analysis

Table 5, panel A, presents the results of the regression for the entire sample as well as for charities with a deficit or a surplus before discretionary accruals (EBDA<0 and EBDA>0, respectively).[8]

Surplus or deficit management (Hypothesis 1)

The first hypothesis states that there is a negative relationship between discretionary accruals and surplus or deficit before discretionary accruals. As can be observed, the coefficients on EBDA for the three subsamples All EBDA, EBDA<0, and EBDA>0 are, respectively, -0.114, -0.268, and -0.072, and highly significant (p<0.01), confirming the first hypothesis (Table 5, panel A). These results are in line with Nguyen and Soobaroyen (2019), who used a sample of U.K. charities, and with previous research performed using other types of nonprofit organizations (e.g., Jegers, 2013; Leone & Van Horn, 2005). These results indicate that charity managers use discretionary accruals to reduce their organization's surplus or deficit toward zero. The findings support the idea that reporting a surplus or deficit that stakeholders could consider excessive may be harmful for both the organizations and their managers. In this case, managers would rather reduce this figure and minimize the cost of their financial disclosure.

Table 5: Regressions

Panel A: Regressions for full sample				
$DA_{it} = \alpha + B_1EBDA_{it} + B_2GVD_{it} + B_3EBDA\times GVD_{it} + B_4PB_{it} + B_5EBDA\times PB_{it} + B_6LEV_{it} + B_7EBDA\times LEV_{it} + \sum\Upsilon jControls_{it} + \sum\delta_j Years_{it} + €_{it}$				
Variables	Predicted sign	All EBDA	EBDA<0	EBDA>0
Constant		0.000 (0.009)	-0.013 (0.015)	-0.014 (0.012)
EBDA (H1)	-	-0.114*** (0.011)	-0.268*** (0.044)	-0.072*** (0.014)
GVD		0.001 (0.001)	-0.005*** (0.002)	-0.004** (0.002)
EBDA×GVD (H2)	-	-0.081*** (0.015)	-0.158*** (0.039)	-0.038** (0.022)
PB		-0.024*** (0.001)	-0.007*** (0.003)	-0.011*** (0.002)
EBDA×PB (H3)	+[a]	-0.063*** (0.016)	0.231*** (0.043)	-0.201*** (0.026)
LEV		-0.008*** (0.001)	-0.006*** (0.002)	-0.002 (0.002)
EBDA×LEV (H4)	-	-0.195*** (0.015)	-0.137*** (0.035)	-0.229*** (0.021)
$EARNINGS_{t-1}$		0.025*** (0.006)	0.023*** (0.008)	0.028*** (0.007)
DAt-1		-0.127*** (0.010)	-0.134*** (0.017)	-0.125*** (0.014)
REV		0.002** (0.001)	0.002*** (0.001)	0.002** (0.001)
N		11,051	4,660	6,391
Adjusted R^2		37.70%	24.01%	37.98%
F-Statistic		141	40	113
p		0.000	0.000	0.000
Panel B: Tests for differences in coefficients between EBDA<0 and EBDA>0 regressions				
EBDA			$p = 0.000$	
EBDA×GVD			$p = 0.004$	
EBDA×PB			$p = 0.000$	
EBDA×LEV			$p = 0.020$	

Notes: Cluster-robust standard errors are in parentheses. * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$ (one-tailed tests for variables EBDA, GVD, EBDA×GVD, PB, EBDA×PB, LEV, and EBDA×LEV; two-tailed for other variables). Chi-squared tests between regression coefficients are two-tailed. Variables are defined in the Appendix. [a]H3 concerns only EBDA>0.

Dependence on government grants (Hypothesis 2)

The second hypothesis states that a negative relationship between discretionary accruals and earnings (surplus or deficit) before discretionary accruals would intensify with a high level of government grants. In line with these expectations, the coefficients on EBDA×GVD for the three subsamples All EBDA, EBDA<0, and EBDA>0 are, respectively, -0.081, -0.158, and -0.038, and

are significant (at least at $p<0.05$, Table 5, panel A). Consistent with resource dependence theory, these results indicate that the use of discretionary accruals to manage a surplus or deficit intensifies when the organization is more dependent on government grants. They also suggest that it is better to reduce a surplus to maintain the appearance of still needing funding and, thereby, mitigate political costs. Alternatively, it is better to narrow a deficit to maintain the image of a viable organization and, thereby, lessen donors' investment risk. Verbruggen and Christiaens (2012) show similar findings for their whole sample. However, when splitting their sample, only entities posting a pre-managed surplus showed a significant negative coefficient for the interaction.

Public benefit (Hypothesis 3)
The third hypothesis predicts that a negative association between discretionary accruals and surplus before discretionary accruals would decrease with a high level of public benefit. Hypothesis 3 applies only to organizations that anticipate a surplus (EBDA>0) and suggests that a higher level of public benefit mitigates the regulatory pressure that managers experience to report a smaller surplus.

Contrary to expectations, when EBDA>0, the coefficient on EBDA×PB is negative (-0.201) and highly significant ($p<0.01$, Table 5, panel A). This result suggests that managers still need to manage earnings toward zero even in the face of a healthy level of public benefit. In accordance with resource dependence theory, charity managers experience pressure with respect to efficiency ratios. To maintain their level of future funding, they have to demonstrate that they still need government grants and donations. Therefore, they will manage their surplus toward zero to show that their organization needs more financing.

In addition, the results indicate that for EBDA<0, the coefficient on EBDA×PB is positive (0.231) and significant ($p<0.01$, Table 5, panel A). The size of this coefficient is similar to that of EBDA (-0.268), but the coefficient is of the opposite sign. This finding suggests that when the level of public benefit is good, charity managers do not attempt to manage their organization's deficit toward zero. Managers with a negative EBDA seem to believe that posting a deficit will show their stakeholders that grants and donations are still necessary for their organization to fulfill its mission. However, no other research on charities has tested this hypothesis, and so the results cannot be compared.

Leverage (Hypothesis 4)
The fourth hypothesis states that a negative relationship between discretionary accruals and earnings (surplus or deficit) before discretionary accruals would intensify with a high level of leverage. In line with these expectations, the coefficients on EBDA×LEV for the three subsamples All EBDA, EBDA<0, and EBDA>0 are, respectively, -0.195, -0.137, and -0.229, and are highly significant ($p<0.01$, Table 5, panel A). These findings confirm that charity managers manage discretionary accruals toward zero when organizations are more leveraged. Nguyen and Soobaroyen (2019) test only the direct effect of leverage on discretionary accruals, and their results are in line with the current study.

When testing whether the different coefficients between EBDA<0 and EBDA>0 organizations differ (Table 5, panel B), the results indicate that managers of charities with negative EBDA manage earn-

ings more than those with positive EBDA, and this behaviour intensifies with a high level of grants. In addition, when organizations are more leveraged, managers of charities with positive EBDA manage earnings more intensely than those with negative EBDA.

CONCLUSION

This study enriches the accounting literature by examining the management of financial information within the charitable sector. This earnings management practice weakens the quality of the financial information that appears in the sector's financial reports and, therefore, its decision usefulness. It is essential to better understand this practice because donors, board members, government agencies, and other stakeholders depend on financial information that reflects economic reality to make enlightened decisions. Financial reports of lesser quality can impair the allocation of economic resources between the charity sector and other economic sectors and lead to considerable consequences given the economic importance of the charitable sector.

This article provides evidence that charities use discretionary accruals to manage their surplus or deficit toward zero for publication in financial reports. Assuming a negative relationship between discretionary accruals and earnings, it also shows that the magnitude of government grants relative to the charity's total revenues intensifies this practice. Similarly, a high level of leverage also intensifies earnings management toward zero. However, a high level of public benefit intensifies the practice of reducing earnings when the charity anticipates a surplus.

This study has several implications for charities. First, by using a large sample of charities with revenues of CDN$500,000 and more, it highlights that management of the surplus or deficit is practiced across these organizations. Second, it underscores the importance for stakeholders such as tax authorities, rating agencies, and donors to remain vigilant and exercise skepticism when monitoring and using financial information, especially regarding highly subsidized and highly leveraged charities. This skepticism should also be exercised with respect to charities with a high level of public benefit that have a surplus, as they will manage this figure toward zero to show that their organization needs more funding.

Despite these implications, this study has some limitations that can lead to additional avenues for research. Canadian accounting standards for nonprofits and International Financial Reporting Standards, which nonprofits can choose to follow, permit accounting for the contributions received using the deferral method or the restricted fund method. This could have an impact on discretionary accruals. However, the CRA database used for this research does not provide the information on charities' choice of method or standards. Hence, no data adjustments could be made. The database does not provide information on operating and other types of reserves either, so the authors could not control for reserves or their interaction with EBDA. The government revenue variables on the T3010 includes grants, contributions, and contracts. It was thus not possible to determine the grant portion separately. This study's public benefit measure uses the ratio of charitable expenses to revenues, thus implicitly assuming that charitable expenses are not managed. However, charitable expenses themselves can be manipulated (Garven et al., 2016; Parsons et al., 2017). Further, the ratio has its limitations in terms of the charitable care really delivered. As mentioned by Coupet, Berrett, Broussard, and Johnson (2021), "financial ratios somewhat capture spending patterns, but they do

not capture what nonprofits *do* with resources, leaving out outputs and outcomes entirely" (p. 648). The leverage variable corresponds to the total of short- and long-term debt in the T3010, assuming that all liabilities are subject to contractual agreements that would entice managers to manage their earnings. This may not be the case. Although the sample in this study was broad, it consisted only of charities, with the result that findings cannot be generalized to the entire nonprofit sector. An intriguing replication of this study would consist of analyzing earnings management practices by private and public charitable foundations. Since these entities would have different earnings management motivations, results should differ from those of this study. Future research might also examine whether donors or other stakeholders are aware of charities' use of discretionary accruals. Interviews with stakeholders could provide some insights on that issue. Lastly, although this study provides theoretical arguments to explain earnings management, it does not measure the relative importance of managers' underlying motives for managing their charity's surplus or deficit. The application of a different methodology, such as a questionnaire, could be indicated to explore this matter.

ACKNOWLEDGMENTS

We acknowledge the financial support of the CPA Quebec Foundation and the Roland-Chagnon Professorship of Accounting and Taxation, HEC Montréal.

NOTES

1. "The issue of public benefit is at the heart of every inquiry into an organization's claim to charitable status under the Income Tax Act. Under current law, an organization is only charitable if it meets the definition of charity at common law. Part of that definition requires that for an organization to be considered charitable, it must be established for public benefit" (Government of Canada, 2006).
2. For a discussion of reporting by Canadian foundations, see Brouard and Glass (2017).
3. Revocation may also occur if a charity fails to expend charitable activity amounts that correspond to its disbursement quota for the year, which corresponds to at least 3.5 percent of its investments and assets not used directly in its operations (Income Tax Act, sub. 149.1(1)).
4. Registered charities must file annually this prescribed form along with their financial statements. On the T3010, they must indicate whether they use cash or accruals accounting.
5. Total revenues of CDN$500,000 is the threshold referred to in Canadian accounting standards to require the recognition of fixed assets by not-for-profit organizations (CPA Canada, 2022). Depreciation on fixed assets is a significant item through which earnings management occurs.
6. Robustness analyses were performed using different models to estimate discretionary accruals. The modified Jones model (with ΔREV_{it} - $\Delta Receivables_{it}$ instead of ΔREV_{it} [Dechow, Sloan, & Sweeney, 1995]) and the Jones model with ROAit to control for the effect of performance on discretionary accruals (Kothari et al., 2005) were used. Results obtained for hypothesis tests and additional analyses do not differ from those reported with the Jones model.
7. For example, if reported earnings and estimated discretionary accruals are respectively $150 and -$5 (this negative discretionary accrual could be a $5 excess depreciation calculated by management), the variable EBDA would equal $155 ($150 - [-$5] = $155). Hence, there is a negative relationship between DA_{it} and $EBDA_{it}$.
8. The Durbin Watson statistic for the All EBDA model is 1.89, indicating that autocorrelation in the model is not a problem since it is very close to 2.

REFERENCES

Boateng, A., Akamavi, R.K., & Ndoro, G. (2016). Measuring performance of non-profit organisations: Evidence from large charities. *Business Ethics: A European Review*, *25*(1), 59–74.

Boris, E.T., & Steuerle, C.E. (2006). Scope and dimensions of nonprofit sector. In W.W. Powell & R. Steinberg (Eds), *The nonprofit sector: A research handbook* (pp. 66–88). New Haven, CT: Yale University Press.

Brickley, J., & Van Horn, R.L. (2002). Managerial incentives in nonprofit organizations: Evidence from hospitals. *The Journal of Law and Economics*, *45*(1), 227–249.

Brouard, F., & Glass, J. (2017). Understanding information exchanges and reporting by grantmaking foundations. *Canadian Journal of Nonprofit and Social Economy Research*, *8*(2), 40–56.

Burgstahler, D.C., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, *24*(1), 99–126.

CanadaHelps. (2020). *The giving report 2020*. Toronto, ON: CanadaHelps. URL: https://www.canadahelps.org /media/The-Giving-Report-2020-CH.pdf [July 10, 2021].

Coupet, J., Berrett, J., Broussard, P., & Johnson, B. (2021). Nonprofit benchmarking with data envelopment analysis. *Nonprofit and Voluntary Sector Quarterly*, *50*(3), 647–661.

CPA Canada. (2022). Tangible capital assets held by not-for-profit organizations. In *Accounting standards for not-for-profit organizations* (Section 4433). Toronto, ON: CPA Canada.

CRA [Canada Revenue Agency]. (2019). Fundraising by registered charities, Guidance. Government of Canada website. URL: https://www.canada.ca/en/revenue-agency/services/charities-giving/charities/policies-guidance/fundraising-registered-charities-guidance.html [August 10, 2021].

Dechow, P., Sloan, R., & Sweeney, A. (1995). Detecting earnings management. *The Accounting Review*, *70*(2), 193–225.

Dhanani, A., & Connolly, C. (2012). Discharging not-for-profit accountability: UK charities and public discourse. *Accounting, Auditing and Accountability Journal*, *25*(7), 1140–1169.

Dichev, I.D., Graham, J.R., Harvey, C.R., & Rajgopal, S. (2013). Earnings quality: Evidence from the field. *Journal of Accounting and Economics*, *56*(2, Supplement 1), 1–33.

Eldenburg, L.G., Gunny, K.A., Hee, K.W., & Soderstrom, N. (2011). Earnings management using real activities: Evidence from nonprofit hospitals. *The Accounting Review*, *86*(5), 1605–1630.

Eldenburg, L.G., Hermalin, B.E., Weisbach, M.S., & Wosinska, M. (2004). Governance, performance objectives and organizational form: Evidence from hospitals. *Journal of Corporate Finance*, *10*(4), 527–548.

Garven, S.A., Beck, A.W., & Parsons, L.M. (2018). Are audit-related factors associated with financial reporting quality in nonprofit organizations? *Auditing: A Journal of Practice and Theory*, *37*(1), 49–68.

Garven, S.A., Hofmann, M.A., & McSwain, D.N. (2016). Playing the numbers game. *Nonprofit Management and Leadership*, *26*(4), 401–416.

Government of Canada. (2006). *Guidelines for registering a charity: Meeting the public benefit test*. URL: https:// www.canada.ca/en/revenue-agency/services/charities-giving/charities/policies-guidance/policy-statement-024 -guidelines-registering-a-charity-meeting-public-benefit-test.html. [September 19, 2022].

Government of Canada. (2021). *T3010 Registered charity information return*. URL: https://www.canada.ca/en /revenue-agency/services/forms-publications/forms/t3010.html [April 27, 2021].

Graham, J.R., Harvey, C.R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, *40*(1-3), 3–73.

Hahmann, T., du Plessis, V., & Fournier-Savard, P. (2020). Volunteering in Canada: Challenges and opportunities during the COVID-19 pandemic. *Statistics Canada website*. URL: https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00037-eng.htm [May 5, 2022].

Hofmann, M.A., & McSwain, D. (2013). Financial disclosure management in the nonprofit sector: A framework for past and future research. *Journal of Accounting Literature*, *32*, 61–87.

Income Tax Act, R.S.C. 1985, c. 1 (5th Supp.).

Jegers, M. (2013). Do nonprofit organisations manage earnings? An empirical study. *Voluntas*, *24*, 953–968.

Jones, J.J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, *29*(2), 193–228.

Kothari, S.P., Leone, A., & Wasley, C.E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, *39*(1), 163–197.

Krishnan, R., Yetman, M.H., & Yetman, R.J. (2006). Expense misreporting in nonprofit organizations. *The Accounting Review*, *81*(2), 399–420.

Leone, A.J., & Van Horn, R.L. (2005). How do nonprofit hospitals manage earnings? *Journal of Health Economics*, *24*(4), 815–837.

Nguyen, T., & Soobaroyen, T. (2019). Earnings management by non-profit organisations: Evidence from UK charities. *Australian Accounting Review*, *29*(1), 124–142.

OECD [Organisation for Economic Co-operation and Development]. (2020). *Taxation and philanthropy*. OECD Tax Policy Studies, No. 27. Paris, FR: OECD Publishing. doi:10.1787/df434a77-en

Parsons, L.M. (2003). Is accounting information from nonprofit organizations useful to donors? A review of charitable giving and value-relevance. *Journal of Accounting Literature*, *22*, 104–129.

Parsons, L.M., Pryor, C., & Roberts, A.A. (2017). Pressure to manage ratios and willingness to do so. *Nonprofit and Voluntary Sector Quarterly*, *46*(4), 1–20.

Pfeffer, J., & Salancik, G.R. (1978). *The external control of organizations: A resource dependence perspective*. New York, NY: Harper and Row.

Shearer, R., & Clark, T. (2016). Are we drawing the correct conclusions? Regression analysis in the nonprofit literature. *Canadian Journal of Nonprofit and Social Economy Research*, *7*(1), 22–28.

Tinkelman, D. (2009). Unintended consequences of expense ratio guidelines: The Avon breast cancer walks. *Journal of Accounting and Public Policy*, *28*(6), 485–494.

Vansant, B. (2016). Institutional pressures to provide social benefits and the earnings management behavior of nonprofits: Evidence from the U.S. hospital industry. *Contemporary Accounting Research*, *33*(4), 1576–1600.

Verbruggen, S., & Christiaens, J. (2012). Do non-profit organizations manage earnings toward zero profit and does governmental financing play a role? *Canadian Journal of Administrative Sciences*, *29*(3), 205–217.

Vermeer, T.E., Edmonds, C.T., & Asthana, S.C. (2014). Organizational form and accounting choice: Are nonprofit or for-profit managers more aggressive? *The Accounting Review*, *89*(5), 1867–1893.

Watts, R.L., & Zimmerman, J.L. (1978). *Towards a positive theory of the determination of accounting standards* (Vol. 53). Sarasota, FL: American Accounting Association.

Wilkicki, K.J. (2001). The effects of not-for-profit hospital reported profits and charitable care on perceptions of tax-exempt status. *The Journal of the American Taxation Association*, *23*(2), 50–58.

ABOUT THE AUTHORS / LES AUTEURS

Dominic Cyr is Associate Professor at Université du Québec à Montréal, École des sciences de la gestion. Email: cyr.dominic@uqam.ca

Suzanne Landry is Roland-Chagnon Accounting and Tax Professor at HEC Montréal. Email: suzanne.landry@hec.ca

Anne Fortin is Professor at Université du Québec à Montréal, École des sciences de la gestion. Email: fortin.anne @uqam.ca

Appendix: Definition of variables

Variable	Definition (Item numbers from the T3010)
AC	AC are calculated as the change in amounts receivable (#4120), inventories (#4150), and other assets (#4170) minus the change in accounts payable and accrued liabilities (#4300) from *t-1* to *t*, minus amortization of capitalized assets (#4900), all amounts scaled by total assets (#4200) at *t-1* for charity *i*.
DA	DA of charity *i* in period *t* scaled by total assets (#4200) at *t-1* is the residual in model 2.
EBDA	EBDA in period *t* is the difference between revenues (#4700) and expenses (#5100) for charity *i* in period *t* scaled by total assets (#4200) at *t-1* and DA.
GVD	1 when the total of municipal (#4560), provincial (#4550), and federal grants (#4540) over total revenues (#4700) for charity *i* in period *t* is larger than the sector median, 0 otherwise.
PB	1 when the total charitable expenses (#5000 + #5050) over total revenues (#4700) adjusted for net profit/loss from asset sales (#4600) for charity *i* in period *t* is larger than the sector median, 0 otherwise.
LEV	1 when the total of short-term and long-term debt (#4350) in period *t* scaled by total assets (#4200) in period *t* for charity *i* is larger than the sector median, 0 otherwise.
$EARNINGS_{t-1}$	Earnings in period *t-1* are the difference between revenues (#4700) and expenses (#5100) at *t-1* for charity *i* scaled by total assets (#4200) at *t-2*.
DA_{t-1}	DA of charity *i* in period *t-1* scaled by total assets (#4200) at *t-2*.
REV	Natural logarithm of revenues of charity *i* in period *t* (#4700).