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The Impact of Accounting Information and Its Quality on Government Funding to Nonprofit Organizations

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Abstract We examine how governments use accounting information, specifically administrative ratios, in their decisions regarding the funding of nonprofit organizations (NPOs). Using data in the setting of Canada, we find that when funding NPOs for the first time, governments consider NPOs' sustainability and are more likely to award funds to NPOs with reasonably high administrative ratios, as long as these ratios are below the government-suggested threshold. In subsequent funding decisions, governments tend to ignore administrative ratios and stick with previously funded NPOs to extend subsequent funding(s). We further find that governments react to low-quality accounting ratios by reducing the likelihood and the value of funds awarded, and this reaction is more pronounced at initial funding than at subsequent funding(s). The practical and policy implications of these findings are discussed.

Keywords Nonprofit organizations · Administrative ratios · Financial reporting quality · Government funding decisions

JEL Classification $H5 \cdot H50 \cdot L3 \cdot L30 \cdot L31 \cdot M4 \cdot M41$

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Introduction

Governments channel significant amounts of funds to nonprofit organizations (NPOs) through contracts and direct grants (Suarez, 2011; Witesman & Fernandez, 2013). For instance, the total amount of U.S. federal government grants to NPOs was approximately \$497 billion in 2015 (Steuerle et al., 2017). The amount of government grants is also substantial in Canada, where more than \$184 billion was granted to NPOs in 2017 (Blumberg, 2019). Governments claim that they consider NPOs' accounting information, especially administrative ratios, when selecting an organization to award funds (Ashley & Van Slyke, 2012; Imagine Canada, 2016). An administrative ratio represents the proportion of an organization's revenues allocated to administrative operations, which can include rent, utilities, management systems, or administrative salaries. These expenses are perceived by governments as the "price" of obtaining a dollar's worth of program output (Weisbrod & Dominguez, 1986).

The utilization of accounting information in a nonprofit setting is not unusual. Prior studies have focused on how donors use accounting information (Ashley & Faulk, 2010; Eckerd, 2015; Yetman & Yetman, 2013). Donors are found to donate less to NPOs that report higher ratios of administrative expenses to total expenses. Such organizations spend more of their revenues on administrative activities instead of programs and services, and consequently, they are perceived to be less accountable than NPOs with lower administrative ratios (Khumawala & Gordon, 1997; Parsons, 2007; Weisbrod & Dominguez, 1986; Yetman & Yetman, 2013). Like donors, governments openly state that they would fund only NPOs with *reasonable* administrative ratios; *reasonable* means that these ratios are within the government-suggested limits (Government of Canada,

2014; Minnesota Department of Human Services, 2011).¹ Many governments are especially sensitive to the threshold of 15 percent and require NPOs to ensure that administrative ratios do not exceed 15 percent (Imagine Canada, 2016; Government of Canada, 2014). However, prior studies have failed to find conclusive evidence indicating that governments consider administrative ratios in their funding decisions (Ashley & Van Slyke, 2012; Zhao & Lu, 2019). A possible reason for the inconclusive findings is that these studies overlook the fact that government-nonprofit collaborations often experience a "multistage" dynamic process (Gazley & Guo, 2020). Hence, we extend the literature by examining how governments use administrative ratios at different stages of the collaboration process with NPOs, namely the first time and the subsequent time(s) they grant funding to NPOs.

Theoretically, governments' central concern about NPOs should differ between the first time and the subsequent time(s) they award funding. For first-time funding, governments are more concerned about NPOs' sustainability because governments need long-term future partnerships to provide essential public services securely. To some extent, reasonably high administrative ratios (i.e., high but within the government-suggested limits) can be an indicator of sustainability because spending on administrative infrastructure and activities, such as hiring profesmanagement, training staff and upgrading sional information systems, can reflect NPOs' long-term commitments to their mission (Ashley & Van Slyke, 2012). In addition, agency costs arising from reasonably high administrative spending are not a dominant issue for governments issuing first-time funding because until this point, it is other funders (e.g., donors) that have supported NPOs' administrative spending. Reasonably high administrative spending backed by other funders may actually reduce governments' future commitments to administrative infrastructure. For subsequent funding(s), however, governments align with other funders in financing NPOs. They may shift their focus from assessing NPOs' sustainability to assessing their accountability, which means looking at which NPOs demonstrate low administrative ratios. As a result, government tolerance for relatively high administrative ratios may diminish at subsequent funding(s). Hence, our first research question is how governments evaluate administrative ratios differently when they award funding for the first time versus the subsequent time(s).

We further examine whether governments pay attention to the quality of accounting information when granting funds. A series of studies show that accounting ratios are frequently subject to intentional manipulation and unintentional errors (Jones & Roberts, 2006; Keating et al., 2008; Khumawala et al., 2005; Krishnan, et al., 2006; Roberts, 2005; Tinkelman, 1998). Donors, especially sophisticated ones, tend to discount low-quality accounting ratios by donating less (Yetman & Yetman, 2013). Governments are believed to be experts at allocating funds, but empirical evidence on their reaction to accounting information quality is scarce. This leads to our second research question: Are governments indeed capable of judging the quality of accounting information, and if so, how does the quality of information affect their funding decisions the first and subsequent time(s) they grant funding?

Using data in the setting of Canada, we find that when NPOs are being funded for the first time, governments consider NPOs' sustainability and are more likely to award funds to NPOs with *reasonably high* administrative ratios. However, in subsequent funding decisions, governments tend to ignore administrative ratios and stick with previously funded NPOs to extend the subsequent funding(s). We further find that governments react to low-quality accounting ratios by reducing the likelihood and the value of funds awarded, and this reaction is more pronounced at initial funding than at subsequent funding(s).

Our study contributes to the current literature in two ways. First, by distinguishing governments' first-time funding decisions from subsequent ones, our study reconciles the inconclusive findings in prior literature regarding how governments use administrative ratios. Our study further extends the prior literature by examining how all governments and governmental agencies in Canada react to the quality of accounting information (Ashley & Van Slyke, 2012; Zhao & Lu, 2019). In addition, we identify the two types of funding decisions: Whether to fund or not and the amount to be granted. This identification is important because for each funding decision, governments may use or interpret the same accounting measure differently.

Second, prior research has focused on how accounting information affects public donations received by NPOs. Our study extends the existing literature by shedding light on government funding, which is another important revenue source for NPOs. Although both sources are significant, we believe that it is crucial to outline the different decision-making processes adopted by these two groups (Parsons et al., 2017). Governments usually have a longer horizon and thus may use accounting information differently from donors. Although donors perceive high administrative ratios as an indicator of inefficiency or vulnerability, our results suggest that governments consider

¹ We do not study other accounting ratios because governments are primarily concerned about administrative expenses (Imagine Canada, 2016). In the Canadian setting, NPOs that apply for governmental funding may not conduct large-scale fundraising activities. Hence, administrative spending is a major source of agency costs that would concern governments.

reasonably high administrative ratios under the government-suggested threshold as a sustainability measure (Ashley & Van Slyke, 2012; Tuckman & Chang, 1991; Zhao & Lu, 2019). This difference highlights the unique nature of the government funding process, which has not been studied sufficiently in prior research.

We review the relevant literature in the following section and then develop our research hypotheses. The "Research Design" section describes the research design, followed by "Results" section, in which we present our empirical results. The last section draws a number of conclusions from our analyses.

Theory and Hypotheses

Government Funding to Nonprofit Organizations

Since the Johnson administration's Great Society initiatives of the 1960s in the U.S., governments of developed countries (e.g., the U.S. and Canada) have delivered taxpayer-funded services such as health care, education, child welfare, and economic development through a network of providers, namely government agencies, NPOs, and private firms (Brown & Troutt, 2004; Milward & Provan, 2000; Ruben & Schulpen, 2009). NPOs have played a prominent role in the delivery of public services at the state and local levels due to their not-for-profit status and legal responsibility to serve the public interest or common good (Bryce, 2006; Suarez, 2011). Government funding is a significant revenue source for NPOs, accounting for more than 60% of their total revenues in Canada and approximately 30% in the USA (Blumberg, 2019; McKeever, 2015; Sharpe, 1994).

Prior studies find that NPOs obtain more government funding if they have professionalized management, stronger internal controls, greater communication and collaboration with governments, and higher pressure to compete for resources from other NPOs (Garrow, 2011; Lu, 2015; Petrovits et al., 2011; Suarez, 2011). Although sometimes influenced by political interference, interest groups, and power elites, government funding processes are largely open, competitive, and objective (Ashley & Van Slyke, 2012; Cho & Gillespie, 2006). Government agencies and institutions, such as the Department of Health and Human Services and the Department of Canadian Heritage, publicly request proposals from NPOs and use a scoring system to rank and select qualified NPOs to fund (Ashley & Van Slyke, 2012; Lowry & Potoski, 2004; Ruben & Schulpen, 2009; Zhao & Lu, 2019). Accounting information, such as administrative ratios, is generally included in the scoring system (Ruben & Schulpen, 2009). A number of government agencies explicitly state that "proposals will be judged on the organization's percent of direct services' cost to administrative costs" (Minnesota Department of Human Services 2011, p. 9).

Accounting Information and Government Funding Decisions

When deciding to fund NPOs for the first time, governments perceive their funding as a supplementary financing source for public services (Austin, 2000; Becker & Lindsay, 1994; Bryson et al., 2006; Marwell & Calabrese, 2015; Young, 2000). The supplementary mentality results from the fact that NPOs have not previously collaborated with governments and have been funded by other contributors (e.g., private donors) to provide particular types of services that have competed with or supplemented government services. With the supplementary mentality, governments may counterintuitively prefer reasonably high administrative ratios for the following two reasons. First, governments need long-term partnerships with NPOs to provide essential public services securely, and thus, the sustainability of NPOs would be their major concern. Although governments generally recommend an upper limit on administrative ratios to control the "price" of obtaining a dollar's worth of program output, reasonably high administrative spending is a signal of the long-term commitment and thus the sustainability of an NPO. A series of studies show that competition to lower administrative ratios can send NPOs into a vicious starvation cycle (Hung, 2021; Lecy & Searing, 2015). Low administrative spending over a period of time results in the erosion of administrative activities and diminished productive capacity to provide programs and services in the long run (Weisbrod & Dominguez, 1986; Zhao & Lu, 2019). Without essential investments in administrative operations, such as staff training, IT, and professional development, it is unlikely that an NPO can deliver services and programs in a reliable and sustainable manner (Hung, 2021; Lecy & Searing, 2015). Second, at the initial funding, an NPO's reasonably high administrative spending was funded not by governments but by other funders. Any excessive administrative spending backed by other funders may actually reduce governments' future commitments to administrative infrastructure. Hence, reasonably high administrative ratios at first-time funding are not necessarily a negative signal for governments, as long as the ratios are below the government-suggested threshold.

However, for subsequent funding(s), governments' interests are aligned with other funders. Because of the

decrease in competition and the increase in trust that results from previous partnerships and collaborations, NPOs are treated as complements to governments (Fyall, 2016; Lamothe & Lamothe, 2011; Salamon & Anheier, 1998; Young, 2000). Governments, along with other funders, finance NPOs' administrative spending and want NPOs to be accountable for their administrative spending. More specifically, governments want the money to be spent efficiently on programs, i.e., "products" they procure from NPOs, and not on non-program items such as administrative infrastructure or operations. Therefore, agency costs are governments' major concern and can override sustainability concerns (Ashley & Van Slyke, 2012). Governments' preference for reasonably high administrative ratios is weaker at subsequent funding(s) than at firsttime funding, even if NPOs' administrative ratios are below the government-suggested threshold. Therefore, we predict the following:

H1a Governments are more likely to award funds and grant a larger amount of funds to NPOs with <u>reasonably</u> <u>high</u> administrative ratios at first-time funding.

H1b Governments are less likely to award funds and grant a smaller amount of funds to NPOs with higher administrative ratios at subsequent funding(s).

The Quality of Accounting Information and Government Funding Decisions

NPOs that apply for government funding are well aware of governments' specific preferences for administrative ratios (Smith & Lipsky, 1993; Suarez, 2011). According to resource dependence theory, organizations are driven to comply with the requirements of strategic resource providers to deal with the pressures of uncertainty and scarcity in their environment (Froelich, 1999; Verbruggen et al., 2011). Hence, NPOs that want to obtain government funds have incentives to present accounting information favored by governments (Verbruggen et al., 2011).

Administrative ratios are products of an accounting system, and they are subject to intentional manipulation and/or unintentional errors. The most common manipulation documented in the literature is the underreporting of administrative/fundraising expenses so that spending on programs and services can appear to be higher (Jones & Roberts, 2006; Keating et al., 2008; Krishnan et al., 2006). For example, a study conducted by the Urban Institute (2004) shows that approximately 58.4 percent of NPOs that receive donations report zero fundraising expenses. Keating et al. (2008) find that 16 percent of NPOs that are engaged in telemarketing fundraising activities report no fundraising expenses, and an additional 20 percent of NPOs underreport fundraising expenses. Trussel (2003) also finds that NPOs use accounting techniques, such as immediate recognition of deferred program expenses, to artificially boost their program/service spending figures.

Manipulated financial ratios result in low-quality accounting information with reduced informational content. Yetman and Yetman (2013) find that donors react negatively to low-quality accounting ratios and reduce their donations accordingly. The more sophisticated the donors are, the more likely they are to reduce their donations as a result of low-quality accounting information. Government agencies allocate enormous sums of funds to NPOs each year. With expertise in allocating funds, governments are expected to be experts at identifying the quality of accounting information (Ruben & Schulpen, 2009). Governments can react to the low quality of accounting information by discounting it or not trusting it at all (Garrett et al., 2014; Witesman & Fernandez, 2013). Therefore, we hypothesize the following:

H2a Governments are less likely to award funds and grant a smaller amount of funds to nonprofit organizations when administrative ratios are judged to be of low quality.

Furthermore, low-quality accounting information can affect first-time funding more negatively than subsequent funding(s). Governments tend to develop dependence on NPOs over the course of their collaboration in delivering public services (Cho & Gillespie, 2006; Lecy & Van Slyke, 2012). This dependence on NPOs, especially those that can mobilize the input of specialized service constituents, can make governments reluctant to act on low-quality accounting information due to either a lack of replacement organizations or possible higher transaction costs (Feiock & Jang, 2009). Politically, caring for citizens is the priority of NPOs and governments (Cutt, Hannis, Bragg, Lalani, and Tassie 1996). Consequently, at subsequent funding(s), governments may pay more attention to program outcomes, such as the number of clients served and the percentage of satisfied clients, and less attention to accounting ratios, which reflect resource commitments (Chen, 2016; Cho & Gillespie, 2006; Lecy & Van Slyke, 2012; Milward & Provan, 2000; Perry, 2013). Hence, low-quality accounting information can effectively stop governments from extending funds for the first time but not for subsequent time(s). We predict the following:

H2b Governments' negative reaction to low-quality administrative ratios is more pronounced at first-time funding than at subsequent funding(s).

Research Design

Data

We use data in the setting of Canada to test the hypotheses. The nonprofit sector in Canada is dominated by service organizations that deliver government-funded social services (Elson, 2007; Emmett & Emmett, 2015). Canadian NPOs have a long history of relying on governments as a source for most of their funding (Blumberg, 2019; McKeever, 2015). This practice provides us with a setting in which the majority of NPOs apply for government funding, and thus, we rely on a large sample for our empirical analyses (Andreoni & Payne, 2013; Krushinsky, 1990; Scott, 2003). In addition, following a government sponsorship scandal in 2002 that angered the public, governments rigorously scrutinized government spending. Thus, government funding to NPOs was "short-term, rarely multi-year" in the decade between 2003 and 2013 (Imagine Canada, 2016, p. 2). With regular ongoing multiyear government funding not being a standard practice in Canada, NPOs had to apply for funding and were evaluated by governments each year. The lack of multiyear government funding between 2003 and 2013 is an institutional feature that allows us to easily identify the year in which an organization receives its first and subsequent funding (Imagine Canada, 2016).

We obtain data on registered charities from annual T3010 tax filings between 2003 and 2013 provided by the Canada Revenue Agency (CRA). The T3010 form contains financial information on charities, including revenue, expenses, and balance sheet data. It also reports program and governance information. In addition, we download the directory of all Canadian charities from the CRA website, which includes each organization's name, address, category code, program activities and date that it obtained its tax-exempt status. Merging the T3010 data and the directory data results in 830,968 observations (85,398 NPOs) from 2003 to 2013.

We then remove observations with zero program expenses, as these NPOs are not active. We also delete observations with negative government funds, i.e., NPOs that return funds to governments rather than receiving them. We find that a number of NPOs display evidence of abnormal observations (i.e., negative values for assets, donations, service revenues, or administrative ratios). It is evident that NPOs with these abnormal observations made mistakes when filing the T3010, and therefore, we delete these observations. We also remove observations with missing lagged values that are required in the analyses. The selection process generates 76,246 organizations (500,078 firm-years) with clean data. To test the hypotheses, we need to separate the first government funding from the subsequent funding(s). We include in the sample only NPOs that are established in the sample period and define these NPOs as "young" organizations. We can thus ensure that the first government funding the young NPOs received in the sample period is the actual first funding. We identify 14,814 young NPOs (58,614 firm-years) that were founded in or after 2003, which is the first year of our sample period.² Out of the 14,814 young NPOs, 4671 (31.53 percent) received government funding at least once by the end of 2013, and 70.26 percent of the 4671 recipients (i.e., 3282 NPOs) received government funding at least once after their first-time funding; this indicates that government funding is sticky.

Next, in "Sample: Propensity-Score Matching" section, we discuss how to create samples from the above data. In "Empirical Models for Hypothesis Testing" section, we discuss the empirical models that are used for hypothesis testing.

Sample: Propensity Score Matching

Only NPOs that apply for government funding have a chance of receiving this funding. Although the majority of NPOs in Canada apply for government funding, some NPOs, such as religious organizations, are less likely to apply for government funding (Andreoni & Payne, 2013; Krushinsky, 1990). To reduce the potential for selection bias, we compare the treatment NPOs that applied for and received funding and the control NPOs that had a similar propensity to apply for but did not receive funding. To construct the control sample, we follow two steps. First, we identify government-sponsored programs by aggregating all programs run by organizations that received government funding each year. Programs run by each organization are documented in the directory of all Canadian charities on the CRA website. We remove 1839 firm-year observations for organizations that do not operate governmentsponsored charitable programs, as only NPOs that run government-sponsored activities apply for government funding. Second, for each treatment NPO in each year, we use propensity score matching to identify a control NPO that has the closest propensity to apply for government funding but does not receive government funding. We calculate the propensity score of applying for government funding based on the following logistic model, with an additional adjustment for repeated observations across years [i.e., clustered standard errors from Peterson (2009)]:

² The Statistical Analysis System (SAS) is used for data cleaning and all empirical analyses in this article. SAS software is one of most popular and widely used software packages in data science.

$$\begin{split} \text{Apply}_{i,t} &= \beta_0 + \beta_1 \ln \text{Asset}_{i,t} + \beta_2 \text{Fixed Asset Ratio}_{i,t} \\ &+ \beta_3 \text{Donation Rev}\%_{i,t} + \beta_4 \text{Service Rev}\%_{i,t} \\ &+ \beta_5 \text{Debt Ratio}_{i,t} + \beta_6 \text{Current Ratio}_{i,t} \\ &+ \beta_7 \ln \text{Fulltime}_{i,t} + \sum \alpha_k \text{Province}_{i,t} \\ &+ \sum \gamma_1 \text{Industry}_{i,t} \\ &+ \sum \delta_m \text{Year Indicators}_{i,t} + \varepsilon_{i,t} \end{split}$$
(1)

where i and t index firms and years, respectively. The dependent variable, $Apply_{i,t}$, is an indicator variable equal to 1 when an NPO applied for and received government funding in year t and zero otherwise. We include the following variables to account for the urgency of an organization applying for government funding: (1) *lnAsset*, the logarithm of the organization's end-year assets, and Fixed Asset Ratio, the ratio of the organization's total fixed assets divided by its end-year assets. NPOs that have more assets, especially fixed assets, need funding to maintain their properties (Sansing & Yetman, 2006). (2) Donation Rev%, the percentage of public donations out of total revenues, and Service Rev%, the percentage of service revenues out of total revenues. A lack of the two supplementary sources of revenues can make an organization more likely to apply for government funding (Andreoni & Payne, 2011). (3) Debt Ratio and Current Ratio, as an organization's leverage and liquidity, reflect how urgently the organization needs government funding (Prentice, 2016). We also consider *lnFulltime*, the logarithm of the number of full-time employees, as more full-time employees means more human resources that enable an organization to apply for government funding (Ni, Chen, Ding, and Wu 2017). Finally, we include province, industry and year fixed effects to account for economic conditions each year and available government funding in different geographic areas and industries (Garrow, 2011; Lu, 2015; Petrovits et al., 2011). Detailed variable definitions, from CRA form T3010, are provided in Table 1.

Panel A of Table 2 presents the results of Model (1). Consistent with our predictions, an NPO is more likely to apply for and receive government funding when it has a higher fixed asset ratio, lower supplementary revenues, and more full-time employees. This is evidenced by significant coefficients on *Fixed Asset Ratio, Donation Rev%, Service Rev%*, and *lnFulltime*.³

To accomplish the matching for each treatment NPO in each funding stage, we divide all observations of organizations that run government-sponsored activities into two groups: the first-fund group and the subsequent-fund group (see Panel B of Table 2). The first-fund group consists of 42,391 firm-year observations that capture all young NPOs' activities from the year that they were established to the year that they received their first government funding or to 2013 if they did not receive government funding during the sample period. The subsequent-fund group comprises 14,384 firm-year observations that capture all NPOs' activities from the year immediately after they received the first funding until 2013. For each treatment organization in each group for each year, we identify a control organization that has the closest propensity to apply for government funding but does not receive government funding. The matching process creates a sample for each funding stage: the Matched First-fund Sample and the Matched Subsequent-fund Sample. Panel C of Table 2 presents for each sample the standardized differences between the organizations that applied for and received government funding and the control organizations that had a similar propensity to apply for but did not receive government funding. Most standardized differences of the matching variables are less than 0.2, indicating that the propensity score matching in Model (1) is reasonably effective at pairing similar observations (Cohen, 1988).

Empirical Models for Hypothesis Testing

To test our hypotheses on the Matched First-fund Sample and the Matched Subsequent-fund Sample, we use the following empirical model, which builds on government grants' determination models used in economics and accounting research (e.g., Garrow, 2011; Lu, 2015; Petrovits et al., 2011; Yetman & Yetman, 2013).

Government Funding Decision,

- $= \beta_0 + \beta_1 \ln \text{Administrative Ratio}_{i,t-1} + \beta_2 \text{High}_{i,t-1}$
 - + $\beta_3 \ln \text{Administrative Ratio}_{i,t-1} * \text{High}_{i,t-1}$
 - $+ \beta_4 \text{Low Quality}_{i,t-1}$
 - + β_5 Administrative Ratio_{*i*,*t*-1} * Low Quality_{*i*,*t*-1}
 - + β_6 Recommended Audit_{*i*,*t*-1}
 - + β_7 Accrual_{*i*,*t*-1} + β_8 Fulltime_{*i*,*t*-1}
 - + β_9 Independent Director Ratio_{*i*,*t*-1} + β_{10} Age_{*i*,*t*}
 - + β_{11} ln Assets_{*i*,*t*-1} + β_{12} Small Size_{*i*,*t*-1}
 - + β_{13} ln Fundraising Expenses_{*i*,*t*-1}
 - + β_{14} ln Public Support_{*i*,*t*-1} + β_{15} ln Service Revenues_{*i*,*t*-1}
 - $+ \beta_{16} \text{Margin}_{i,t-1}$
 - + β_{17} Equity_{*i*,*t*-1} + β_{18} Lobbying_{*i*,*t*} + β_{19} ln GDP_{*t*} + ε_i

(2)

 $^{^{3}}$ The coefficient of *Current Ratio* is statistically significant but only - 0.00000153 (non-rounding). Thus, the effect of *Current Ratio* is too small to be economically significant.

Table 1 Variable definitions

| Variable | Definition | Model (1) | Model (2) |
|------------------------------|---|-----------|--------------|
| Accrual | = An indicator variable that equals 1 if a NPO adopts accrual basis accounting for the fiscal year; otherwise 0 | | ~ |
| Administrative ratio | = Administrative expenses (T3010 Line 5010) scaled by total expenses (T3010 Line 5100) | | ~ |
| Age | = The number of years the NPO has been tax-exempt (CRA data from http://www.cra-arc.gc.ca/ chrts-gvng/lstngs/menu-eng.html) | | • |
| Apply | = An indicator variable equal to 1 when a NPO applied and received government funding; otherwise 0 | ~ | |
| Assets | = Total assets at the end of the fiscal year (T3010 Line 4200) | ~ | ~ |
| Current ratio | = The total amount of current assets (the sum of Lines 4100, 4110, 4120, 4130 on T3010) divided by the total amount of current debts (the sum of Lines 4300, 4310 and 4320 on T3010) | ~ | |
| Debt ratio | = The total amount of debts (T3010, Line 4350) divided by total assets (T3010, Line 4200) | ~ | |
| Donation rev% | = The percentage of public donations out of total revenues (the sum of Line 4500 and Line 4630 divided by Line 4700) | ~ | |
| Equity | = The total amount of equity (the total amount of assets (T3010, Line 4200) subtracts the total amount of liabilities (T3010, Line 4350)) scaled by the total amount of assets (T3010, Line 4200) | | ~ |
| Fixed asset ratio | = The total fixed assets (the sum of Line 4155, Line 4160 and Line 4165 on the T3010 form) divided by total assets at the end of the fiscal year (T3010 Line 4200) | • | |
| Fundraising expenses | = Fundraising expenses for the fiscal year (T3010 Line 5020) | | ~ |
| Full time | = An indicator variable that equals 1 if organization hires any full-time employees for the fiscal year; otherwise 0 | | ~ |
| Government funds dummy | = An indicator variable that equals 1 if organization received government funds for the fiscal year; otherwise 0 | | ~ |
| Government funds | = The logarithm of the total value of funds received from federal, provincial/territorial, and municipal/regional governments for the fiscal year (T3010 Line 4540 + Line 4550 + Line 4560) | | • |
| High | = An indicator variable that equals 1 if organization reports the previous year's administrative ratio being higher than 15%; otherwise 0 | | • |
| Independent director ratio | = The number of independent directors divided by the total number of directors on the board | | ~ |
| Industry | = The type of registered charities based on the CRA classifications: education, health, welfare, religion, and others | ~ | |
| GDP | = The annual gross domestic product in million dollars obtained from Statistics Canada | | ~ |
| InFullTime | = The logarithm of the number of full-time employees (Line 300) | ~ | |
| Lobbying | = An indicator variable that equals 1 if organization reports lobbying expenditures to directly influence a legislative body (T3010 Line 5030); otherwise 0 | | ~ |
| Margin | = The net profit (T3010 Line 4700—Line 5100) scaled by total revenues (T3010 Line 4700) | | ~ |
| Province | = The province where the nonprofit is registered with the CRA | ~ | |
| Public support | = Total public support received for the fiscal year, defined as the sum of donations from individuals and other registered charities (T3010 Line 4500 + Line 4510 + Line 4630) | | ~ |
| Recommended audit | = An indicator variable that equals 1 if organization's revenues are more than \$250,000 for the fiscal year; otherwise 0 | | ~ |
| Service revenues | = Program service revenue, including memberships, dues and association fees, received for the fiscal year (T3010 Line 4620 + Line 4640) | | ~ |
| Service rev% | = The percentage of service revenues out of the total revenues (the sum of Line 4500 and Line 4630 divided by Line 4700) | ~ | |
| Small size | = An indicator variable that equals1 if the nonprofit's total year-end assets are less than \$1 million, and 0 otherwise | | ~ |
| Trussel | = Estimated probability of program ratio manipulation using the method of Trussel (2003) | | ~ |
| Underreported fundraising | = The organization-specific residual from a fundraising expense prediction model (scaled by reported fundraising expenses). Please see footnote 7 for details | | ~ |
| Underreported administrative | = The organization-specific residual from an administrative expense prediction model (scaled by reported administrative expenses). Please see footnote 8 for details | | ~ |
| Year | = The fiscal year for which the organization files the T3010 form | ~ | |

| Table 1 continued | | | |
|-------------------|---|-----------|-----------|
| Variable | Definition | Model (1) | Model (2) |
| Zero fundraising | = An indicator variable that equals 1 if organization received more than \$100,000 of public donations and does not incur fundraising expenses for the fiscal year; otherwise 0 | | • |

Source: T3010 Form from the Canada Revenue Agency

The dependent variable is measured by two variables that capture two government funding decisions: 1) Government Funds Dummy_{i,t}, coded as 1 if organization *i* received funds from the federal, provincial or municipal governments for year t and otherwise 0; and 2) Government *Funds*_{*i*,*t*}, the logarithm of the total value of funds received from governments. When the dependent variable is Government Funds Dummy_{i,t}, the model is a logistic model with standard errors clustered by organizations. This model estimates the probability of an organization receiving government funding. When the dependent variable is measured by Government $Funds_{i,t}$, the model is a regression model with an adjustment for repeated organizations. This model tests whether accounting information and its quality influence the amount of funds that governments award to an organization. This regression model is limited to NPOs that governments screened to receive funds.

The independent variable, Administrative Ratio, is defined as total administrative expenses scaled by total expenses. Relatively high administrative ratios are traditionally treated as an indicator of inefficiency or low accountability in an organization (Khumawala & Gordon, 1997; Parsons, 2007; Weisbrod & Dominguez, 1986; Yetman & Yetman, 2013). Governments generally set an upper limit for administrative ratios for funding applicants. Many governments are especially sensitive to the threshold of 15 percent and require NPOs to ensure that overhead costs do not exceed 15 percent of a total grant or contribution (Imagine Canada, 2016; Government of Canada, 2014). The threshold of 15 percent is also consistent with findings based on US data. Zhao and Lu (2019) use a sample of NPOs funded by the United States Agency for International Development and find that an administrative ratio of approximately 16-18% is the tipping point at which the government agency decreases funds to NPOs. Consequently, we create an indicator variable, High, to capture the government-suggested threshold. This indicator equals 1 if an organization reports administrative ratios higher than 15 percent; otherwise, it equals 0. We include the indicator variable High and its interaction with Administrative Ratio, which allows us to examine the threshold effect of administrative ratios in government funding decisions.

The accounting quality variable, Low Quality, is measured in four ways, as adopted in Yetman and Yetman (2013). More specifically, Zero Fundraising is equal to 1 if an NPO received at least \$100,000 in public donations but did not report fundraising expenses, and 0 otherwise. Generally, it is unusual for NPOs to receive more than \$100,000 in public donations while incurring zero fundraising expenses.⁴ Underreported Fundraising is the organization-specific residual from a fundraising expense prediction model (scaled by reported fundraising expenses).⁵ We switch the sign on the residuals such that larger residuals represent a higher likelihood of underreporting fundraising expenses. Underreported Administrative is the organization-specific residual from an administrative expense prediction model.⁶ Again, we switch the sign on the residuals such that larger residuals represent a higher likelihood of underreporting administrative expenses. Finally, Trussel is the estimated probability of program ratio manipulation, based on the model in Trussel (2003), where higher values mean a higher likelihood of manipulation of accounting ratios.⁷ We include the interaction of

⁴ According to the Canadian regulations, grant writing efforts belong to administrative activities, not to fundraising activities (the Canada Revenue Agency 2012, Guidance CG-013). Fundraising expenses strictly refer to expenses of soliciting public donations.

⁵ The fundraising expense prediction model is used by Yetman and Yetman (2013). The model is *Fundraising Expenses*_{*i*,*t*} = $\beta_0 + \beta_1 Pri$ *vate Donations*_{*i*,*t*+1} + $\beta_2 Government Grants$ _{*i*,*t*+1} + $\beta_3 Feeder Dona$ tions_{*i*,*t*+1} + $\beta_4 Age_{i,t+1} + \beta_5 Total$ Assets_{*i*,*t*+1} + $\sum \gamma_i$ Year *Indicators*_{*t*} + ϵ_i . To include the 71.83 percent of observations that reported actual zero fundraising expenses in the analyses, we scale the residual by using the reported fundraising expenses plus 1.

⁶ The administrative expense prediction model is by Yetman and Yetman (2013). The model is *Administrative Expenses*_{*i*,*i*} = $\beta_0 + \beta_1$. Donations_{*i*,*t*+1} + β_2 Program Revenues_{*i*,*t*+1} + β_3 Investment Revenues_{*i*,*t*+1} + β_4 Other Revenues_{*i*,*t*+1} + β_5 Age_{*i*,*t*} + β_6 Total Assets_{*i*,*t*+1} + $\sum \gamma_i$ Year Indicators_{*t*} + ε_i . We scale the residual by using the reported administrative expenses plus 1.

⁷ We use the method from Trussel (2003) to calculate the probability of accounting manipulation, which is $1/[1 + e^{-(Z)}]$, where Z is equal to -2.807–0.702 * *MARGIN*–1.360 * *DEFEXP* + 0.030 * *GROWTH* + 0.938 **DEPPROG*–2.375 * *DEFREV* + 1.326* *PROGCHG. MARGIN* is equal to (revenues–expenses)/revenues, *DEFEXP* is equal to (prepaid and deferred charges + other assets)/total assets, *GROWTH* is the one-period percentage change in revenues, *DEPPROG* is equal to depreciation/(depreciation + fixed assets), *DEFREV* is equal to deferred revenues/total assets, and *PROGCHG* is equal to a one-period percentage change in the program ratio (i.e., program spending out of total expenses).

| Table 2 S | amples from prope | Samples from propensity score matching | 20 | | | | | | |
|--------------------|--|---|---|------------------------|-------------------|---------------------------------------|-----------------------|---------------|-------------------------|
| Panel A: R | Panel A: Results of propensity score model (1) | v score model (1) | | | | | | | |
| Variables | | | Coeffient | | | <i>t</i> -value | | | <i>p</i> value |
| lnAsset | | | 0.014 | | | 1.26 | | | 0.207 |
| Fixed asset ratio | t ratio | | 1.219 | | | 14.27 | | | < .0001 |
| Donation rev% | ev% | | - 2.073 | | | - 34.05 | | | < .0001 |
| Service rev% | 196 | | -0.975 | | | -9.24 | | | < .0001 |
| Debt ratio | | | -0.004 | | | - 0.28 | | | 0.778 |
| Current ratio | io | | 0.000 | | | -4.10 | | | < .0001 |
| lnFulltime | | | 1.175 | | | 32.14 | | | < .0001 |
| Province | | | Fixed | | | | | | |
| Industry | | | Fixed | | | | | | |
| Year | | | Fixed | | | | | | |
| Firm | | | Clustered | 1 | | | | | |
| Observations | su | | 53,163 | | | | | | |
| Pseudo R^2 | | | 0.34 | | | | | | |
| Panel B: Y | oung organizations | that run governmen | Panel B: Young organizations that run government-sponsored programs | | | | | | |
| | All young organi | zations that run gove | All young organizations that run government-sponsored programs | grams First-fund group | troup | | Subsequent-fund group | nd group | |
| | Observations | Organizations | % of organizations | s Observations | ns Organizations | % of organizations | Observations | Organizations | % of organizations |
| Education | 6758 | 1773 | 12.15 | 4854 | 1773 | 12.15 | 1904 | 518 | 13.09 |
| Health | 4450 | 1135 | 7.78 | 3047 | 1135 | 7.78 | 1403 | 391 | 9.88 |
| Welfare | 17,126 | 4422 | 30.31 | 12,493 | 4422 | 30.31 | 4633 | 1261 | 31.86 |
| Religion | 16,433 | 4150 | 28.45 | 15,098 | 4150 | 28.45 | 1335 | 403 | 10.18 |
| Other | 12,008 | 3109 | 21.31 | 6899 | 3109 | 21.31 | 5109 | 1385 | 34.99 |
| | 56,775 | 14,589 | 100.00 | 42,391 | 14,589 | 100.00 | 14,384 | 3958 | 100.00 |
| Panel C: P | ropensity score mat | Panel C: Propensity score matching descriptive statistics | atistics | | | | | | |
| Matching variables | /ariables | Observations apply & receive fund | & receive fund | | Observations appl | Observations apply & not receive fund | | Sta | Standardized difference |
| | | u | Mean | Median | u | Mean | Median | I | |
| Matched fi | Matched first-fund sample | | | | | | | | |
| lnAsset | | 4582 | 11.53 | 11.33 | 4564 | 11.42 | 11.05 | 0 | 0.05 |
| Fixed asset ratio | et ratio | 4671 | 0.18 | 0.00 | 4564 | 0.20 | 0.00 |) – | 0.05 |
| Donation rev% | rev% | 4660 | 0.26 | 0.11 | 4564 | 0.30 | 0.13 |) – | - 0.12 |
| Service rev% | ev% | 4660 | 0.11 | 0.00 | 4564 | 0.15 | 0.00 |) – | -0.13 |
| Debt ratio | c | 4671 | 0.57 | 0.25 | 4564 | 0.55 | 0.09 | | 0.01 |
| | | | | | | | | | |

| |) | | | | | | |
|--------------------------------|--------------|-----------------------------------|--------|--------------|---------------------------------------|--------|-------------------------|
| Matching variables | Observations | Observations apply & receive fund | | Observations | Observations apply & not receive fund | d | Standardized difference |
| | u | Mean | Median | и | Mean | Median | |
| Current ratio | 4671 | 8916.97 | 3.84 | 4564 | 8864.05 | 3.17 | 0.00 |
| InFulltime | 4671 | 0.90 | 0.69 | 4564 | 0.84 | 0.00 | 0.06 |
| Matched subsequent-fund sample | id sample | | | | | | |
| InAsset | 10,247 | 12.14 | 11.91 | 9696 | 11.39 | 11.22 | 0.37 |
| Fixed asset ratio | 10,359 | 0.20 | 0.03 | 9696 | 0.19 | 0.00 | 0.03 |
| Donation rev% | 10,340 | 0.19 | 0.05 | 9696 | 0.26 | 0.12 | -0.25 |
| Service rev% | 10,340 | 0.12 | 0.01 | 9696 | 0.17 | 0.00 | -0.17 |
| Debt ratio | 10,359 | 0.58 | 0.37 | 9696 | 0.63 | 0.15 | -0.03 |
| Current ratio | 10,359 | 6499.75 | 2.51 | 9696 | 2810.84 | 1.30 | 0.14 |
| InFulltime | 10,359 | 1.30 | 1.10 | 9696 | 0.82 | 0.69 | 0.44 |

administrative ratios and accounting quality in both models, as set out in Yetman and Yetman (2013).

We add controls for reporting and managerial sophistication, as they may be correlated with both reporting quality and government funding. Recommended Audit is equal to 1 if the NPO's gross revenue is more than \$250,000, as the CRA recommends that such organizations be audited, and 0 otherwise (Yetman & Yetman, 2013). Accrual is equal to 1 if the NPO indicates that accrual accounting is used for its financial reports and 0 if the cash method of accounting is adopted. Full Time is equal to 1 if the NPO reports full-time permanent position(s), which suggests that it has a professional management team, and 0 otherwise. Independent Director Ratio is the number of independent directors divided by the total number of directors on the board, with a higher ratio suggesting better governance of the organization's management (Callen, Klein and Tinkelman, 2010). Age of the NPO is included as an indicator of reputation (Petrovits et al., 2011). To control for scale effects, we include the value of year-end assets (Assets) (Tinkelman, 2004). An indicator variable, Small Size, is added to identify NPOs that might be less sophisticated, where Small Size is equal to 1 if the nonprofit's total year-end assets are less than \$1 million and 0 otherwise (Keating et al., 2008; Yetman & Yetman, 2013).

We also include several variables to control for the factors associated with government funding. Prior studies find that government funds have either a crowding-out or crowding-in effect. That is, NPOs receiving government funds may reduce or increase organizations' fundraising efforts (Fundraising Expenses), donations from the public (Public Support), and revenues from service programs (Service Revenues) (Sokolowski, 2013). Handy and Webb (2003) and Austen-Smith and Jenkins (1985) show that NPOs that receive government funding tend to avoid reporting net profit. Hence, we include profit scaled by revenues (Margin) to control for organizations' reporting behavior. Tuckman and Chang (1991) find that larger amounts of equity (the amount left over after an NPO's liabilities are subtracted from its assets) indicate a stronger financial position of an NPO, which may attract government funding. Therefore, we include equity scaled by assets (Equity) to control for an NPO's financial strength.

In addition to organizational factors, political factors such as the values and priorities of interest groups can trump the consideration of program needs, leading to a distribution of government resources (Rich, 1989; Wood & Theobald, 2003). To address the political determinants of government funding, we include *Lobbying*, which is an indicator variable that designates whether the NPO incurred expenditures as a means to influence legislation through communication with legislators or government officials. Finally, we add the annual gross domestic product (*GDP*).

Consistent with prior research (e.g., Yetman & Yetman, 2013), we use the natural logs of *Administrative Ratio*, *Assets*, *Fundraising Expenses*, *Public Support*, *Service Revenues*, and *GDP* in the empirical analyses. Government funding in the current period is a function of a number of variables in the prior period. Therefore, we use lagged values for these independent variables. All variables that we use in the models are defined in Table 1.

To test our hypotheses, we run Model (2) on the Matched First-fund Sample and the Matched Subsequent-fund Sample. We further divide each matched sample into two subsamples using the indicator variable High: the High Administrative Ratio subsample (High = 1) and the Low Administrative Ratio subsample (High = 0). We also run Model (2) for the two subsamples within each matched sample to demonstrate governments' preference for <u>rea-</u> <u>sonably high</u> administrative ratios that are within the government-suggested threshold.

Results

Descriptive Statistics

The nonprofit sector is diverse, and our sample contains observations with extreme minimum and maximum values for many of our variables of interest. This is particularly true when the ratios are calculated. To mitigate the influence of extreme values on our analyses, we winsorize all of our data at the 1st and 99th percentiles. Our descriptive statistics and our analyses use these winsorized values.

Table 3 presents descriptive statistics. NPOs in the Matched First-fund Sample received a mean fund of \$175,081 awarded by governments, which is smaller than the mean fund of \$287,447 awarded in the Matched Subsequent-fund Sample. The reported mean of Administrative Ratio in the Matched First-fund Sample (13.00 percent) is smaller than that in the Matched Subsequent-fund Sample (15.00 percent). The percentage of NPOs whose administrative ratios exceed the government-suggested threshold is lower in the Matched First-fund Sample than in the Matched Subsequent-fund Sample (29.80 percent vs. 32.49 percent). The accounting quality for NPOs in the Matched First-fund Sample seems poorer than that in the Matched Subsequent-fund Sample, with 7.83 percent of observations in the Matched First-fund Sample reporting unreasonable zero fundraising expenses (i.e., Zero Fundraising) compared to 5.21 percent in the Matched Subsequent-fund Sample. In addition, there is an 11.00 percent likelihood of manipulating financial ratios (i.e., Trussel) in the Matched First-fund Sample as opposed to 9.00 percent in the Matched Subsequent-fund Sample.

The percentage of NPOs that have more than \$250,000 in revenues and therefore are recommended for auditing is higher in the Matched Subsequent-fund Sample (37.00 percent) than in the Matched First-fund Sample (34.98 percent). A higher percentage of NPOs in the Matched Subsequent-fund Sample adopt accrual accounting (83.72 percent) and hire full-time employees (62.43 percent) compared to the Matched First-fund Sample (76.77 percent and 51.89 percent, respectively). NPOs that received funding for the first time are two years younger on average than those that received repeated funding(s)—the mean ages for the Matched First-fund Sample and the Matched Subsequent-fund Sample are 4 and 6 years, respectively

We also conduct multicollinearity analyses and find that correlations for all continuous variables in the two samples are less than 0.35 and no variance inflation factors (VIFs) are over 1.44. Since correlations higher than 0.8 and VIFs higher than 10 represent high multicollinearity, we conclude that multicollinearity is not an issue in our samples (Belsley et al., 1980)

Hypothesis Testing

H1a and H1b: The Effect of Accounting Information on Government Funding Decisions

H1a predicts that governments prefer reasonably high administrative ratios at first-time funding, while H1b predicts that governments may penalize high administrative ratios at subsequent funding(s). Table 4 reports the results for H1a, that is, how governments use administrative ratios at first-time funding. The coefficients of *lnAdministrative* Ratio in Columns (1)-(8) of Panel A are significantly positive, but no significant coefficients of InAdministrative Ratio are found in Panel B. Hence, we can conclude that administrative ratios affect only decisions about whether to fund for the first time, not the amount of first-time funding. Furthermore, the significantly positive coefficients on the InAdministrative Ratio in Panel A hold only for the Low Administrative Ratio subsample (see Columns (5)-(8) of Panel A) but not for the High Administrative Ratio subsample (see Columns (9)-(12) of Panel A). This contrast indicates that governments prefer reasonably high administrative ratios. More specifically, in the Low Administrative Ratio subsample whose administrative ratios are within the government-suggested threshold, a one-percent increase in administrative ratios can increase the odds of governments awarding first-time funding by 5.03 percent, 3.92 percent, 4.44 percent, or 4.43 percent, depending on which measure of accounting quality is used in the

Table 3 Descriptive statistics

Panel A: Descriptive statistics for continuous variable

| | n | Mean | Q1 | Median | Q3 | SD |
|--------------------------------|--------|-----------|---------|---------|---------|-----------|
| Matched first-fund sample | | | | | | |
| Government grants | 9235 | 175,081 | 0 | 100 | 38,585 | 746,706 |
| Administrative ratio | 9235 | 0.13 | 0.00 | 0.06 | 0.18 | 0.18 |
| Underreported fundraising | 8284 | 12,629 | 11 | 2574 | 13,567 | 24,390 |
| Underreported administrative | 8284 | 27,809.55 | - 44.98 | - 2.91 | 0.93 | 631,436.1 |
| Trussel | 9235 | 0.11 | 0.04 | 0.05 | 0.07 | 0.21 |
| Age | 9235 | 4 | 3 | 4 | 5 | 2 |
| Asset | 9235 | 1,104,440 | 20,029 | 73,338 | 408,484 | 3,570,444 |
| Public support | 9235 | 125,354 | 1,993 | 16,451 | 85,184 | 341,583 |
| Service revenues | 9235 | 55,143 | 0 | 0 | 11,029 | 164,323 |
| Fundraising expenses | 9235 | 7,179 | 0 | 0 | 814 | 27,610 |
| Margin | 9235 | - 0.14 | - 0.05 | 0.03 | 0.15 | 1.26 |
| Equity | 9235 | 0.44 | 0.28 | 0.83 | 1 | 1.45 |
| Independent director ratio | 9193 | 0.76 | 0.63 | 1.00 | 1.00 | 0.37 |
| Matched subsequent-fund sample | | | | | | |
| Government grants | 20,055 | 287,447 | 0 | 1000 | 108,291 | 957,243 |
| Administrative ratio | 20,055 | 0.15 | 0.03 | 0.09 | 0.20 | 0.17 |
| Underreported fundraising | 15,801 | 9,302 | 4 | 2155 | 11,424 | 18,438 |
| Underreported administrative | 15,801 | 10,932.23 | - 9.14 | - 1.97 | 0.74 | 233,893.8 |
| Trussel | 20,055 | 0.09 | 0.04 | 0.05 | 0.06 | 0.16 |
| Age | 20,055 | 6 | 5 | 6 | 8 | 2 |
| Asset | 20,055 | 1,021,299 | 32,175 | 112,102 | 454,532 | 3,275,605 |
| Public support | 20,055 | 121,360 | 2500 | 17,685 | 95,820 | 312,615 |
| Service revenues | 20,055 | 56,231 | 0 | 290 | 28,996 | 146,055 |
| Fundraising expenses | 20,055 | 9276 | 0 | 0 | 2500 | 29,309 |
| Margin | 20,055 | - 0.11 | - 0.07 | 0.01 | 0.10 | 0.92 |
| Equity | 20,055 | 0.39 | 0.29 | 0.71 | 0.98 | 1.59 |
| Independent director ratio | 19,836 | 0.76 | 0.67 | 1.00 | 1.00 | 0.38 |

Panel B: Descriptive statistics for indicator variables

| | Matched first-fund sample (%) | Matched subsequent-fund sample (%) |
|-------------------------|-------------------------------|------------------------------------|
| Government grants dummy | 50.58 | 51.65 |
| High | 29.80 | 32.49 |
| Zero fundraising | 7.83 | 5.21 |
| Accrual | 76.77 | 83.72 |
| Recommended audit | 34.98 | 37.00 |
| Full time | 51.89 | 62.43 |
| Small size | 83.81 | 82.81 |
| Lobbying | 0.87 | 0.54 |

| Panel A: Government first time funding decision-fund or not fund | funding decisic | n-fund or no | t fund | | | | | | | | | |
|--|---------------------------|---------------------------------------|---------------------------|---------------------------|-----------------------|-----------------------|---|----------------------|---------------|-----------------|--|-------------------|
| | Governmen | Government funds dummy _{i,t} | ny _{i,t} | | | | | | | | | |
| | Matched fir | Matched first fund sample | le | | Low admini | strative ratic | Low administrative ratio ($\leq 15\%$) subample | bample | High admin | nistrative rati | High administrative ratio (> 15%) subample | bample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (7) | (8) | (6) | (10) | (11) | (12) |
| In Administrative ratio $_{r-1}$ | 0.044*** | 0.035*** | 0.040*** | 0.040** | 0.051*** | 0.039*** | 0.045*** | 0.045*** | 0.133 | 0.127 | 0.012 | 0.067 |
| High _{r-1} | 0.244 | (22.2) 0.257 | 0.261 | 0.268 | (/1.c) | (40.7) | (61.7) | (61.7) | (17.0) | (1.0) | (00.0) | (00.0) |
| InAdministrative ratio _{$i-1$} *High _{$i-1$} | (0.87) 0.066 (0.35) | (0.93) 0.062 (0.33) | (0.93) 0.065 (0.35) | (0.98) 0.068 (0.37) | | | | | | | | |
| Low quality _{r-1} | (000) | (000) | (000) | | | | | | | | | |
| Zero fundraising $_{t-1}$ | -0.540^{**} | | | | -0.658^{**} | | | | -0.311 | | | |
| | (- 2.47) | | | | (- 2.41) | | | | (-0.47) | | | |
| Underreported administrative _{r-1} | | 0.000 | | | | 0.000 | | | | 0.000 | | |
| | | (-0.34) | | | | (-0.17) | | | | (-0.68) | | |
| Underreported fundraising _{t-1} | | | 0.000 | | | | 0.000 | | | | 0.000 | |
| | | | (-0.81) | | | | (-0.73) | | | | (0.98) | |
| $Trussel_{f-1}$ | | | | -0.006* | | | | - 0.003 | | | | -0.001 |
| | | | | (-1.76) | | | | (-0.75) | | | | (-0.16) |
| InAdministrative ratio _{t-1} *Low | -0.090^{***} | 0.000 | 0.000 | -0.001 | -0.104^{***} | 0.000 | 0.000 | -0.001 | -0.050 | 0.000 | 0.000 | 0.009 |
| quality _{r-1} | (-3.14) | (-0.32) | (-0.91) | (-1.28) | (-3.14) | (-0.17) | (-0.8) | (-1.03) | (-0.09) | (-0.46) | (1.1) | (1.15) |
| Recommended audit $_{r-1}$ | -0.263^{**} | -0.271^{**} | -0.265^{**} | -0.274^{**} | -0.206 | - 0.211 | -0.207 | -0.214 | -0.418^{**} | -0.429^{**} | -0.444^{**} | -0.443^{**} |
| | (-2.13) | (- 2.23) | (- 2.15) | (-2.26) | (-1.36) | (-1.41) | (-1.36) | (-1.43) | (-2.06) | (- 2.13) | (-2.17) | (-2.21) |
| $Accrual_{t-1}$ | 0.033 | 0.030 | 0.031 | 0.029 | 0.009 | 0.006 | 0.005 | 0.004 | 0.115 | 0.116 | 0.115 | 0.118 |
| | (0.34) | (0.32) | (0.32) | (0.3) | (0.08) | (0.05) | (0.04) | (0.04) | (0.7) | (0.7) | (0.7) | (0.72) |
| $fulltime_{r-1}$ | 0.206^{**} | 0.200* | 0.201^{*} | 0.200* | 0.145 | 0.136 | 0.139 | 0.144 | 0.404^{**} | 0.397^{**} | 0.406^{**} | 0.395** |
| | (1.89) | (1.84) | (1.84) | (1.82) | (1.14) 0.000±±± | (1.08) 0.005±± | (1.09) | (1.13) 0.000±± | (2.27) | (2.24) | (2.3) | (2.18) 0.251±± |
| Independent director rano _{t-1} | - 0.209*** (- 2 66) | - 0.2/3*** (- 7 66) | $-0.2/0^{-5}$ | -0.269^{***} | - 0.235** (- 1 96) | - 0.233** (- 1 92) | -0.233 | - 0.232** (- 1 9) | -0.530** | | | -0.354 |
| Age, | - 0.242*** | - 0.243*** | - 0.242*** | - 0.241*** | - 0.243*** | - 0.245*** | - 0.243*** | - 0.244*** | - 0.233*** | - 0.234*** | - 0.233*** | - 0.231*** |
|) | (-10.82) | (-10.93) | (-10.79) | (-10.76) | (- 9.4) | (- 9.53) | (-9.34) | (-9.41) | (- 5.82) | (- 5.85) | (- 5.8) | (-5.75) |
| lnAssets _{r-1} | 0.108^{***} | 0.106^{**} | 0.106^{**} | 0.108^{***} | 0.102^{***} | 0.099*** | 0.100^{***} | 0.100^{***} | 0.146^{***} | 0.143^{***} | 0.148^{***} | 0.150^{***} |
| | (3.61) | (3.56) | (3.58) | (3.6) | (2.9) | (2.86) | (2.85) | (2.86) | (2.82) | (2.78) | (2.88) | (2.91) |
| Small size _{t-1} | 0.825*** | 0.830^{***} | 0.818^{***} | 0.828^{***} | 0.618^{***} | 0.618^{***} | 0.602^{**} | 0.616^{**} | 1.141^{***} | 1.154^{***} | 1.176^{***} | 1.141^{***} |
| | (4.11) | (4.04) | (3.93) | (4.06) | (2.72) | (2.65) | (2.55) | (2.67) | (3.71) | (3.75) | (3.75) | (3.63) |
| InFundraising expenses $_{t-1}$ | 0.063^{***} | 0.067^{***} | 0.064^{***} | 0.067^{***} | 0.058*** | 0.061^{***} | 0.059*** | 0.061^{***} | 0.076*** | 0.081^{***} | 0.081^{***} | 0.080*** |
| | (4.95) | (2.34) | (4.66) | (2.3) | (3.8) | (4.2) | (3.77) | (4.16) | (3.65) | (3.94) | (3 4) | (3 85) |

| continued | |
|-----------|--|
| 4 | |
| Table | |

| Panel A: Government first time funding decision-fund or not fund | ing decision-fun | the or not fund | | | | | | | | | | |
|--|---------------------------------|---------------------------------------|---------------|---------------|---------------|-------------------|---|---------------|-------------|--|--------------|----------|
| | Government | Government funds dummy _{i,t} | i,r | | | | | | | | | |
| | Matched firs | Matched first fund sample | | | Low admini: | strative ratio (: | Low administrative ratio ($\leq 15\%$) subample | ple | High admini | High administrative ratio (> 15%) subample | > 15%) subam | ple |
| | (1) | (2) | (3) | (4) | (5) | (9) | (1) | (8) | (6) | (10) | (11) | (12) |
| lnPublic support _{t-1} | - 0.008 | - 0.012 | - 0.011 | - 0.012 | -0.034 | - 0.036 | - 0.036 | - 0.037 | 0.031 | 0.026 | 0.023 | 0.026 |
| | (-0.49) | (-0.71) | (-0.67) | (-0.71) | (-2.14) | (-2.31) | (-2.29) | (-2.34) | (1.03) | (0.85) | (0.81) | (0.88) |
| InService revenues _{r-1} | 0.042^{***} | 0.042^{***} | 0.042^{***} | 0.042^{***} | 0.036^{***} | 0.035^{***} | 0.035^{***} | 0.035^{***} | 0.055*** | 0.056*** | 0.055*** | 0.056*** |
| | (4.03) | (4.01) | (3.96) | (3.97) | (2.98) | (2.87) | (2.84) | (2.85) | (3.65) | (3.76) | (3.69) | (3.68) |
| $Margin_{t-1}$ | 0.067 | 0.066 | 0.064 | 0.037 | 0.112 | 0.111 | 0.112 | 0.118 | - 0.053 | -0.061 | -0.067 | -0.176 |
| | (1.28) | (1.28) | (1.25) | (0.68) | (1.89) | (1.91) | (1.9) | (1.94) | (-0.46) | (-0.53) | (-0.58) | (-1.5) |
| $Equity_{t-1}$ | -0.014 | -0.014 | -0.014 | -0.015 | 0.005 | 0.005 | 0.004 | 0.004 | -0.050 | -0.050 | -0.051 | -0.047 |
| | (-0.44) | (-0.44) | (-0.43) | (-0.48) | (0.14) | (0.13) | (0.12) | (0.1) | (-0.96) | (-0.96) | (-0.99) | (-0.92) |
| $Lobbying_{t-1}$ | 0.184 | 0.205 | 0.204 | 0.205 | 0.006 | 0.032 | 0.034 | 0.031 | 0.583 | 0.594 | 0.589 | 0.580 |
| | (0.47) | (0.53) | (0.53) | (0.53) | (0.01) | (0.07) | (0.07) | (0.07) | (0.92) | (0.94) | (0.93) | (0.92) |
| InGDP | 0.179 | 0.176 | 0.173 | 0.178 | 2.048^{**} | 2.068^{**} | 2.038^{**} | 2.046^{**} | 2.203 | 2.222 | 2.264 | 2.175 |
| | (0.22) | (0.21) | (0.21) | (0.22) | (2.22) | (2.25) | (2.21) | (2.22) | (1.39) | (1.4) | (1.42) | (1.38) |
| Province | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Industry | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Year | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Number of observations | 8966 | 8966 | 8966 | 8966 | 6269 | 6269 | 6269 | 6269 | 2697 | 2697 | 2697 | 2697 |
| Likelihood ratio | 6.33 | 6.42 | 6.38 | 6.27 | 4.82 | 4.84 | 4.83 | 4.67 | 3.53 | 3.59 | 3.70 | 3.65 |
| Pseudo R^2 | 0.103 | 0.100 | 0.101 | 0.101 | 0.094 | 060.0 | 0.091 | 0.091 | 0.143 | 0.143 | 0.144 | 0.146 |
| Panel B: Government first time funding decision-the value of fund | unding decisi | on-the value | of fund | | | | | | | | | |
| | Government funds _{i,t} | nt funds $_{i,t}$ | | | | | | | | | | |
| | Matched fi | Matched first fund sample | ple | | Low admir. | ustrative rati- | Low administrative ratio ($\leq 15\%$) subample | ıbample | High admi | High administrative ratio (>15%) subample | io (>15%) su | bample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (2) | (8) | (6) | (10) | (11) | (12) |
| InAdministrative ratio $_{t-1}$ | 0.008 | 0.009 | 0.012 | 0.003 | 0.006 | 0.006 | 0.009 | - 0.003 | 0.015 | 0.002 | 0.059 | 0.021 |
| | (0.87) | (0.97) | (1.21) | (0.35) | (0.6) | (0.64) | (0.85) | (-0.25) | (0.18) | (0.03) | (0.6) | (0.23) |
| $\operatorname{High}_{r-1}$ | 0.033 | 0.020 | 0.031 | 0.044 | | | | | | | | |
| | (0.28) | (0.17) | (0.26) | (0.38) | | | | | | | | |
| InAdministrative ratio _{$t-1$} *High _{$t-1$} | 0.012 | 0.003 | 0.004 | 0.012 | | | | | | | | |
| | (0.15) | (0.04) | (0.05) | (0.15) | | | | | | | | |
| Low quality $_{t-1}$ | | | | | | | | | | | | |
| Zero Fundraising $_{t-1}$ | - 0.999*** | | | | - 0.954*** | | | | -1.135* | | | |
| | (- 5.55) | | | | (-3.85) | | | | (-1.89) | | | |
| Underreported administrative $_{t-1}$ | | 0.000^{***} | | | | 0.000^{***} | | | | -0.001^{**} | | |
| | | (- 3.54) | | | | (- 3.83) | | | | (- 2.47) | | |

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| Table 4 continued | | | | | | | | | | | | |
|--|---------------------------------|---------------------------|----------------|----------------|----------------|---|----------------|----------------|----------------|-----------------|---|----------------|
| Panel B: Government first time funding decision-the value of | funding decisic | n-the value o | of fund | | | | | | | | | |
| | Government funds _{i,i} | it funds $_{i,t}$ | | | | | | | | | | |
| | Matched fir | Matched first fund sample | le | | Low admini | Low administrative ratio ($\leq 15\%$) subample | (≤ 15%) su | bample | High admini | istrative ratic | High administrative ratio (>15%) subample | ample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (7) | (8) | (6) | (10) | (11) | (12) |
| Underreported fundraising _{<i>t</i>-1} | | | 0.000 | | | | 0.000 | | | | 0.000 | |
| | | | (0.5) | | | | (0.42) | | | | (-0.46) | |
| Trussel _{t-1} | | | | -0.001 | | | | 0.005 | | | | -0.008 |
| | | | | (-0.49) | | | | (1.12) | | | | (-1.13) |
| In Administrative ratio $_{t-1}$ *Low | -0.034 | 0.000^{***} | 0.000 | 0.000 | - 0.023 | 0.000^{***} | 0.000 | 0.001 | -0.159 | -0.001 | 0.000 | 0.000 |
| quality _{r-1} | (- 1.24) | (-3.41) | (- 1.21) | (0.4) | (-0.72) | (- 3.53) | (- 0.66) | (1.26) | (-0.35) | (- 2.66) | (-0.93) | (-0.03) |
| Recommended audit $_{t-1}$ | 1.240^{***} | 1.178^{***} | 1.170^{***} | 1.183^{***} | 1.263^{***} | 1.176^{***} | 1.168^{***} | 1.184^{***} | 1.231^{***} | 1.207^{***} | 1.201^{***} | 1.209^{***} |
| | (17.97) | (16.94) | (16.71) | (17) | (13.73) | (12.77) | (12.59) | (12.84) | (11.98) | (11.54) | (11.44) | (11.6) |
| $Accrual_{t-1}$ | 0.472*** | 0.465*** | 0.477^{***} | 0.476*** | 0.504^{***} | 0.492^{***} | 0.510^{***} | 0.508*** | 0.365*** | 0.352^{***} | 0.370^{***} | 0.376^{***} |
| | (6.98) | (6.82) | (6.98) | (96.9) | (5.98) | (5.79) | (5.98) | (5.96) | (3.28) | (3.17) | (3.32) | (3.36) |
| Fulltime,1 | 1.068^{***} | 1.046^{***} | 1.052^{***} | 1.047^{***} | 1.130^{***} | 1.100^{***} | 1.112^{***} | 1.111^{***} | 0.945^{***} | 0.937^{***} | 0.930^{***} | 0.918^{***} |
| | (17.74) | (17.34) | (17.35) | (17.26) | (14.45) | (14.12) | (14.17) | (14.15) | (9.93) | (9.78) | (9.71) | (9.61) |
| Independent director ratio _{t-1} | 0.004 | -0.008 | - 0.006 | -0.004 | - 0.058 | -0.068 | - 0.066 | -0.068 | 0.118 | 0.110 | 0.107 | 0.106 |
| | (0.06) | (-0.12) | (-0.09) | (-0.07) | (-0.69) | (-0.81) | (-0.79) | (-0.82) | (1.16) | (1.07) | (1.04) | (1.03) |
| Age, | -0.112^{***} | -0.116^{***} | -0.117^{***} | -0.116^{***} | -0.115^{***} | -0.117^{***} | -0.119^{***} | -0.121^{***} | - 0.099*** | -0.101^{***} | -0.107^{***} | -0.100^{***} |
| | (- 6.96) | (- 7.21) | (- 7.27) | (- 7.2) | (- 5.68) | (- 5.79) | (- 5.91) | (- 5.98) | (-3.73) | (- 3.82) | (-4.06) | (- 3.77) |
| $\ln Assets_{t-1}$ | 0.305^{***} | 0.294^{***} | 0.295*** | 0.298*** | 0.312^{***} | 0.301^{***} | 0.304^{***} | 0.307^{***} | 0.289^{***} | 0.278^{***} | 0.275*** | 0.275*** |
| | (14.26) | (13.61) | (13.73) | (13.84) | (11.96) | (11.48) | (11.59) | (11.73) | (7.62) | (7.32) | (7.23) | (7.23) |
| Small size _{t-1} | -0.421^{***} | -0.389^{***} | -0.392^{***} | -0.417^{***} | - 0.377*** | -0.359^{**} | - 0.369** | -0.387^{**} | -0.461^{***} | -0.405^{***} | -0.401^{**} | -0.433^{**} |
| | (- 3.45) | (-3.15) | (- 3.2) | (-3.37) | (-2.47) | (- 2.33) | (- 2.41) | (- 2.5) | (- 2.32) | (- 2) | (-1.99) | (- 2.14) |
| InFundraising expenses $_{t-1}$ | -0.052^{***} | -0.039^{***} | -0.032^{***} | -0.039^{***} | - 0.055*** | -0.041^{***} | -0.034^{***} | -0.041^{***} | -0.045^{***} | - 0.033*** | -0.028^{**} | -0.032^{***} |
| | (- 7.55) | (- 5.64) | (- 4.22) | (-5.62) | (-6.13) | (- 4.57) | (-3.35) | (-4.53) | (-4.08) | (-3.09) | (-2.3) | (-3.01) |
| InPublic support _{$t-1$} | -0.065^{***} | -0.080^{***} | -0.083^{***} | -0.080^{***} | - 0.057*** | -0.074^{***} | - 0.077*** | -0.074^{***} | -0.081^{***} | - 0.095*** | -0.095^{***} | -0.093^{***} |
| | (-8.6) | (-10.82) | (-11.28) | (-10.69) | (-5.53) | (-7.31) | (- 7.67) | (- 7.19) | (- 7.73) | (- 9.28) | (-9.31) | (-9.1) |
| InService revenues ₁₋₁ | 0.006 | 0.008 | 0.008 | 0.007 | 0.007 | 0.009 | 0.009 | 0.009 | 0.003 | 0.006 | 0.005 | 0.005 |
| | (1.02) | (1.37) | (1.37) | (1.29) | (1.03) | (1.27) | (1.25) | (1.24) | (0.37) | (0.66) | (0.61) | (0.57) |
| $\operatorname{Margin}_{t-1}$ | -0.035 | -0.040 | - 0.044 | - 0.066 | - 0.037 | -0.037 | -0.041 | -0.045 | -0.036 | -0.044 | -0.051 | -0.116 |
| | (-0.83) | (-0.93) | (-1.03) | (- 1.42) | (-0.74) | (-0.73) | (-0.83) | (-0.81) | (-0.42) | (-0.51) | (-0.58) | (- 1.29) |
| $Equity_{t-1}$ | -0.139^{***} | -0.136^{***} | -0.135^{***} | -0.137^{***} | -0.143^{***} | -0.143^{***} | -0.142^{***} | -0.143^{***} | - 0.090 | - 0.087 | - 0.082 | -0.061 |
| | (- 4.26) | (-4.17) | (- 4.1) | (- 4.19) | (- 4.1) | (- 4.11) | (-3.99) | (- 4.05) | (-0.36) | (-0.35) | (-0.33) | (- 0.24) |
| $Lobbying_{t-1}$ | 0.050 | 0.057 | 0.067 | 0.069 | 0.129 | 0.151 | 0.162 | 0.153 | -0.130^{**} | -0.123 | - 0.123 | -0.120 |
| | (0.27) | (0.31) | (0.36) | (0.37) | (0.46) | (0.54) | (0.58) | (0.55) | (-2.03) | (-1.92) | (-1.89) | (-1.88) |
| InGDP | 0.282 | 0.301^{***} | 0.299 | 0.297 | 2.416 | 1.375 | 1.457 | 1.849 | 3.699 | 3.767 | 4.116 | 4.118 |
| | (0) | (Infty) | (0) | (0) | (0.56) | (0.32) | (0.33) | (0.42) | (0.68) | (0.68) | (0.76) | (0.75) |

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| Table | |

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| | Governn | Government funds _{i,t} | | | | | | | | | | |
|------------------------|---------|---------------------------------|-------|-------|---------|----------------|---|----------|----------|---|--------------|----------|
| | Matched | Matched first fund sample | nple | | Low adm | unistrative ra | Low administrative ratio ($\leq 15\%$) subample | subample | High adr | High administrative ratio (>15%) subample | tio (>15%) s | subample |
| | (1) | (2) | (3) | (4) | (2) | (9) | (7) | (8) | (6) | (10) | (11) | (12) |
| Province | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Industry | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Year | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Number of observations | 4512 | 4512 | 4512 | 4512 | 2950 | 2950 | 2950 | 2950 | 1562 | 1562 | 1562 | 1562 |
| Adjusted R^2 | 0.556 | 0.552 | 0.551 | 0.551 | 0.569 | 0.566 | 0.564 | 0.564 | 0.526 | 0.523 | 0.521 | 0.522 |

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t-values/F-values are in parentheses under their respective coefficient estimates

All variables are defined in Table 1

repeated organizations that tests whether accounting information and its quality influence the value of funds governments reward to an organization. This regression model is limited to All models are estimated using Model (2). When the dependent variable is *Government Funds Dummy*_{i,v}, the model is the logistic model with standard errors clustered by firm that estimates the probability of an organization receiving government funding. When the dependent variable is measured by Government Funds_{i,i}, the model is the regression model with an adjustment for organizations that governments screened to receive funds

In addition to the results discussed in "Hypothesis Testing" section, Table 4 documents interesting findings regarding Independent Director Ratio and Age. The negative coefficients on Independent Director Ratio indicate that governments tend not to award first-time funding to NPOs with higher independent director ratios. Expenses associated with independent directors may explain the findings. Generally, NPOs need to cover expenses incurred by independent directors and sometimes even compensate them for their services (Callen et al., 2010). However, independent directors do not directly operate/run NPO programs. Governments may deem such expenses nonessential. This is especially true when governments evaluate NPOs for the first time, as governments may send their own representatives to supervise the board in the future. The negative coefficients on Age indicate that governments tend to fund younger NPOs. This is probably because younger NPOs are more adaptable to provide tailored programs that meet governments' funding requirements, and younger NPOs need more funding to develop their programs

| Panel A: Government subsequent funding decision-fund or not fund | ent funding a | lecision-fund | or not fund | | | | | | | | | |
|--|------------------------|---------------------------------------|------------------------------|------------------------|------------------|---|---------------------|---------------------|--------------------|--|-------------------|----------------------------|
| | Governmer | Government funds dummy _{i,t} | ny _{i,t} | | | | | | | | | |
| | Matched su | Matched subsequent fund sample | d sample | | Low admir | Low administrative ratio ($\leq 15\%$) subample | o (≤ 15%) su | bample | High admi | High administrative ratio (> 15%) subample | o (> 15%) su | bample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (1) | (8) | (6) | (10) | (11) | (12) |
| In Administrative Ratio $_{t-1}$ | -0.043 (-1.52) | - 0.037 (- 1.32) | - 0.042 (- 1.42) | -0.020 (-0.68) | -0.215 (-0.8) | - 0.045 (- 1.64) | - 0.047 (- 1.61) | - 0.035 $(-$ 1.25) | - 0.215 (- 0.8) | - 0.215 (- 0.82) | -0.186 (-0.61) | - 0.112 (- 0.4) |
| $\operatorname{High}_{r-1}$ | 0.440 | 0.410 | 0.429 | 0.498 | | | | | | | | |
| In Administrative ratio $_{i-1}$ *High $_{i-1}$ | (1.02) - 0.028 (- 0.1) | (0.03) – 0.039 (– 0.14) | (0.00) - 0.029 (- 0.1) | (0.03) 0.003) | | | | | | | | |
| Low quality _{r-1} | ~ | ~ | ~ | ~ | | | | | | | | |
| Zero Fundraising ₁₋₁ | 0.039 | | | | 0.549 | | | | 0.549 | | | |
| Underreported administrative, | (70.0) | 0.000^{**} | | | (0.4.0) | 0.000 | | | (0.4.0) | 0.004 | | |
| 7 | | (- 2.37) | | | | (- 2.17) | | | | (0.59) | | |
| Underreported fundraising _{<i>i</i>-1} | | | 0.000 | | | | 0.000 | | | | 0.000 | |
| | | | (-0.33) | | | | (-0.86) | | | | (0.75) | |
| $Trussel_{r-1}$ | | | | - 0.011** | | | | - 0.004 | | | | -0.017 |
| In Administrative ratio - *1 ou | 0.038 | **0000 | 0000 | (cc:7 -) - 0 003*** | - 0.063 | 0.000 | 0000 | (- 0.0) - 0.001* | - 0.063 | 0.002 | 0.000 | (+C-I -) |
| quality _{r-1} | (0.61) | (- 2.37) | (0.29) | (-2.95) | (-0.08) | (- 2.12) | (0.03) | (-1.68) | (-0.08) | 0.56) | (-0.52) | (-0.71) |
| Recommended audit $_{r-1}$ | 0.969*** | 0.957*** | 0.972*** | 0.956*** | 0.538* | 1.247* | 1.287^{**} | 1.250^{**} | 0.538* | 0.554* | 0.523 | 0.547* |
| | (4.34) | (4.2) | (4.32) | (4.17) | (1.68) | (4.85) | (5.06) | (4.83) | (1.68) | (1.74) | (1.63) | (1.72) |
| Accrual _{r-1} | 0.049 | 0.032 | 0.039 | 0.050 | -0.137 | 0.132 | 0.140 | 0.161 | - 0.137 | -0.135 | -0.119 | - 0.173 |
| | (0.21) | (0.14) | (0.17) | (0.22) | (-0.37) | (0.53) | (0.55) | (0.64) | (-0.37) | (-0.37) | (-0.32) | (-0.49) |
| Fulltime $_{t-1}$ | 0.491*** | 0.478** | 0.497*** | 0.485*** (2.58) | 0.717** | 0.505** | 0.549*** | 0.527** | 0.717** | 0.725** | 0.745** (2.44) | (2, 38) |
| Independent Director Ratio _{t-1} | 0.037 | 0.060 | 0.026 | 0.038 | -0.305 | 0.233 | 0.167 | 0.214 | -0.305 | -0.310 | -0.313 | -0.353 |
| | (0.16) | (0.26) | (0.12) | (0.17) | (-1.1) | (0.87) | (0.68) | (0.8) | (-1.1) | (-1.12) | (- 1.12) | (-1.29) |
| Age, | - 0.007 | - 0.005 | - 0.009 | - 0.007 | 0.013 | 0.004 | - 0.009 | 0.003 | 0.013 | 0.014 | 0.018 | 0.00 |
| | (-0.13) | (-0.09) | (-0.18) | (-0.12) | (0.2) | (0.05) | (-0.14) | (0.04) | (0.2) | (0.21) | (0.27) | (0.13) |
| $\ln Assets_{r-1}$ | 0.179*** | 0.171^{***} | 0.183^{***} | 0.179^{***} | 0.324^{***} | 0.098 | 0.121^{*} | 0.101 | 0.324^{***} | 0.337^{***} | 0.332^{***} | 0.345*** |
| | (2.81) | (2.65) | (2.9) | (2.74) | (3.2) | (1.35) | (1.74) | (1.4) | (3.2) | (3.31) | (3.18) | (3.4) |
| Small size _{r-1} | 766.0 | 1.021 | 0.995 | 0.991 | 1.474 | 0.785 | 0.759 | 0.737 | 1.474 | 1.503 | 1.550 | 1.482 |
| | (2.43) | (2.46) | (2.42) | (2.38) | (2.8) | (1.71) | (1.69) | (1.61) | (2.8) | (2.83) | (2.97) | (2.78) |
| InFundraising expenses $_{r-1}$ | 0.039* | 0.040* | 0.032 | 0.040 | 0.042 | 0.055** | 0.037 | 0.056^{**} | 0.042 | 0.035 | 0.066** | 0.032 |
| | (1.71) | (1.75) | (1.36) | (1.74) | (1.6) | (2.06) | (1.34) | (2.1) | (1.6) | (1.34) | (2.14) | (1.24) |
| InPublic support $_{t-1}$ | - 0.065** | - 0.068** | - 0.064** | - 0.067** | - 0.092** | - 0.064** | -0.051 | - 0.063* | - 0.092** | - 0.085** | - 0.090** | - 0.082** |
| | (-1.98) | (-2.1) | (-2.02) | (-2.08) | (-2.4) | (-1./4) | (-1.40) | (-1./3) | (-2.4) | (-7, 70) | | $\left(\frac{x}{x}\right)$ |

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| Table | |
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| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | | Government fi | Government funds dummyi,t | | | | | | | | | | |
|---|--|-----------------|---------------------------|----------|------------------|--------------|-------------------|--------------|-----------------|---------------|-------------------|---------------|-------------|
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | Matched subse | equent fund san | nple | | Low administ | cative ratio (≤ 1 | 5%) subample | | High administ | rative ratio (> 1 | 5%) subample | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | (1) | (2) | (3) | (4) | (5) | (9) | (1) | (8) | (6) | (10) | (11) | (12) |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | InService revenues _{t-1} | 0.015 | 0.015 | 0.016 | 0.015 | 0.031 | 0.010 | 0.011 | 0.012 | 0.031 | 0.030 | 0.026 | 0.029 |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | (0.73) | (0.7) | (0.76) | (0.73) | (1.08) | (0.4) | (0.48) | (0.48) | (1.08) | (1.05) | (0.94) | (1.02) |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | $Margin_{r-1}$ | 0.108 | 0.127 | 0.105 | 0.071 | 0.267^{**} | 0.037 | 0.002 | 0.043 | 0.267^{**} | 0.261^{**} | 0.259^{**} | 0.142 |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | (1.18) | (1.38) | (1.15) | (0.83) | (2.48) | (0.47) | (0.02) | (0.51) | (2.48) | (2.46) | (2.44) | (1.13) |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | Equity _{r-1} | -0.034 | -0.031 | -0.038 | -0.031 | 0.044 | -0.091 | -0.104 | -0.096 | 0.044 | 0.032 | 0.044 | 0.038 |
| | | (-0.52) | (-0.47) | (- 0.58) | (-0.48) | (0.5) | (-1.38) | (-1.56) | (- 1.42) | (0.5) | (0.38) | (0.51) | (0.44) |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | $cobbying_{t-1}$ | 1.431^{**} | 1.408^{**} | 1.449** | 1.420** | 0.433 | 3.917*** | 4.048*** | 3.956*** | 0.433 | 0.438 | 0.439 | 0.426 |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | | (2.18) | (2.17) | (2.19) | (2.16) | (0.52) | (3.87) | (3.94) | (3.91) | (0.52) | (0.52) | (0.54) | (0.51) |
| (-554) (-5.44) (-5.57) (-5.53) (-499) (-5.11) (-506) (-511) Fixed | nGDP | -14.045^{***} | -13.750^{***} | | $- 14.135^{***}$ | - 46.748*** | -13.426^{***} | - 13.782*** | -13.786^{***} | - 46.748*** | -46.800^{***} | - 47.009*** | - 46.680*** |
| · Fixed Fi | | (-5.54) | (- 5.44) | (- 5.57) | (- 5.55) | (- Infty) | (- 4.99) | (- 5.11) | (-5.06) | (- Infty) | (- Infty) | (-0.15) | (- Infty) |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | Province | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| | ndustry | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| of observations $9,732$ $9,732$ $9,732$ $9,732$ $9,732$ $9,732$ $9,732$ $9,732$ $9,732$ $13,296$ $13,296$ $13,296$ $13,296$ $53,296$ 650 od Ratio 2.78 2.97 2.97 2.95 2.91 2.56 2.74 2.55 7.8 R : Government subsequent funding decision-the value of fund 0.151 0.152 0.172 0.167 0.167 0.25 7.8 R : Government subsequent fundist _i 0.151 0.151 0.172 0.167 0.167 0.25 0.167 0.25 R : Government fundist _i 0.12 (3) (4) (5) (6) (7) (8) M | í ear | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| od Ratio 2.78 2.97 2.95 2.91 2.67 2.74 2.55 7.8 R^2 0.151 0.156 0.151 0.151 0.157 0.167 0.157 0.167 0.255 7.8 B: Government subsequent funding decision-the value of fund Education Distribution Distribution <thdistribution< th=""> Distribution</thdistribution<> | Number of observations | 19,732 | 19,732 | 19,732 | 19,732 | 13,296 | 13,296 | 13,296 | 13,296 | 6568 | 6568 | 6568 | 6568 |
| \mathbb{R}^2 0.151 0.156 0.151 0.151 0.151 0.157 0.170 0.167 0.2 B: Government subsequent funding decision-the value of fund Government subsequent fundistrix Image: Covernment subsequent fundistrix Image: Covernment subsequent fundistrix 0.167 0.27 0.167 0.27 B: Government subsequent fundistrix Government fundistrix Image: Covernment fundistrix Image: Covernment fundistrix Image: Covernment fundistrix Image: Covernment fundistrix 0.167 0.27 0.167 0.27 Image: Covernment subsequent fund sample Image: Covernment fundistrix Image: Covernment for Covernment fundistrix Image: Covernment for C | ikelihood Ratio | 2.78 | 2.97 | 2.95 | 2.91 | 2.50 | 2.67 | 2.74 | 2.55 | 7.87 | 7.89 | 8.34 | 8.15 |
| B: Government subsequent funding decision-the value of funding decision decision decis | seudo R^2 | 0.151 | 0.156 | 0.151 | 0.154 | 0.167 | 0.172 | 0.170 | 0.167 | 0.229 | 0.229 | 0.233 | 0.232 |
| $ \begin{array}{l l l l l l l l l l l l l l l l l l l $ | ^p anel B: Government subseq | uent funding d | lecision–the v | | | | | | | | | | |
| $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | Gover | 'nment funds _i | 1' | | | | | | | | | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | Match | ied subsequer | | | Low ad | ministrative r | atio (≤ 15%) | subample | High adm | ninistrative ra | tio (> 15%) s | ubample |
| listrative ratio_{-1} 0.012 0.013 0.016 0.015 0.005 0.008 0.004 0.005 -0.058 0.014 -0.045 -0.058 0.058 0.014 -0.045 -0.058 0.058 0.014 -0.045 -0.058 0.058 0.014 -0.045 -0.058 0.05 | | (1) | (2) | (3) | (4) | (2) | (9) | (2) | (8) | (6) | (10) | (11) | (12) |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | nAdministrative ratio $_{t-1}$ | 0.012 | 0.013 | 0.016 | 0.015 | 0.005 | 0.008a | 0.008 | 0.014 | - 0.045 | -0.058 | - 0.008 | -0.082 |
| $\begin{array}{llllllllllllllllllllllllllllllllllll$ | | (1.41) | | | (1.6) | (0.62) | (0.95) | (0.83) | (1.44) | (-0.68) | (-0.85) | (-0.11) | (-1.16) |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | High,1 | - 0.019 | | | | | | | | | | | |
| $\begin{array}{rrrrr} - 0.042 & - 0.050 & - 0.056 & - 0.047 \\ (- 0.63) & (- 0.74) & (- 0.83) & (- 0.69) \\ \end{array}$ | | (-0.18) | | | | | | | | | | | |
| $(-0.63) (-0.74) (-0.83) (-0.69)$ ing1 $-0.594^{***} \qquad -0.303$ | InAdministrative Ratio _{t-1} *High _{t-1} | | | | | | | | | | | | |
| -0.594^{***} - 0.303 | | (-0.63) | | - | | | | | | | | | |
| -0.594^{***} | Low quality ₁₋₁ | | | | | | | | | | | | |
| | Zero fundraisin g_{t-1} | - 0.592 | 4*** | | | - 0.303 | | | | — 1.064*** | | | |

Voluntas

0.000(- 0.53)

0.000* (1.76)

0.000* (1.69)

0.000** (- 2.22)

Underreported administrative_{r-1}

Underreported Fundraising₁₋₁

- 0.594*** (- 3.14)

(- 2.17) 0.000^{**}

-0.009(- 2)

- 1.064*** (- 2.77)

- 0.303 (- 1.19)

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| value of fund | |
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| lecision-the | |
| t funding c | |
| subsequent | |
| Government | |
| Panel B: | |

| 4 | Government funds: | nt fiinds: . | | | | | | | | | | |
|---|-------------------|-------------------------|----------------|----------------|----------------|-----------------|---|---------------------|----------------|-----------------|--|----------------|
| | Matched s | Matched subsequent fund | nd sample | | Low admin | istrative ratic | Low administrative ratio ($\leq 15\%$) subample | lbample | High admin | iistrative rati | High administrative ratio (> 15%) subample | bample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (1) | (8) | (6) | (10) | (11) | (12) |
| $Trussel_{r-1}$ | | | | -0.002 | | | | - 0.002 (- 1 14) | | | | 0.002 |
| InAdministrative ratio $_{t-1}$ *Low quality $_{t-1}$ | - 0.014 | 0.000** | 0.000 | 0.000 | 0.030 | 0.000** | 0.000 | - 0.001* | - 0.172 | - 0.005 | 0.000 | 0.003 |
| | (-0.33) | (- 2.1) | (-0.74) | (-1.87) | (0.66) | (- 1.97) | (0.26) | (- 2.04) | (-0.55) | (- 1.45) | (-1.05) | (0.88) |
| Recommended audit $_{t-1}$ | 1.053^{***} | 1.022^{***} | 1.021^{***} | 1.024^{***} | 1.072^{***} | 1.040^{***} | 1.039^{***} | 1.043^{***} | 1.114^{***} | 1.086^{***} | 1.085^{***} | 1.080^{***} |
| | (17.05) | (16.55) | (16.72) | (16.64) | (13.15) | (12.74) | (12.9) | (12.83) | (13.97) | (13.5) | (13.56) | (13.38) |
| $Accrual_{r-1}$ | 0.496^{***} | 0.490 | 0.496^{***} | 0.497^{***} | 0.492^{***} | 0.483^{***} | 0.493^{***} | 0.490^{***} | 0.487^{***} | 0.494^{***} | 0.502^{***} | 0.496*** |
| | (6.28) | (6.1) | (6.19) | (6.21) | (5.21) | (5.02) | (5.14) | (5.12) | (4.03) | (4.01) | (4.08) | (4.01) |
| $Fulltime_{r-1}$ | 0.955*** | 0.956^{***} | 0.961^{***} | 0.957*** | 1.015^{***} | 1.015^{***} | 1.024^{***} | 1.018^{***} | 0.804^{***} | 0.790*** | 0.802^{***} | 0.798^{***} |
| | (15.91) | (15.82) | (15.86) | (15.81) | (13.52) | (13.43) | (13.51) | (13.43) | (9.65) | (9.46) | (9.59) | (9.53) |
| Independent director Ratio _{r-1} | 0.008 | 0.006 | 0.005 | 0.003 | - 0.086 | - 0.084 | -0.089 | - 0.090 | 0.170^{**} | 0.172** | 0.170^{**} | 0.170^{**} |
| | (0.12) | (0.09) | (0.08) | (0.05) | (-1.05) | (-1.03) | (-1.1) | (-1.1) | (2.13) | (2.16) | (2.11) | (2.12) |
| Age, | - 0.036** | - 0.035** | - 0.036*** | -0.036^{***} | - 0.029* | - 0.027 | - 0.028 | - 0.029 | -0.047^{**} | -0.048^{**} | -0.049^{**} | -0.049^{**} |
| | (-2.58) | (- 2.54) | (- 2.6) | (- 2.58) | (-1.67) | (- 1.57) | (-1.63) | (- 1.64) | (- 2.47) | (- 2.47) | (- 2.55) | (- 2.52) |
| $\ln Assets_{t-1}$ | 0.378^{***} | 0.372^{***} | 0.362^{***} | 0.37^{***3} | 0.401^{***} | 0.396^{***} | 0.384^{***} | 0.397^{***} | 0.313^{***} | 0.300^{***} | 0.299^{***} | 0.305*** |
| | (15.2) | (14.95) | (14.88) | (14.99) | (13.3) | (13.14) | (13.01) | (13.19) | (8.54) | (8.14) | (8.26) | (8.24) |
| Small size $_{i-1}$ | - 0.300** | -0.285^{**} | - 0.255** | -0.293^{**} | -0.324^{**} | -0.310^{**} | -0.281^{**} | -0.318^{**} | -0.195 | -0.183 | -0.156 | -0.175 |
| | (-2.55) | (- 2.4) | (- 2.16) | (- 2.46) | (- 2.29) | (-2.16) | (- 1.97) | (- 2.22) | (- 1.1) | (- 1.02) | (-0.88) | (- 0.97) |
| $\ln Fundraising expenses_{t-1}$ | - 0.053*** | -0.043^{***} | - 0.029*** | -0.043^{***} | -0.060^{***} | -0.051^{***} | -0.035^{***} | -0.051^{***} | -0.041^{***} | - 0.029*** | - 0.022** | -0.028^{***} |
| | (-8.18) | (- 6.46) | (-3.91) | (- 6.46) | (- 6.91) | (- 5.71) | (- 3.7) | (- 5.71) | (- 5.06) | (-3.61) | (- 2.35) | (- 3.57) |
| InPublic support _{$l-1$} | - 0.049*** | -0.059^{***} | - 0.065*** | - 0.059*** | -0.042^{***} | -0.053^{***} | -0.059^{***} | -0.052^{***} | -0.058^{***} | -0.071^{***} | - 0.072*** | -0.071^{***} |
| | (- 6.75) | (- 7.86) | (- 9.21) | (- 7.82) | (- 4.52) | (- 5.39) | (-6.54) | (-5.33) | (-6.28) | (- 7.51) | (- 7.93) | (- 7.56) |
| InService revenues $_{r-1}$ | 0.000 | 0.000 | -0.001 | 0.000 | 0.002 | 0.002 | 0.001 | 0.002 | - 0.008 | - 0.006 | -0.007 | -0.006 |
| | (-0.05) | (0.04) | (-0.12) | (0.05) | (0.27) | (0.26) | (0.11) | (0.3) | (- 1.07) | (-0.81) | (-0.89) | (-0.86) |
| $Margin_{t-1}$ | -0.110* | -0.105 | -0.095 | -0.107 | - 0.049 | - 0.046 | -0.029 | -0.045 | -0.307^{***} | -0.300^{***} | -0.301^{***} | -0.309^{***} |
| | (-1.69) | (-1.53) | (- 1.27) | (-1.57) | (-0.63) | (-0.57) | (-0.33) | (-0.56) | (-3.35) | (-3.1) | (-3.15) | (-3.26) |
| $Equity_{r-1}$ | -0.192^{***} | -0.193^{***} | -0.191^{***} | -0.194^{***} | -0.219^{***} | -0.221^{***} | -0.220^{***} | -0.223^{***} | -0.059 | -0.075 | -0.044 | -0.060 |
| | (-6.95) | (- 6.88) | (- 6.8) | (- 6.9) | (- 6.53) | (- 6.53) | (- 6.47) | (- 6.6) | (-0.22) | (-0.28) | (-0.17) | (-0.23) |
| $Lobbying_{t-1}$ | -0.011 | -0.018 | - 0.056 | -0.010 | -0.165 | -0.174 | -0.226 | -0.156 | -0.122^{***} | -0.117^{***} | -0.118^{***} | -0.118^{***} |
| | (-0.04) | (-0.06) | (-0.2) | (-0.04) | (-0.38) | (-0.42) | (-0.58) | (-0.37) | (-3.13) | (- 2.88) | (- 2.9) | (- 2.89) |
| InGDP | -0.454 | -0.654 | -0.704 | -0.578 | -0.046 | -0.285 | -0.329 | -0.149 | -1.467 | -1.767 | -1.676 | - 1.732 |
| | (-0.44) | (-0.64) | (-0.68) | (-0.56) | (-0.03) | (- 0.2) | (-0.23) | (-0.1) | (-0.91) | (-1.09) | (-1.04) | (-1.07) |
| Province | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Industry | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |

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| anel B: Government subsequent funding decision-the value of fund | |
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| | Governme | Government funds _{i,t} | | | | | | | | | | |
|------------------------|-----------|---------------------------------|------------|--------|---------|-----------------|---|----------|----------|--|-------------|----------|
| | Matched a | Matched subsequent fund sample | and sample | | Low adm | uinistrative ra | Low administrative ratio ($\leq 15\%$) subample | subample | High adn | High administrative ratio (> 15%) subample | tio (> 15%) | subample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (2) | (8) | (6) | (10) | (11) | (12) |
| Year | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed |
| Number of observations | 10,222 | 10,222 | 10,222 | 10,222 | 6424 | 6424 | 6424 | 6424 | 3798 | 3798 | 3798 | 3798 |
| Adjusted R^2 | 0.576 | 0.574 | 0.576 | 0.574 | 0.604 | 0.604 | 0.605 | 0.603 | 0.527 | 0.522 | 0.522 | 0.521 |
| | | | | | | | | | | | | |

*, **, ***Represent significance levels of 10 percent, 5 percent and 1 percent, respectively (two-tailed)

t-values/F-values are in parentheses under their respective coefficient estimates.

All variables are defined in Table 1

All models are estimated using Model (2). When the dependent variable is Government Funds Dummy_{i.t.} the model is the logistic model with standard errors clustered by firm that estimates the probability of an organization receiving government funding. When the dependent variable is measured by Government Fundsi,t, the model is the regression model with an adjustment for repeated organizations that tests whether accounting information and its quality influence the value of funds governments reward to an organization. This regression model is limited to organizations that governments screened to receive funds

Independent Director Ratio in Columns (9)-(12) of Panel B indicate that governments tend to award a larger amount of subsequent funding(s) to NPOs that have higher independent director ratios and report high administrative expenses. This is because having more independent directors is more common for NPOs with higher administrative spending, and governments need to continue funding these NPOs as best as they can due to stickiness to NPOs' programs. The negative coefficients on Age in Panel B indicate that governments award a larger amount of In addition to the results discussed in "Hypothesis Testing" section, Table 5 documents interesting findings regarding Independent Director Ratio and Age. The positive coefficients on subsequent funding(s) to younger NPOs. This is probably because younger NPOs need more funding to develop their programs, and governments stick to young NPOs by providing more funding once they become government-funded NPOs model(Columns (5)–(8) of Panel A).⁸ However, in the High Administrative Ratio subsample whose administrative ratios exceed the government-suggested threshold, governments no longer fund NPOs with relatively higher administrative ratios. Therefore, consistent with the prediction of H1a, governments prefer *reasonably high* administrative ratios at first-time funding when deciding whether to extend funding to an NPO for the first time.

Table 5 documents the results for H1b, that is, how governments use administrative ratios in subsequent funding decisions. After awarding funds to NPOs for the first time, governments do not use administrative ratios when they decide whether to extend subsequent funding(s) or to determine the amount of the subsequent funding(s). This is evidenced by the non-significant coefficients on InAdministrative Ratio in Panel A and Panel B of Table 5. The non-use of administrative ratios in subsequent funding decisions may be attributed to governments' stickiness to public services provided by the NPOs chosen for funding (Cho & Gillespie, 2006; Lecy & Van Slyke, 2012). Hence, counter to H1b's prediction, governments tend not to penalize NPOs by decreasing the likelihood and/or the amount of the subsequent funding(s) if NPOs have relatively high administrative ratios. We further find (not tabulated) that those NPOs that received the subsequent funding(s) have a mean administrative ratio of 15.67 percent, which is not significantly higher than the government-suggested threshold of 15 percent. Therefore, not exceeding the government-suggested threshold seems to be a precondition for NPOs to be considered for subsequent funding(s).

H2a and H2b: The Effect of Accounting Information Quality on Government Funding Decisions

H2a predicts that governments react negatively to lowquality administrative ratios, and H2b further predicts that the negative reaction is more pronounced at first-time funding than at subsequent funding(s). Consistent with our predictions, we find significantly negative coefficients on one of the *Low Quality* measures, *Zero Fundraising*, at both the first-time and subsequent funding(s). More specifically, in Table 4, we find that when NPOs report unreasonable zero fundraising expenses (i.e., *Zero Fundraising*), the odds of governments awarding the first fund decrease by 41.70 percent and the amount of the first fund decreases by 63.19 percent (see Column (1) in both panels of Table 4).⁹ In Table 5, we find that governments reduce their negative reaction to Zero Fundraising in subsequent funding(s). The odds of governments awarding subsequent fund(s) are not significantly associated with Zero Fundraising (see the insignificant coefficient of Zero Fundraising in Column (1) of Panel A, Table 5). The decrease in the amount of government funds due to lowquality accounting information is alleviated to 44.75 percent from the 63.19 percent decrease in first-time funding (see Column (1) in Panel B of Table 5). The coefficients on three quality measures, Underreported the other Fundraising, Underreported Administrative and Trussel, are either not statistically significant or not meaningful in magnitude. These three measures are more computationally complex; thus, governments either are not fully able or are not willing to consider them in their decisions (Yetman & Yetman, 2013). Hence, H2a and H2b are supported.

We also conduct robustness tests for our hypotheses using all young NPOs instead of the propensity score matched samples, as most NPOs in Canada apply for government funding. All robustness test results are primarily consistent with our findings in the above main analyses. Please see the robustness tests in the Appendix.

Conclusions

NPOs' role in the delivery of public services is well documented and recognized (Bryce, 2006; Suarez, 2011), and many of their services rely on government funding through contracts and direct grants (Suarez, 2011; Witesman & Fernandez, 2013). In other words, the effectiveness of government funding processes determines whether governments are capable of meeting and serving the needs of the people when essential services are provided by NPOs. Governments rely on a variety of information to make their funding decisions. A commonly used source is publicly available financial information, particularly administrative ratios. Governments arguably prefer low administrative ratios, as low administrative ratios indicate a higher level of accountability and suggest that NPOs spend a greater amount of resources delivering programs and services. However, reasonably high administrative ratios can also demonstrate sustainability, meaning that NPOs invest more resources in improving their administrative infrastructure

⁸ We estimate the change in the odds of governments awarding funds by calculating 100 ($e^{\beta_1} - 1$), where β_1 is the coefficient on *InAdminstrative Ratio* in Model (2) when the dependent variable is *Government Fund Dummy*. We estimate the change in the value of government funding by calculating 100 (1.01^{β_1} -1), where β_1 is the coefficient on *InAdminstrative Ratio* in Model (2), when the dependent variable is *Government Fund*.

⁹ We estimate the change in the odds of governments awarding funds by calculating 100 ($e^{\beta 4} - 1$), where β_4 is the coefficient on *Low Quality* in Model (2) when the dependent variable is *Government Fund Dummy*. We estimate the change in the value of governments' grants by calculating 100 β_4 , where β_4 is the coefficient on *Low Quality* in Model (2) when the dependent variable is *Government Fund*.

and then deliver more reliable services and programs in the long run. The different interpretations of administrative ratios may contribute to inconclusive evidence in the prior literature regarding how governments consider administrative ratios in their funding decisions (Ashley & Van Slyke, 2012; Zhao & Lu, 2019). Given that governmentnonprofit collaborations often experience a "multistage" dynamic process, the first purpose of our paper is to examine how governments interpret administrative ratios differently and balance their preference for the appropriate level of administrative ratios the first and subsequent time(s) they award funding to NPOs. As prior studies find that NPOs misreport their expenses to manipulate their financial ratios, our second purpose is to investigate whether governments are able to discover and react to lowquality accounting information when making their funding decisions.

Using data in the setting of Canada, we find that at first time funding, governments prioritize the sustainability of NPOs and are less concerned about agency costs arising from administrative ratios (Hung, 2021; Lecy & Searing, 2015). Thus, they are more likely to award funds to NPOs that report reasonably high administrative ratios. Such organizations have built administrative infrastructure using contributions from other funders and are believed to be more reliable in delivering programs and services in the long term (Weisbrod & Dominguez, 1986; Zhao & Lu, 2019). We also find that at subsequent funding(s), governments tend to ignore administrative ratios and stick to previously screened NPOs to grant funds. In addition, we find that governments, as expected, react to low-quality accounting information by decreasing the likelihood and the amount of funding granted. This negative reaction is more pronounced at initial funding than at subsequent funding(s) because governments develop dependence on NPOs over the course of their collaboration in delivering public services and have less leverage to effectively react to low quality accounting information in subsequent funding(s) (Cho & Gillespie, 2006; Feiock & Jang, 2009; Lecy & Van Slyke, 2012).

Our results have important implications. Our findings suggest that NPOs need to understand that donors and governments utilize accounting information differently to make their funding decisions (Parsons et al., 2017). Understanding this process may affect NPOs' access to critical financial resources, which can determine how well they achieve their mission and vision. NPOs relying mainly on public donations need to minimize their administrative ratios, as donors want to see their donations well spent on programs and services. NPOs aiming to receive government grants for the first time, however, need to incur necessary expenses that improve their administrative infrastructure and activities, as governments treat reasonably higher administrative spending as an indicator of the increased sustainability of NPOs in delivering services. NPOs that consider any investment in administrative infrastructure and activities as a "waste" of resources may run the risk of never being considered for government funding.

In addition, our results show that governments are capable of identifying poor-quality accounting information and react to it accordingly by being less likely to fund or funding less. This finding adds to the prior literature and demonstrates that both governments and donors shun NPOs that manipulate their accounting ratios (Yetman & Yetman, 2013). Therefore, it is not necessary for NPOs to misreport their expense numbers to impress donors and governments.

This study has the following limitations. First, we examine the aggregate amount of funding received by a nonprofit in a given year from all governments. In practice, all levels of governments (federal, provincial, and municipal) in Canada generally coordinate to extend funding to a specific program, and thus, the aggregate amount of funding would be an appropriate measure for this research (Brown & Troutt, 2004; Halseth & Ryser, 2007; Krushinsky, 1990). Nonetheless, it would be best to use government funding for each specific program from a specific level of government. However, we lacked such detailed data. Second, any empirical study's results are dependent upon its methods and the size and representativeness of its sample. Our regression analysis samples are from Canada. Replication with a larger and broader sample from other countries would be useful (Tables 6 and 7).

Appendix

Robustness Analysis

Most NPOs in Canada apply for government funding. Hence, we include all young NPOs in our sample and use a larger group of observations to conduct robustness tests. More specifically, we include all 42,391 firm-year observations in the first-fund group as the First-fund Sample and all 14,384 firm-years in the subsequent-fund group as the Subsequent-fund Sample (please refer to in "Data" section to see how the two samples are generated). We use a hazard model to estimate the probability of governments extending funds to an NPO conditional on the fact that the NPO has applied for but has not yet received any funds. The hazard model is a dynamic model and suffers less from self-selection bias (Cader and Letherman 2011). To perform robustness tests examining how accounting information and its quality affect the amount of funds, we use a

| Government funds du | Governmer | Government funds dummy _{i,t} | my _{i,t} | | | | | | | | | |
|---|---------------------------------|---------------------------------------|-------------------|-----------------------|-------------------|--------------------|---|-------------------|-----------------|-------------------|--|-----------------|
| | First fund sample | sample | | | Low admin | nistrative rat | Low administrative ratio ($\leq 15\%$) subample | subample | High adm | inistrative ra | High administrative ratio (> 15%) subample | subample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (1) | (8) | (6) | (10) | (11) | (12) |
| InAdministrative ratio ₁₋₁ | 0.012*** | 0.018*** | 0.014** | 0.015** | 0.012*** | 0.017*** (9 94) | 0.016*** | 0.014** | 0.015 | 0.018 | -0.039 | - 0.015 |
| High,1 | 0.082 | 0.062 | 0.072 | 0.070 | | | | | | | | |
| $\ln Administrative ratio_{t-1} *High_{t-1}$ | (1.24) 0.007 (0.02) | (0.11) - 0.002 (0) | (0.003 (0) | (0.0) 0.001 (0) | | | | | | | | |
| Low quality ₁₋₁ Zero fundraising ₁₋₁ | - 0.211** | | | | - 0.142 | | | | - 0.266 | | | |
| | (4.91) | | | | (1.29) | | | | (0.81) | | | |
| Underreported administrative ₁₋₁ | | 0.000 (0.7) | | | | 0.000 (0.34) | | | | - 0.001 (2.66) | | |
| Underreported fundraising _{<i>i</i>-1} | | | 0.000** (6.41) | | | (0) | 0.000*** (6.98) | | | | 0.000 (1.54) | |
| Trussel _{t-1} | | | | -0.002 (1.75) | | | | 0.001 (0.09) | | | | -0.001 (0.13) |
| In Administrative ratio $_{t-1}$ *Low quality $_{t-1}$ | 0.025* (3.07) | 0.000 (0.86) | 0.000 (0.51) | 0.000 (0.33) | 0.031* (3.46) | 0.000 (0.41) | 0.000 | 0.000 (0.98) | 0.027 (0.01) | 0.000 (2.31) | 0.000** (4.42) | 0.004 (1.65) |
| Controls | ~ | ~ | ~ | ~ | ~ | ~ | ~ | | ~ | ~ | ~ | ~ |
| Number of observations Likelihood ratio | 39,704 5771.13 | 39,704 5743.29 | 39,704 5761.46 | 39,704 5747.97 | 29,911 3696.33 | 29,911 3674.90 | 29,911 3693.35 | 29,911 3676.04 | 9793 1894.74 | 9793 1893.91 | 9793 1895.04 | 9793 1899.19 |
| Pseudo R^2 | 0.135 | 0.135 | 0.135 | 0.135 | 0.116 | 0.116 | 0.116 | 0.116 | 0.176 | 0.176 | 0.176 | 0.176 |
| Panel B: Government first time funding decision-the value of fund | ecision–the va | lue of fund | | | | | | | | | | |
| | Government funds _{i,t} | t funds $_{i,t}$ | | | | | | | | | | |
| | First fund sample | ample | | | Low adm | nistrative ra | Low administrative ratio ($\leq 15\%$) subample | subample | High adn | ninistrative r | High administrative ratio (>15%) subample | subample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (2) | (8) | (6) | (10) | (11) | (12) |
| InAdministrative ratio ₁₋₁ | 0.008 | 0.009 | 0.012 | 0.003 | 0.006 | 0.006 | 0.009 | -0.003 | 0.015 | 0.002 | 0.059 | 0.021 |
| $\operatorname{High}_{r-1}$ | 0.033 | 0.020 | 0.031 | (cc.u) 0.044 | (0.0) | (+0.0) | (00.0) | ((77.0 -) | (01.0) | (cn.n) | (0.0) | (C7.0) |
| | (0.28) | (0.17) | (0.26) | (0.38) | | | | | | | | |

| First fur | | | | | | | | | | | |
|--|-------------------|-------------------|-----------------|----------------|---|------------|---------|----------|---|-------------|---------|
| | First fund sample | | | Low admini | Low administrative ratio ($\leq 15\%$) subample | (≤ 15%) si | ubample | High adm | High administrative ratio (>15%) subample | io (>15%) s | ubample |
| (1) | (2) | (3) | (4) | (5) | (9) | (1) | (8) | (6) | (10) | (11) | (12) |
| In Administrative ratio _{$i-1$} *High _{$i-1$} 0.012 (0.15) | 0.003 (0.04) | 0.004 (0.05) | 0.012 (0.15) | | | | | | | | |
| Low quality _{t-1} | | | | | | | | | | | |
| Zero fundraisin g_{t-1} – 0.999*** | *** | | | -0.954^{***} | | | | - 1.135* | | | |
| (-5.55) | | | | (- 3.85) | | | | (-1.89) | | | |
| Underreported administrative $_{r-1}$ | 0.000*** | | | | 0.000^{***} | | | | -0.001^{**} | | |
| | (-3.54) | | | | (-3.83) | | | | (- 2.47) | | |
| Underreported fundraising t_{i-1} | | 0.000 | | | | 0.000 | | | | 0.000 | |
| | | (0.5) | | | | (0.42) | | | | (-0.46) | |
| Trussel _{i-1} | | | -0.001 | | | | 0.005 | | | | -0.008 |
| | | | (-0.49) | | | | (1.12) | | | | (-1.13) |
| In Administrative ratio $_{t-1}$ *Low quality $_{t-1} - 0.034$ | 0.000^{***} | 0.000 | 0.000 | -0.023 | 0.000^{***} | 0.000 | 0.001 | -0.159 | -0.001 | 0.000 | 0.000 |
| (-1.24) | | (-3.41) (-1.21) | (0.4) | (- 0.72) | (-3.53) | (-0.66) | (1.26) | (-0.35) | (-2.66) | (-0.93) | (-0.03) |
| Controls | | | | | | | | | | | |
| Number of observations 4512 | 4512 | 4512 | 4512 | 2950 | 2950 | 2950 | 2950 | 1562 | 1562 | 1562 | 1562 |
| Adjusted R^2 0.556 | 0.552 | 0.551 | 0.551 | 0.569 | 0.566 | 0.564 | 0.564 | 0.526 | 0.523 | 0.521 | 0.522 |

When the dependent variable is *Government Funds Dummy*_{i,v}, the model is the hazard model controlling both the occurrence and the timing of the events that organizations receive funds. The hazard model is adjusted with the standard errors for dependence among the repeated funds received by an organization (Allison, 2014; Lin & Wei, 1989; Therneau & Grambsch, 2000). When the dependent variable is measured by *Government Funds*_{i,t}, the model is the regression model with an adjustment for repeated organizations that tests whether accounting information and its quality influence the value of funds governments reward to NPOs. This regression model is limited to organizations that governments screened to receive fund

Table 6 continued

Voluntas

| | accision-jun | Panel A: Government subsequent funding decision-fund or not fund | <i>a</i> | | | | | | | | | |
|---|----------------------------|--|----------------------------|----------------------------|--------------------------|---|--------------------------|--------------------------|--------------------------|--|--------------------------|--------------------------|
| | Subsequent fund | Government tunds dummy _{i,t} Subsequent fund sample | nmy _{i,t} le | | Low admi | Low administrative ratio (≤ 15%) subample | io (≤ 15%) s | subample | High admi | High administrative ratio (> 15%) subample | (> 15%) si | lbample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (2) | (8) | (6) | (10) | (11) | (12) |
| InAdministrative Ratio ₁₋₁ High ₁₋₁ | 0.001 (0.18) 0.000 | $\begin{array}{c} 0.003 \\ (1.01) \\ - 0.003 \end{array}$ | 0.000 (0.02) 0.001 | 0.002 (0.83) 0.000 | - 0.001 (0.07) | 0.001 (0.14) | - 0.002 (0.39) | 0.001 (0.22) | - 0.035* (3.13) | - 0.033* (2.97) | - 0.024 (1.28) | - 0.036* (3.01) |
| In Administrative ratio _{$t-1$} *High _{$t-1$} | (0) $-$ 0.024 (1.45) | (0.01) $-$ 0.024 (1.51) | (0) - 0.023 (1.41) | (0) - 0.023 (1.43) | | | | | | | | |
| Low quality ₍₋₁ Zero fundraising ₍₋₁ | 0.106 (2.39) | | | | 0.145 (2.39) | | | | 0.087 (0.69) | | | |
| Underreported administrative ₁₋₁ | х г | 0.000*** (8) | | | , , | 0.000*** (7.13) | | | | 0.000 (0.07) | | |
| Underreported fundraising $_{t-1}$ | | ~ | 0.000** (5.55) | | | ~ | 0.000*** (7.86) | | | ~ | 0.000 (0.22) | |
| Trussel _{r-1} | | | | - 0.001 | | | | - 0.001 | | | Ì | 0.000 |
| InAdministrative ratio $_{t-1}$ *Low quality $_{t-1}$ | 0.012 | 0.000*** (8.45) | 0.000** (3.91) | | 0.017* (3.8) | 0.000*** (7.26) | 0.000^{***} | 0.000 0.000 (0.24) | 0.032 | 0.001 | 0.000 (0.88) | 0.000 0.12) |
| Controls | | | | | | | | | | | | |
| Number of observations Likelihood ratio Pseudo R ² | 14,017 3606.91 0.227 | 14,017 3611.60 0.227 | 14,017 3605.91 0.227 | 14,017 3604.69 0.227 | 9140 2353.02 0.227 | 9140 2356.89 0.227 | 9140 2352.13 0.227 | 9140 2350.67 0.227 | 4877 1256.81 0.227 | 4877 1257.04 0.227 | 4877 1257.04 0.227 | 4877 1256.53 0.227 |
| Panel B: Government subsequent funding decision-the value of fund | decision-the | value of fun | p | | | | | | | | | |
| | Governme | Government funds _{i,t} | | | | | | | | | | |
| | Subsequent fund | it fund sample | le | | Low adr | Low administrative ratio ($\leq 15\%$) subample | atio (≤ 15% |) subample | High admi | High administrative ratio (>15%) subample |) (>15%) si | ıbample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (7) | (8) | (6) | (10) | (11) | (12) |
| In Administrative ratio $_{r-1}$ | 0.012 (1.41) | 0.013 (1.5) | 0.016 (1.8) | 0.015 (1.6) | 0.005 (0.62) | 0.008 (0.95) | 0.008 (0.83) | 0.014 (1.44) | -0.045 (-0.68) | -0.058 (-0.85) | -0.008 (-0.11) | - 0.082 (- 1.16) |
| High _{r-1} | -0.019 (-0.18) | -0.034 (-0.32) | (-0.041) | -0.025 (-0.23) | | | | | | | | |

Voluntas

| Table 7 continued | | | | | | | | | | | | |
|---|---|--|---------------|----------------------------|-------------------------------|---|------------------------|--------------------------------|---|-----------------------|---------------|------------|
| Panel B: Government subsequent funding decision-the value of fund | decision-the v | alue of fund | | | | | | | | | | |
| | Government funds _{<i>i</i>,<i>t</i>} | $funds_{i,t}$ | | | | | | | | | | |
| | Subsequent fund sample | fund sample | | | Low admi | Low administrative ratio ($\leq 15\%$) subample | io (≤ 15% |) subample | High administrative ratio (>15%) subample | strative ratio | o (>15%) su | bample |
| | (1) | (2) | (3) | (4) | (5) | (9) | (2) | (8) | (6) | (10) | (11) | (12) |
| In Administrative ratio _{$r-1$} *High _{$r-1$} | - 0.042 | -0.050 | | -0.047 | | | | | | | | |
| ····· 11: 1 | (c0.0 -) | (- 0./4) | (00.0 -) | (60.0 -) | | | | | | | | |
| Low quairty _{t-1} Zero fundraising _{t-1} | - 0.594** | | | | -0.303 | | | | -1.064^{***} | | | |
| | (-3.14) | | | | (-1.19) | | | | (-2.77) | | | |
| Underreported administrative _{t-1} | | 0.000 * * | | | | 0.000^{**} | | | | -0.009 | | |
| | | (- 2.22) | | | | (- 2.17) | | | | (- 2) | | |
| Underreported fundraising $_{t-1}$ | | | 0.000* | | | | 0.000* | | | | 0.000 | |
| | | | (1.69) | | | | (1.76) | | | | (-0.53) | |
| $Trussel_{t-1}$ | | | | -0.002 | | | | -0.002 | | | | 0.002 |
| | | | | (-1.37) | | | | (-1.14) | | | | (0.48) |
| InAdministrative ratio $_{t-1}$ *Low quality $_{t-1}$ | -0.014 | 0.000** | 0.000 | 0.000 | 0.030 | 0.000^{**} | 0.000 | -0.001* | -0.172 | -0.005 | 0.000 | 0.003 |
| | (-0.33) | (- 2.1) | (-0.74) | (-1.87) | (0.66) | (-1.97) | (0.26) | (- 2.04) | (-0.55) | (- 1.45) | (-1.05) | (0.88) |
| Controls | | | | | | | | | | | | |
| Number of observations | 10,222 | 10,222 | 10,222 | 10,222 | 6424 | 6424 | 6424 | 6424 | 3798 | 3798 | 3798 | 3798 |
| Adjusted R^2 | 0.576 | 0.574 | 0.576 | 0.574 | 0.604 | 0.604 | 0.605 | 0.603 | 0.527 | 0.522 | 0.522 | 0.521 |
| *, **, ***Represent significance levels of 10 percent, 5 percent and 1 percent, respectively (two-tailed) | 10 percent, 5 | percent and | 1 percent, re | espectively | (two-tailed) | | | | | | | |
| t-values/F-values are in parentheses under their respective coefficient estimates | their respectiv | e coefficient | estimates | | | | | | | | | |
| All variables are defined in Table 1 | | | | | | | | | | | | |
| When the dependent variable is <i>Government Funds Dummy</i> _{in} , the model is the hazard model controlling both the occurrence and the timing of the events that organizations receive funds. The hazard model is adjusted with the standard errors for dependence among the repeated funds received by an organization (Allison 2014, Lin & Wei 1989, Themeau & Grambsch 2000). When | <i>nt Funds Dumn</i> errors for dene | <i>ty_{i,b}</i> , the mo | del is the ha | zard model ted funds re | controlling | both the occu | urrence and | 1 the timing o | f the events th Wei 1989 Th | tt organizatio | ons receive 1 | unds. The |
| the dependent variable is measured by <i>Government Funds</i> _{i,v} , the model is the regression model with an adjustment for repeated organizations that tests whether accounting information and its quality influence the value of funds governments reward to NPOs. This regression model is limited to organizations that governments screened to receive funds | vernment Fund. nments reward | <i>s_{i,t}</i> , the mode to NPOs. T | l is the regr | ession mode on model is | el with an ac limited to c | ljustment for rganizations | repeated of that gover | organizations inments scree | that tests whet ned to receive | her accounti funds | ng informat | on and its |
| | | |) | | |) |) | | | | | |

regression model with an adjustment for repeated organizations. For both models in the robustness tests, we use the same set of dependent and independent variables as those detailed in Model (2) of the main analyses. The results of the robustness tests are primarily consistent with the results in our main analyses. The results show that for first-time funding, governments prefer the sustainability of NPOs and tend to fund NPOs that commit a reasonable level of administrative spending to improve their administrative infrastructure and activities. This is evidenced by the significantly positive coefficients on InAministrative Ratio in Columns (5)-(8) but the non-significant coefficients on InAministrative Ratio in Columns (9)-(10) in Panel A of Table 6. For the subsequent funding(s), governments stick to organizations with reasonably high administrative ratios when making their selections (see the non-significant coefficients on InAministrative Ratio in Columns (1)-(8) of Panel A in Table 7). Unlike the main analyses, however, we find marginal support for H1b, which is evidenced by the marginally negative coefficients on the *lnAministrative* Ratio for NPOs whose administrative ratios exceed the government-suggested threshold (see Columns (9), (10), and (12) of Panel A in Table 7). Alternatively speaking, governments stress NPOs' accountability by reducing the likelihood of extending subsequent funding if the NPOs' administrative ratios exceed the government-suggested threshold. Furthermore, governments are less likely to provide funding and provide less funding to NPOs with low-quality accounting information. This finding is supported by the significantly negative coefficients of Zero Fundraising in Columns (1) in both Panels A and B of Table 6 and Panel B of Table 7. The higher magnitudes of the coefficients on Zero Fundraising for the First-fund Sample relative to the Subsequent-fund Sample show that the negative reaction to the low quality of accounting information is more pronounced at the first-time funding than at the subsequent funding(s).

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