

Incentivizing Regulatory Participation: Effectiveness of a Fundraising Levy

Professor Alasdair C. Rutherford, Faculty of Social Sciences, University of Stirling, Stirling
FK9 4LA Email: alasdair.rutherford@stir.ac.uk

Dr Diarmuid McDonnell, Research Fellow. Third Sector Research Centre, School of Social
Policy, University of Birmingham. Email: d.mcdonnell.1@bham.ac.uk

Dr Eddy Hogg, Lecturer in Social Policy, School of Social Policy, Sociology and Social
Research, University of Kent. e.hogg@kent.ac.uk

Alasdair Rutherford is Professor of Social Statistics in the faculty of Social Sciences at the University of Stirling. His work uses large administrative data sets and secondary social survey data to address research questions in charity risk, regulation and finance in charities across countries and jurisdictions. An economist by training, Alasdair is also interested in developing the capacity of both regulators and charities to make use of the administrative data they generate.

Diarmuid McDonnell is a Research Fellow at the Third Sector Research Centre, University of Birmingham. His research explores the interrelated topics of charity risk, regulation, and accountability using linked administrative data derived from charity regulators internationally. He has methodological interests in the use of administrative data for social science research, data science, and policy evaluation methods.

Eddy Hogg is a Lecturer in Social Policy at the University of Kent. His research looks at volunteering, charitable giving and public attitudes to the voluntary sector. Recently he has worked on: volunteering in public services; youth volunteering; charitable giving and

volunteering in schools; the value of charity involvement in supporting young people;
fundraising regulation and; public attitudes towards charity regulation in England and Wales.

Abstract

In the absence of a statutory instrument to enforce payment of a regulatory fee, regulators are reliant on a combination of ‘carrots’ and ‘sticks’ to encourage financial contribution by the bodies they oversee. In contrast to extant studies of public funding of nonprofits, we empirically evaluate the effectiveness of a government policy to rely on nonprofit funding of statutory regulation. We exploit a sharp discontinuity in the eligibility threshold for charities contributing to a new Fundraising Regulator in England & Wales in order to estimate a causal effect of the levy on participation. We show that the regulator’s threat to ‘name and shame’ was very effective in incentivizing regulatory participation and generating income, but raise some concerns about the long-term viability of this approach. The results are significant at a time when many jurisdictions are considering how best to fund the regulation of nonprofits.

Keywords: Regulation, Trust, Fundraising, Charity, Regression Discontinuity

Evidence for Practice

- We examine the effectiveness of a ‘name and shame’ strategy pursued by a charity regulator to encourage organizations to contribute to the cost of their regulation.
- Fundraising charities place high value on their reputations, and the threat of being ‘named and shamed’ by the Fundraising Regulator for not paying the fundraising levy was one that charities took seriously.
- The way that the Fundraising Regulator implemented the levy, by sending invoices to eligible charities playing down the ‘voluntary’ nature of the levy, was necessary to get charities to join. This was especially the case for medium-sized organizations.
- Cost was not a significant barrier to membership of the Fundraising Regulator for most charities, and so charities do not seem to be very sensitive to the price for joining. However, this also means that altering the levy fee bands may not result in significantly higher or lower numbers of paying organizations.
- The estimated income for the Fundraising Regulator attributable to the ‘name and shame’ approach was significant (approximately £900,000 per annum), and without this it is likely that the level of resources available for fundraising regulation, particular for a new and unproven fundraising regulator, would be significantly lower.

Introduction

An important role for regulators across the world is to increase the trust of consumers and/or the public in the sector which is being regulated (Keating & Thrandardottir 2017). In many sectors, the violation of regulations by the few can have a negative externality, affecting trust even in other organizations that conform to the regulation (Kilpatrick & Lapsley 1996). But regulators can also take actions which may undermine broader trust in their sector, particularly when they highlight bad practice. This is a tension in accountability: good transparency can incentivize compliance with regulatory requirements, but it also risks undermining trust in a sector if it shows violations to be widespread.

A thorny issue in the establishment of many regulators is the question of how they are to be funded. Regulators who are dependent on registration fees from the organizations they regulate may use a combination of ‘carrots’ and ‘sticks’ if they are to gain sufficient participation; both to achieve legitimacy as well as to be financially viable.

The carrots are often fairly clear: a potential gain in reputation from demonstrating conformity to the regulatory requirements, perhaps by being listed in a register with an accompanying a mark of approval (May 2005). In terms of sticks, traditionally regulators would adopt a “command and control” approach to compel participation: for example, in the field of environmental governance regulators would command firms to reduce emissions and control how they did it e.g. by specifying technologies (Prakash and Potoski 2011). In the absence of statutory powers, regulators often rely on information-based approaches such as implementing voluntary disclosure regimes and threatening further statutory regulation if there is non-compliance (Busuioc and Lodge 2017; Prakash and Gugerty 2010). Another option is for the regulator to actively ‘name and shame’ organizations who do not or only partially participate in regulation. This imposes a potential reputational cost on the non-

complying organization when their actions are publicly highlighted. It also creates a risk of damaging the wider reputation of the sector being regulated and delegitimizing the mandate of the regulator, particularly if significant numbers of organizations do not comply.

The United Kingdom charity sector has come under increasing scrutiny in recent times, as evidenced by the commission of parliamentary inquiries into regulation (2013), fundraising (2015), and the general health of sector (2017). The nature and legitimacy of fundraising regulation has been particularly high on the agenda given the 2016 transition from self-regulation to statutory regulation in England & Wales. Not only are registered charities subject to oversight by the new regulatory body, the Fundraising Regulator, those who meet certain criteria are also expected to pay a voluntary levy to help fund the Regulator's activities. The voluntary nature of this levy is questionable, as the Regulator has threatened to publically name organizations that it deems should pay the requisite fee but who do not.

In this article we empirically examine the impact of the levy on the charity sector in England & Wales, in particular the implications of the Regulator's 'name and shame' approach to incentivizing participation in the levy scheme. Contributing to both the fundraising regulation and broader public regulation literatures, we address three research questions:

1. Was the reputational risk of 'naming and shaming' an effective incentive for charities to pay the levy for fundraising regulation?
2. How big an impact did this incentive have on levy payments by different sized charities and on the ability of the regulator to raise funds?
3. What can regulators learn about the effectiveness of 'naming and shaming' as a means of regulatory compliance?

We show that ‘naming and shaming’ was effective in encouraging compliance with the levy, that price was not a binding constraint, and that the policy was critical to the financial sustainability of the regulator. However, we reflect on the longer term impact on the relationship between the regulator and the organizations being regulated that this policy may have.

The article proceeds as follows. First, we synthesize the nonprofit and fundraising regulation literatures to produce a conceptual understanding of how charities respond to and are affected by regulatory initiatives and incentives. This is followed by an outline of fundraising regulation in England & Wales, and the new regulator’s attempts to levy a fee on charities to fund its operations. We describe the data and methods, before presenting our empirical results. The article concludes with a discussion of the scholarly, policy and practitioner implications of the study.

Theory

Regulation is a multi-dimensional concept, and has been understood as a specific set of commands, as deliberative state influence, and as all forms of social or economic interest (Baldwin, Cave and Lodge 2011). Despite its obvious negative connotations as an activity that can restrict and control behavior, regulation can also play a facilitative or enabling role in a sector (Baldwin et al. 2011). Trust is a salient component in the formation, behavior and impact of regulatory regimes. Johnson, Jenkinson, Kendall and Bradshaw (1998, 310) argue that “All regulatory systems are to some extent dependent on trust. Evaluation, monitoring and inspection are time-consuming and costly and complete policing is undesirable.” Trust is also a crucial component in the funding of regulators: stakeholders making a financial contribution to the regulator’s budget must trust their contributions will be used effectively, efficiently and in way that benefits them and the wider sector, whilst those overseeing the

regulator's activities need to have faith that said contributions do not lead to regulatory capture.

There is a consensus emerging that the success of the charity sector depends not only on its economic and social activities but also on its ability to demonstrate accountability and transparency, which in turn can develop, protect and enhance public trust (Breen 2009; Connolly and Hyndman 2013; Cordery and Morgan 2013; Cordery et al. 2017; Keating and Frumkin, 2003; Morgan 2012). Bovens (2007, 452) defines accountability as “a relationship between an actor and a forum in which the actor is obliged to explain and justify his conduct; the forum can pose questions; pass judgment; and the actor may face consequences.” At its core, accountability is about trust, and consists of four components: transparency, making information accessible and assessable for scrutiny; compliance, adhering to standards and requirements; justification, explaining the reasoning behind actions (including those not adopted); and enforcement or sanctions, administered by those with monitoring powers (Ebrahim 2010).

In order to trust charities – either individually or the sector as a whole – the public must perceive these organizations to be performing effectively. Perception here is key, with a number of studies reporting that the public perceiving charities to be well organized, efficient and effective was fundamental to building trust (Furieux and Wymer 2015; Kennedy et al. 2001; McFall 1987; Michel and Rieunier 2012; Sargeant and Lee 2004; Sargeant et al. 2001, 2004). Where possible, people may base their perceptions on personal experience of the charity (Furieux and Wymer 2015). Where personal experiences are limited, potential donors may instead use proxies as the basis of their trust and therefore their decision making (Sargeant et al. 2008). One commonly used proxy is the status of an organization, with membership of a regulated group communicating trustworthiness (Sargeant et al. 2008).

There is some evidence from previous studies that increased public trust in charities – partly as a result of their regulated status – leads to increased levels of donations, although such findings are generally based on stated rather than actual donor behavior (e.g. Bourassa and Stang 2016; Sargeant et al. 2004) or on public goods games (e.g. Jackson and Matthews 1995; Parsons 2003; 2007). Often this trust, however, is more related to perceptions of the sector as a whole than to any individual charities (Sargeant et al. 2004; Tonkiss and Passey 1999). Therefore, good governance, transparency and accountability are necessary in order to seek to ensure this trust, although as O'Neill (2009, 243) argues, “the relationship between trust and behavior is complex”. While we have identified above the potential positive impacts of the use of regulation to encourage and enhance accountability in terms of increased donor trust and (possibly) increased donations as a consequence, regulation of the charity sector is not without consequences, intended or otherwise (Irvin 2005). Corry (2010) argues forcefully that charities cannot be regulated without imposing some organizational and sectoral cost, mainly as a result of dampening the essential qualities of these organizations (e.g. voluntary participation, autonomy). Hyndman and McDonnell (2009; see also Cordery 2013) contend that charities may become more accountable to the regulator at the expense of their donors and beneficiaries, while burdensome reporting requirements can incentivize the reallocation of resources to satisfy regulatory demands (Szper and Prakash 2011). The use of coercive approaches to incentive compliance may also politicize and damage the relationship between the regulator and charities (Phillips, 2013). Finally, regulation can be an expensive way of increasing public trust, with Bekkers (2003) finding no clear link between increased regulation and increased trust in charities. Similarly, McDonnell (2017), in a longitudinal study of Scottish charities, found no link between the presence of regulator-defined accountability concerns (e.g. possible failure to apply funds for charitable purposes) and negative organizational outcomes such as dissolution or misconduct.

The agency of charities is also critical to consider when examining the use of regulation to encourage and develop public trust in the sector. Beyond the formal regulation imposed on charities by England & Wales' Charity Commission (see Hogg 2018; Phillips and Smith 2011), the sector possesses the following instruments for demonstrating trustworthiness: subscribing to voluntary codes, achieving certification, adhering to standards and benchmarks, voluntary disclosure of information requested by stakeholders, and engaging in training to improve practice (Phillips 2013). Charities have a strong incentive to go above-and-beyond what is required of them by statutory regulation and employ one or more of the aforementioned instruments. If, as Sargeant et al. (2004) argue, public trust is based on perceptions of the charity sector as a whole, then the sector can suffer from a contamination problem, where the actual or perceived misconduct of a minority of organizations can tarnish the reputations of legitimate, ethical charities (Burger and Owens 2010; Ortmann and Schlesinger 1997). The contamination problem is partly attributed to the information asymmetries regarding charity behavior that develop between the public and the organizations themselves (Tremblay-Boire, Prakash and Gugerty 2016). Thus, legitimate charities are incentivized to differentiate themselves from less credible organizations in order to preserve trust in their operations.

Subscribing to a code of practice and engaging in voluntary regulatory programs in general represent efforts by charities "to collectively signal their commitment to deploy resources as per their organizational mandate." (Prakash and Gugerty 2010, 3). Participation in such programs is based on the assumption that charities value their reputations and public trust in the sector as a whole (Phillips 2013). A number of studies have cited 'brand' as being important to charities (e.g. Michel and Rueunier 2012; Sargeant et al. 2008), and the threat of naming and shaming is a clear risk to positive brand reputation for charities. Thus, charities that pay the Fundraising Regulator's voluntary levy can be conceptualized as seeking to

signal to the public their commitment to efficient and effective practice i.e. engaging in ethical, compliant fundraising practices and using the funds generated as per their mission and charitable purposes (Bies 2010; Hogg 2018).

The Fundraising Regulator is the first attempt in the UK to impose statutory fundraising regulation on charities, but it follows in a long history of charity regulation in the UK and beyond (see Cordery 2013; Cordery, Sim, and Zijl 2017). The majority of these schemes (e.g. Australia, Canada and, England & Wales) do not charge charities to be regulated, although in other countries (e.g. New Zealand) there is a small cost (Cordery 2013; Hogg 2018). The Fundraising Regulator's model of voluntary funding of statutory regulation is, however, relatively novel. At a time when many countries are having conversations about how best to fund the regulation of charitable activities (Bies 2010; Cordery 2013; Cordery, Sim, and Zijl 2017; Hogg 2018), the lessons from the Fundraising Regulator therefore can inform conversations about how best to fund the regulation of charities in countries around the world.

Fundraising Regulation in England & Wales

U.K. charities are primarily subject to statutory regulation by the Charity Commission for England & Wales (CCEW). CCEW is the independent (i.e. non-ministerial department) registrar and regulator of charities operating in England & Wales; Scottish and Northern Irish charities are subject to their own respective independent regulators. This system is similar to those in Australia and the Republic of Ireland, and in contrast to North America, where nonprofits are regulated at the federal level by the relevant tax authority. Dunn (2017, 44) characterizes the state of charity regulation in England & Wales as an evolving series of interactions between state, self and co-regulatory approaches, and is currently moving “toward co-regulation against the bedrock of a well-established state regime”.

Attempts to regulate fundraising in England & Wales are far from new. The Accrediting Bureau for Fundraising Organizations was founded in 1996 in response to concerns about mass fundraising and what the media reported at the time as, “financial scandals and an alarming drop in public confidence” (Blackhurst 1996, 7, in Bies 2010, 1074). The ABFO struggled to gain support, with little buy-in from charities, and by the early 2000s it had become clear that the approach of encouraging charities to become accredited was not working (Bies 2010; Ortmann et al. 2005). A period of consultation took place to discuss what more could be done, which culminated in 2006 with the establishment of self-regulation through the Fundraising Standards Board (Bies 2010; Breen 2012; Hind 2017; Sargeant et al. 2012). The FRSB ruled on alleged breaches of fundraising practice against industry standards, with member organizations required to include its ‘blue tick’ logo on their fundraising materials (Bies 2010; Hind 2017). It was initially funded by a 5-year government grant, alongside a sliding scale of membership fees ranging from £30 per year for the smallest charities to £5,000 for the largest (Bies 2010). By 2012, the FRSB had 1,258 member charities, around 5% of the estimated 24,000 fundraising charities in the UK and representing around 40% of total fundraised income (Breen 2012; Home Office 2005).

Following a number of fundraising scandals, a review led by Sir Stuart Etherington, Chief Executive of the National Council for Voluntary Organizations was established in the summer of 2015. The Review recommended that a single regulator be established to combine setting standards for good fundraising practice. This regulator was expected to work closely with existing regulatory bodies, including the Charity Commission for England & Wales and the Information Commissioner’s Office. As a result, the Fundraising Regulator for England & Wales was established as an independent body in January 2016 (Hind 2017), with the FRSB handing over its powers to investigate and sanction charities to this new body. The new Fundraising Regulator has a budget five times greater than the FRSB had in its final years,

with a significant proportion of this funding generated through a ‘voluntary’ levy charged on large fundraising charities. The details of this levy were outlined in a discussion paper produced by the new regulator in the summer of 2016 to which comments and responses were invited. As a result, the levy was established with eligible charities expected to contribute by paying the ‘voluntary’ levy from September 2016. Asking charities to contribute financially towards the costs of regulation was not without controversy, and both the principle and the coverage are matters of live policy debate. As the recent Lords Select Committee on Charities report noted (2017 Paragraph 276):

We are conscious of the concerns from the sector that the voluntary levy to fund the Regulator may be disproportionately burdensome for small and medium-sized charities. We recommend that the new Fundraising Regulator continually monitors the impact of the levy, particularly on small- and medium-sized charities, and makes changes if appropriate.

The levy is charged to all charities who spend more than £100,000 per year on fundraising. This was assessed based on accounts submitted to the Charity Commission with a financial year ending in 2014, the most recent full year of data available in summer 2016. Charities falling into this category were asked (and indeed expected) to contribute on a sliding scale (shown in Figure 1). In addition, there are a number of ‘exempt charities’ that are not regulated by the Charity Commission whose accounting and reporting practices are different from regulated charities¹. These organizations were levied at a flat rate of £1,000 per annum as calculating fundraising expenditure in a standardized way would not be straightforward.

¹ Organizations that are exempted from the Charity Commission’s jurisdiction include further and higher education institutions, certain museums and art galleries, social housing providers and religious investment funds and are generally large organisations with high annual turnovers and high annual fundraising

[Figure 1 here]

Figure 1 also shows the percentage of fundraising spend that the annual levy payment represents. While this is small for all charities (<0.4%), it peaks for charities spending £200,000 on fundraising annually. These differences suggest that charities around this size have the potential to be sensitive to the price set by the regulator.

Invoices requesting payment were issued to eligible ‘levy payers’. The levy payment is voluntary, but expected, with the Regulator proposing six reasons why charities should pay (Fundraising Regulator 2017):

- By paying, charities pay their share of the cost of regulation;
- Paying entitles charities to take part in the setting of fundraising standards, while charities who refuse to pay will not be able to take part in these exercises;
- Paid-up charities can use the Regulator’s “Registered With” logo;
- Charities who pay will find it easier to meet Charity Commission regulation regarding their fundraising activities;
- Charities who pay are helping to improve donor confidence in fundraising across the sector;
- Charities who are not contributing, “aren’t acting as good corporate citizens”.

expenditure. See the Charity Commission’s detailed guidance on these statuses: Exempt charities (CC23); and Excepted charities (<https://www.gov.uk/government/publications/excepted-charities>).

Perhaps due to recognition that these reasons alone may not encourage charities to pay the levy, significant pressure was put on eligible organizations to contribute to the costs of this new regulator through comments by key figures, including then Chair of the Fundraising Regulator Lord Grade, at events and in the media. In these comments it was made clear that a list of eligible charities who did not pay the levy would be published, in effect to be named and shamed. A number of organizations made objections to the arrangements and in particular the pressure to pay the levy for an unproven regulator, and not all eligible charities contributed.

Further to this scheme, there was also the opportunity for charities more broadly (those spending less than £100k per year on fundraising) to sign-up to the new regulator to demonstrate their commitment to the Code of Fundraising Practice. Registration for these organizations cost £50 per year, and allowed organizations to use the branding of the Fundraising Regulator, to be listed in the Public Register and to benefit from the other positive outcomes outlined above.

In August 2017, at the end of the first year of the levy payment scheme, the Fundraising Regulator named the charities who had paid the levy, and those who had refused or not communicated with the regulator. This revealed high participation rates, particularly amongst larger charities, but still significant numbers of organizations who had opted out.

The gradient in participation rates by fundraising spend illustrates the increasing potential benefit of registration to charities with a bigger stake in high-profile fundraising. It also hints at the potential reputational damage for charities who were named as non-payers, particularly if they were well known. But given that many organizations did opt-in to the previous self-regulation scheme, how effective was the levy in increasing participation in fundraising regulation?

Methods

In estimating the effect that the Fundraising Regulator's imposition of the 'fundraising levy' had on the willingness of charities to take up membership of the regulatory body we cannot simply compare charities who do join with those who do not. While we can observe many aspects of a charities finances from their annual returns to the Charity Commission, we would be concerned that unobserved heterogeneity between charities would be a confounding factor in their decision to participate. That is, some charities would derive more benefit from participation than others, in a way which we do not directly observe, leading our estimate of the effectiveness of the levy to be biased. In the absence of a randomized control trial to estimate this effect, we exploit a natural experiment that arises unintentionally from the design of the levy enforcement in order to make a causal estimate of the levy's effect.

Regression Discontinuity Design

We use a Regression Discontinuity Design (RDD) to estimate the effect of the threshold set by the Fundraising Regulator on participation in the voluntary levy scheme. RDD is a method for estimating treatment effects "in a non-experimental setting where treatment is determined by whether an observed "assignment" variable (also referred to in the literature as the "forcing" variable or the "running" variable) exceeds a known cut-off point" (Lee and Lemieux 2010, 281). Thistlethwaite and Campbell (1960) were the first to apply this technique in their analysis of the impact of merit awards on future academic performance, and RDD is now applied frequently in policy analysis studies across economics, education, public administration and social policy. The idea behind the RDD approach is that observations just above and below the cut-off point (threshold) are similar and thus good comparisons. RDD is suitable for estimating causal effects when units cannot precisely manipulate the assignment variable, variation near the threshold is randomized as a result of

the first assumption, and therefore RDD can be analyzed and tested like a randomized experiment (Lee and Lemieux 2010).

Given these assumptions, we exploit the sharp eligibility threshold by fundraising expenditure in order to make a causal estimate of the effect of the fundraising levy, particularly amongst smaller fundraising charities. This exploits the randomization into levy eligibility that results for charities with fundraising expenditure close to the threshold. As we are trying to estimate a causal effect of treatment, and charities are effectively randomized into treatment (above the threshold) and control (below the threshold) groups we do not control for other covariates as might be done if one were trying to explicitly model the predictors of membership.

Our model is a linear probability model of membership of the regulatory scheme (Y_i) as a function of fundraising expenditure (X_i) and a treatment dummy (D_i) that equals one above the levy threshold at c :

$$Y = \alpha + \tau D + \beta_l(X - c) + (\beta_r - \beta_l)D(X - c) + \varepsilon \quad (1)$$

The estimate of interest is the treatment effect τ at the cutoff, given participation Y_i with fundraising expenditure of X_i , and a threshold in levy eligibility at $c = \text{£}100,000$.

$$\tau(c) = E \{Y_i(1) - Y_i(0) | X_i = c\} \quad (2)$$

We estimate the RDD models in Stata 15 using the `-rdrobust-` package (Calonico et al. 2017).

This effect is estimated using local polynomial methods with bandwidth h around the cutoff c , such that:

$$c - h \leq X \leq c + h \quad (3)$$

The bandwidth h , is estimated optimally following (Calonico et al. 2017) and we use a local linear point estimator with a triangular kernel that assigns linear down-weighting to observations further from the cut-off.

As recommended, a range of polynomial specifications were estimated of order zero, one and two. The model was also estimated over a local sample (fundraising spend restricted to +/- £100k around the threshold) and the whole sample. In addition, a number of further robustness checks examining polynomial specification, kernel and bandwidth selection were estimated, and these are reported in the online supplementary document accompanying this article.

The regression discontinuity is estimated close to the threshold, and so is most applicable for organizations that are close to the threshold. However, the RD estimate is in fact a weighted average treatment effect, where the weights are the relative probabilities that organizations are close to the threshold (Lee and Lemieux 2010).

Data

The financial data on registered charities in England & Wales was drawn from the Charity Commission's data extract, which is freely available online (Charity Commission 2017). Specifically, detailed historical financial information by financial year is contained within the Annual Return 'Part B', completed by all charities with an annual income of greater than £500,000. Information on individual charity's registration with the Fundraising Regulator was extracted from the Public Register (Fundraising Regulator 2017) as at 1 August 2017 by scraping the register website using Python and the Beautiful Soup module. This created a dataset of charity numbers and the status of their membership of the Fundraising Regulator. These two datasets were linked deterministically using registered charity numbers, contained within both the Charity Commission's Charity Register and the Fundraising Regulator's

Public Register. Our sample does not include ‘exempt’ or ‘excepted’ charities that are not regulated by the Charity Commission, as for those financial data is not available.

Our analysis focuses on the registration of charities within the first year of the Fundraising Regulator’s operation, and prior to their ‘naming and shaming’ of non-payers. In the linked analysis dataset we have a working sample of 4,147 charities with an annual income of over £500,000, of whom 1,865 spent over £100,000 on generating voluntary income in 2014 and therefore are expected to pay the levy. The analysis dataset and Stata syntax files are available at GitHub.¹

As stated, a critical assumption of this method is that charities not be able to manipulate their eligibility. This is satisfied as the relevant financial years (2014) would have finished prior to the review (2015) with accounts submitted by all charities well in advance of the final levy details being announced (2016). This is confirmed by the results of two formal tests of whether there is a discontinuity in the density of organizations at the £100k threshold: *dcdensity* (McCrary 2008); and *rddensity* (Cattaneo et al. 2018). The results of both tests (i.e. miniscule, statistically insignificant discontinuity estimates) suggest that there is no clustering around the threshold and thus no precise manipulation of fundraising expenditure in response to the setting of the threshold – see the supplementary document accompanying this paper for details of these tests. While there may be scope for marginal charities to influence their eligibility in future years this was not the case in the current eligibility period.

Secondly, it is important that other covariates that might influence the outcome are continuous across the threshold. We estimated regression discontinuities for four covariates: total income, total expenditure, number of employees, and number of volunteers. These baseline covariates are smooth around the £100k threshold – see the supplementary document for details of these models. While there are other unrelated charity reporting thresholds (e.g.

supplying enhanced financial reporting for charities whose income exceeds £500k) these are not directly related to expenditure on fundraising. The Fundraising Regulator's charge does vary slightly across the threshold: charities below may join for £50 while the lowest annual levy rate is £150. However, this difference of £100 would represent 0.1% of a marginal charities fundraising expenditure, and a likely 0.001% of their annual income, and so is unlikely to be a significant factor in participation.

Results

Descriptives

Figure 2 shows the population of charities with total income greater than £0.5 million in 2014. In panel (a) the charities colored red are above the levy threshold (n=1,865; 45%), while those colored blue are below the threshold (n=2,282; 55%). The second panel colors only those charities who elected to pay the levy; above the threshold are Levy Payers eligible to be 'named and shamed', and below the threshold are voluntary payers. As expected, the participation rate above the threshold is 67.3%, much higher than that below the threshold at 9.3%, but we still observe significant numbers of non-payers above and voluntary payers below the threshold. The Fundraising Regulator reported an annual income from regulatory activities of £1.5m in the financial year ending 31st March 2017 (Fundraising Regulator 2018), although this covers a different twelve-month period from the regulatory year which ends in July.

[Figure 2 here]

Estimating the Effect of the Levy on Participation

We estimate the RDD models across both the whole sample, and also on a sample restricted to charities around the levy threshold – those spending between £1 and £200,000 on fundraising.

Table 1 shows the discontinuity estimates from the RDD models estimated across the two samples with polynomials of order one (alternative functional forms and bandwidth specifications can be found in the supplementary document). Both models show a large and statistically significant discontinuity around the levy threshold. The RDD method provides the best causal estimates close to the threshold, and so the sub-sample model estimated on charities spending between £1 and £200,000 is the preferred model with an effect of the levy threshold on participation estimated at 0.399 (95% CI 0.253 - 0.545).

[Table 1 here]

The scale of the discontinuity can be observed graphically in

Figure 3, which shows the plots of the two regression discontinuity models.

Figure 3a shows the discontinuity estimated across the whole sample, while

Figure 3b shows the estimation \pm £100k around the levy threshold. Both demonstrate the large and significant discontinuity in participation. Using the local estimation model, the estimates suggest that a charity spending £99,999 on fundraising would have an 18.3% chance of joining the fundraising regulator, whilst a charity spending £100,001 on fundraising would have a 58.2% chance of joining. Therefore the estimated treatment effect of the fundraising levy is to increase participation by 39.9 percentage points.

[Figure 3 here]

Estimating the Effect of Price on Participation

The regression discontinuity can be extended to examine participation discontinuity around the increasing levy payment bands for charities spending greater than £100k on fundraising. The sample size allows us to estimate these models for the first six payment bands above the threshold; the small number of very large charities prohibits estimation of discontinuities for charities spending more than £10 million on fundraising. This involves applying the same RDD method to test for discontinuities in charities' participation as prices change. Essentially the argument is the same: a charity who spent £499,999 on their fundraising activity would be charged £800 to join, whilst a charity who spent £500,001 on fundraising would be charged nearly twice as much, at £1,500. If charities are price sensitive in joining the regulatory scheme then we would expect the probability of joining to fall as the threshold is crossed. If charities are not price-sensitive, then we would expect to estimate treatment effects that are essentially zero.

Figure 4 shows the RDD plots for the first six payment bands above the levy threshold. We focus on the jump between the lines, with a fall in participation across the threshold being consistent with charities being price-sensitive in their joining of the regulator. As the plots suggest, none of these discontinuities are large or statistically significant. Only the £200k threshold actually shows a discontinuity in the expected direction, decreasing participation after the threshold, the remaining five actually suggest a small increase in participation across the threshold. This supports regulatory participation increasing in fundraising expenditure despite the increasing levy payment.

[Figure 4 here]

Levy Income Projections

An important question for the Fundraising Regulator is the impact that this policy had on its income, and therefore budget available to undertake regulatory activity. We can use the estimates of levy participation to forecast the likely total levy income of the Fundraising Regulator. We do this under three different assumptions about participation rates if participation had been completely voluntary, without the regulator's policy of 'naming and shaming' charities who did not pay to join, in order to get a description of the distribution of possible outcomes. These scenarios are 1) a conservative assumption that propensity to participate is constant across fundraising income; 2) that propensity to participate follows a linear probability model, and; 3) that propensity to participate follows a logistic probability model.

Total income under each scenario is calculated by multiplying the probability of participation by the appropriate levy fee for each charity, and summing all these amounts (where p_i is the estimated probability of participation for charity i and L_i is the membership fee due given the fundraising expenditure of charity i):

$$\sum_{i=1}^n \hat{p}_i \cdot L_i \quad (4)$$

The baseline estimate of scenario 1 assumes a flat participation rate across charities (i.e. participation does not increase with fundraising expenditure), estimated from charities just below the levy threshold. This produces a lower estimate of £400,000. Two alternative models (linear probability and logistic regression) are used to estimate \hat{p}_i by fitting the patterns of participation above the threshold. When this participation probability is adjusted by subtracting the estimated treatment effect of the levy, both these scenarios forecast a total income for the Fundraising Regulator of just under £800,000. This is about half the income actually received from levy payers in the first year.

Figure 5 shows the estimated participation rates without the levy for the three scenarios. This can be compared to the average participation rate observed with the levy, represented by the grey line. Table 2 reports the estimated income for the Fundraising Regulator in the first year given the three scenarios considered.

[Table 2 here]

[Figure 5 here]

These estimates suggest that the fundraising levy generated around £900,000 more income than would have been received in a purely voluntary scheme. Under the previous system of self-regulation, the Fundraising Standards Board (FRSB) generated a total income from membership fees of £506,000 (Civil Society, 2015), which suggests that scenarios 2 and 3 are reasonable estimates of total value of participation in the absence of the levy structure.

Discussion

Our results suggest that fundraising charities' concern for reputational damage of non-participation in fundraising regulation far outweighs the cost to the organizations. We estimate a significant causal effect of the levy for charities around the threshold. For charities above the threshold we find no evidence of discontinuities around the payment steps that would suggest the cost of the levy is a binding constraint. Instead, participation seems to be increasing in line with fundraising expenditure, showing both the falling relative cost and the

likely greater benefits of participation for charities which engage in greater levels of fundraising activity.

This has a number of clear implications. Firstly, fundraising charities place a high value on their reputations, and the threat of being ‘named and shamed’ by the Regulator was a significant one. This outcome is consistent with the theoretical perspective offered by the broader regulatory compliance literature: compliance with requirements “increases with increased perceptions of potential punishment” (Yee et al. 2016, 108; see also Lee 2010). Previous research has highlighted the importance of ‘brand’ to charities (Michel and Rueuiner 2012; Sargeant et al. 2008), while others have identified that potential donors base their perceptions where possible on personal experiences of a charity (Furneaux and Wymer 2015) and otherwise on proxies such as the status of an organization (Sargeant et al. 2008). That such a high proportion of fundraising charities pressurized to pay the levy have done so suggests that they are aware of the damage that being named and shamed for not paying could do to their reputation and ‘brand’.

Secondly, the levy was necessary to secure the level of participation of charities observed, particularly for small to medium-sized fundraising charities. In the first year that the regulator required charities with a qualifying fundraising spend to pay the levy, a total of 1,408 paid up. This is more than the 1,258 organizations who were paid up members of the Fundraising Standards Board shortly before it was closed, a number which it had taken five years to build towards (Breen 2012). However, while the fear of the impact of being named and shamed clearly concerned charities enough to make large numbers sign up, and research suggests that regulation can help to ensure that charities behave transparently and accountably (Cordery and Morgan 2013; Phillips 2013; Thompson and Williams 2014), if charities feel that the costs of regulation identified by Bekkers (2003) and Corry (2010) outweigh the benefits they

receive then they may cease to pay. While naming and shaming appears to have persuaded organizations to pay the levy initially, and therefore appears to have been necessary, if organizations fail to see benefit from the regulation they might well decide to take the risk of not paying. It remains to be seen whether the initial ‘success’ of a threat to ‘name and shame’ transpires into a long term commitment from organizations to pay the levy.

Thirdly, the levy fee itself is not a significant barrier to participation for most charities. While the Fundraising Regulator needs to take a wide range of factors into account when setting the fee bands and levels, our analysis suggests that a small increase in the fee levels would not lead to significantly lower regulatory participation even amongst small to medium-sized charities. The corollary of this is that reducing the fees is unlikely to significantly increase participation by charities. It does not appear that cost is a significant motivator in participation, and there is very little evidence of price sensitivity in determining whether organizations pay or not. However, having set the levy bands as they are, a raise in the cost without proving to organizations that paying the levy is good for their charity – rather than that not paying is bad – may cause organizations to reevaluate whether to pay or not. As Bekkers (2003) notes, regulation can be an expensive way of increasing public trust in charities.

Fourthly, the estimated marginal income due to the levy scheme is very significant, and without this it is likely that the level of resources available for fundraising regulation would be significantly lower. It could therefore be argued that the ‘name and shame’ approach was necessary to ensure initial engagement in a new regulator who initially at least could provide no evidence of prior effective regulation. In need of initial funding to establish a reputation as an effective regulator, the Fundraising Regulator took an approach that ensured a significant proportion of eligible organizations paid the levy early in the process. Going forward, it is

likely that it will need to prove to be an effective regulator, delivering the benefits identified by Cordery and Morgan (2013), Philips (2013) and Thompson and Williams (2014). Should the Regulator fail to do so, it is likely organizations will opt out in future years. The transactional relationship that the threat of shaming creates is likely to result in organizations being particularly demanding that the regulator delivers the promised benefits.

Conclusion

Our analysis suggests that the ‘name and shame’ approach can be an effective strategy for regulators where the regulated organizations are concerned for their reputations. In the short term, it has the potential to drive participation in regulation even where there is little statutory powers to compel it. The successful implementation of this approach by the Fundraising Regulator may act as a proof-of-concept for other independent charity regulators, such as those in Australia, New Zealand, Republic of Ireland, Northern Ireland, and England & Wales. For instance, the Charity Commission for England & Wales has for some time now considered charging charities a regulatory fee, though a long-awaited consultation on this policy has failed to materialize (Civil Society 2018). However, regulators need to be aware that this approach may come at the cost of building confidence in the new regime. It remains to be seen whether this approach is effective in the medium to long term, and how the participation of charities evolves over time. To ensure continued support, the Regulator will need to demonstrate to charities that they should pay the levy because of the positive outcomes of regulation (as identified by Breen 2009; Connolly and Hyndman 2013; Cordery and Morgan 2013; Cordery et al. 2017; Keating and Frumkin 2003; Morgan 2012) rather than because of the continued threat of naming and shaming.

For this to occur, charities need to be seen to publicly support the Regulator and to be paying the levy not because of the threat to reputation of not paying but rather for the reputational

boost that being regulated will bring to individual organizations and to the sector as a whole. Fundraising charities are dependent on trust if donors are to give (Bekkers 2003) and visible and effective regulation can build trust. Furthermore, charities willingly contributing to the cost of regulation can result in them being perceived by donors as buying into the regulation both literally and symbolically (Hogg 2018). A sector which is seen to be committed to the maintenance of ethical good practice is likely to benefit from greater public trust than one which is seen to be scared of the damage that not paying might cause. It is unlikely that a voluntary levy which charities need to be named and shamed into paying will lead to significant changes in practices by charities. Rather, what will lead to meaningful change is a well-funded regulator which supports and supervises fundraising and is seen by both charities and the public to be doing so effectively.

Further research will be needed in future years to explore whether charities continue to pay the levy and whether a wider range of organizations, including those below the levy threshold, pay the levy because of the benefits of paying rather than because of the threat of non-paying. While our data does not allow us to make forecasts about the future, we feel that the ‘name and shame’ tactic could be problematic going forward should charities not see the benefits of the regulation. Further, the Charity Commission for England & Wales may over the next few years introduce charges of its own for charity regulation (see Hogg 2018) which may impact on charities’ willingness to pay the Fundraising Regulator levy.

Therefore, we argue that while the Fundraising Regulator has been successful in its efforts to stimulate participation in the levy scheme, it should be cognizant of the limitations of adopting a regulatory approach that is coercive, and focused on monitoring and sanctioning noncompliance with demands or requirements (Carter 2016). External, coercive pressure to be accountable has “limited potential for encouraging organizations and individuals to take

internal responsibility for shaping their organizational mission, values, and performance or *for promoting ethical behavior.*” [emphasis added] (Ebrahim 2010, 13). It remains to be seen whether paying the levy represents a strategic response by charities, thus leading to the raising of fundraising standards, or if it is simply weak, pro-forma compliance with the demands of the regulator.

1. Accessible at <https://github.com/alasdair/paper-IncentivizingRegulatoryParticipation/>

References

- Baldwin, Robert, Martin Cave, and Martin Lodge 2011. *Understanding Regulation: Theory, Strategy, and Practice*. Oxford: Oxford University Press.
- Bekkers, Rene 2003. Trust, accreditation and philanthropy in the Netherlands. *Nonprofit and Voluntary Sector Quarterly* 32:596–615.
- Bies, Angela 2010. Evolution of nonprofit self-regulation in Europe. *Nonprofit and Voluntary Sector Quarterly* 39:1057–1086.
- Bourassa, Maureen A., and Abbey C. Stang 2016. Knowledge is power: why public knowledge matters to charities. *International Journal of Nonprofit and Voluntary Sector Marketing* 21:13–30.
- Bovens, Mark 2007. Analysing and Assessing Accountability: A Conceptual Framework. *European Law Journal* 13:447–468.
- Breen, Oonagh B. 2009. Regulating charitable solicitation practices - The search for a hybrid solution. *Financial Accountability & Management* 25:115–143.
- Busuioc, Madalina., and Lodge, Martin. 2017. Reputation and Accountability Relationships: Managing Accountability Expectations through Reputation. *Public Administration Review* 77:91-100.
- Calonico, S., Cattaneo, M. D. & Farrell, M. H. 2017. “rdrobust: Software for regression-discontinuity designs” *The Stata Journal* 17:2
- Carter, David P. 2016. Public, Nonprofit, and For-Profit Sector Regulatory Approaches in Third-Party Regulatory Administration. *Journal of Public Administration Research and Theory* 26: 726–744.

Charity Commission 2017. Registered charities in England & Wales Accessed online at <http://data.charitycommission.gov.uk/> (31st July 2017)

Civil Society 2015. FRSB reports 10 per cent membership increase bringing total regulated funds to £5.5bn. Accessed online at <https://www.civilsociety.co.uk/news/frsb-reports-10-per-cent-membership-increase-bringing-total-regulated-funds-to--5-5bn.html> (28th September 2017)

Civil Society 2018. Government gives Charity Commission extra £5m a year funding. Accessed online at <https://www.civilsociety.co.uk/news/government-gives-charity-commission-extra-5m.html> (15th August 2019).

Connolly, Ciaran, and Noel Hyndman 2013. Towards Charity Accountability: Narrowing the gap between provision and needs? *Public Management Review* 15:945–968.

Cordery, Carolyn J. 2013. Regulating small and medium charities: Does it improve transparency and accountability? *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 24:813–851.

Cordery, Carolyn J., and Gareth G. Morgan 2013. Special issue on charity accounting, reporting and regulation. *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 24:757–759.

Cordery, Carolyn, Dalice Sim, and Tony van Zijl 2017. Differentiated regulation: The case of charities. *Accounting & Finance* 57:131–164.

Corry, Olaf 2010. Defining and Theorising the Third Sector. In *Third Sector Research*, ed. Rupert Taylor, 11–20. London: Springer.

Ebrahim, Alnoor 2010. The Many Faces of Nonprofit Accountability. In *The Jossey-Bass Handbook of Nonprofit Leadership and Management*, ed. David O. Renz, 110–121. San Francisco: Jossey-Bass.

Fundraising Regulator 2017 Charities spending over £100,000 on fundraising. Accessed online at <https://www.fundraisingregulator.org.uk/registration/determine-levy-payment/> (9th May 2018)

Fundraising Regulator 2017 The Directory. Accessed online at <https://fundraisingregulator.secure.force.com/directory> (1st August 2017)

Fundraising Regulator 2018. Annual Accounts Accessed online at <https://www.fundraisingregulator.org.uk/wp-content/uploads/2016/06/Fundraising-Regulator-Annual-report-and-Accounts.pdf> (9th May 2018)

Furneaux, Craig W., and Walter Wymer 2015. Public trust in Australian charities: Accounting for cause and effect. *Third Sector Review* 21:99–127.

Hogg, Eddy 2018. What Regulation, Who Pays? Public Attitudes to Charity Regulation in England and Wales. *Nonprofit and Voluntary Sector Quarterly* 47:72–88.

Hyndman, Noel, and Paul McDonnell 2009. Governance and charities: An exploration of key themes and the development of a research agenda. *Financial Accountability & Management* 25:5–31.

Irvin, Renée A. 2005. State regulation of nonprofit organizations: Accountability regardless of outcome. *Nonprofit and Voluntary Sector Quarterly* 34:161–178.

Jackson, Nick C., and R. Mark Mathews 1995. Using public feedback to increase contributions to a multipurpose senior center. *Journal of Applied Behavior Analysis* 28:449–455.

Johnson, Norman, Sandra Jenkinson, Ian Kendall, Yvonne Bradshaw, and Martin Blackmore 1998. Regulating for Quality in the Voluntary Sector. *Journal of Social Policy* 27:307–328.

Keating, Elizabeth. K., and Peter Frumkin 2003. Reengineering Nonprofit Financial Accountability: Toward a More Reliable Foundation for Regulation. *Public Administration Review* 63:3–15.

Keating, V. C., & Thrandardottir, E. 2017. NGOs, trust, and the accountability agenda. *The British Journal of Politics and International Relations*, 19(1), 134–151.
<https://doi.org/10.1177/1369148116682655>

Kennedy, Mary Susan, Linda K. Ferrell, and Debbie Thorne LeClair 2001. Consumer's trust of salesperson and manufacturer: an empirical study. *Journal of Business Research* 51:73–86.

Kenneth Kilpatrick & Irvine Lapsley 1996. 'Trust us'—regulators and the governance of privatized utilities. *Public Money & Management*, 16:2, 39-46,

Lee, Eungkyoon. 2010. Information, interest intermediaries, and regulatory compliance. *Journal of Public Administration Research and Theory* 21:137–57.

Lee, David S. and Thomas Lemieux. 2010. Regression Discontinuity Designs in Economics. *Journal of Economic Literature* 48:281–355.

May, Peter. 2005. Regulation and Compliance Motivations: Examining Different Approaches. *Public Administration Review* 65:31-44.

McDonnell, Diarmuid P. 2017. Improving Charity Accountability: Lessons from the Scottish Experience. *Nonprofit and Voluntary Sector Quarterly* 46:725-746.

McFall, Lynne 1987. Integrity. *Ethics* 98:5–20.

Michel, Géraldine, and Sophie Rieunier 2012. Nonprofit brand image and typicality influences on charitable giving. *Journal of Business Research* 65:701–707.

Morgan, Gareth. G. 2012. Public benefit and charitable status: assessing a 20-year process of reforming the primary legal framework for voluntary activity in the UK. *Voluntary Sector Review* 3:67–91.

O'Neill, Michael 2009. Public confidence in charitable nonprofits. *Nonprofit and Voluntary Sector Quarterly* 38:237–269.

Ortmann, Andreas, and Mark Schlesinger. 1997. Trust, reputé and the role of non-profit enterprise. *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 8:97–119.

Parliament. House of Lords 2004. *Stronger charities for a stronger society*. (HL 2016-2017 (133)). London: The Stationery Office.

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

Parsons, Linda M. 2007. The impact of financial information and voluntary disclosures on contributions to not-for-profit organizations. *Behavioral Research in Accounting* 19:179–196.

Phillips, Susan D. 2011. Incrementalism at its best and worst: Regulatory reform and relational governance in Canada. In *Governance and regulation in the third sector: International perspectives*, ed. Susan D. Phillips and Steven Rathgeb Smith, 215–237. New York, NY: Routledge.

Phillips, Susan D. 2013. Shining Light on Charities or Looking in the Wrong Place? Regulation-by-Transparency in Canada. *Voluntas* 24:881–905.

Phillips, Susan D., and Steven Rathgeb Smith 2011. Between governance and regulation: Evolving government-third sector relationships. In *Governance and regulation in the third sector: International perspectives*, ed. Susan D. Phillips and Steven Rathgeb Smith, 1–36. New York, NY: Routledge.

Prakash, Aseem, and Mary Kay Gugerty 2010. Trust but verify? Voluntary regulation programs in the nonprofit sector. *Regulation & Governance* 4:22–47.

Sargeant, Adrian, and Stephen Lee 2004. Trust and relationship commitment in the United Kingdom voluntary sector: Determinants of donor behavior. *Psychology and Marketing* 21:613–635.

Sargeant, Adrian, Jane Hudson, and Douglas C. West 2008. Conceptualizing brand values in the charity sector: the relationship between sector, cause and organization. *The Service Industries Journal* 28:615–632.

Sargeant, Adrian, Douglas C. West, and John B. Ford 2001. The role of perceptions in predicting donor value. *Journal of Marketing Management* 17:407–428.

Sargeant, Adrian, Douglas C. West, and John B. Ford 2004. Does perception matter?: an empirical analysis of donor behavior. *The Service Industries Journal* 24:9–36.

Szper, Rebecca, and Aseem Prakash 2011. Charity Watchdogs and the Limits of Information-Based Regulation. *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 22:112–141.

Tonkiss, Fran, and Andrew Passey 1999. Trust, Confidence and Voluntary Organizations: Between Values and Institutions. *Sociology* 33:257–274.

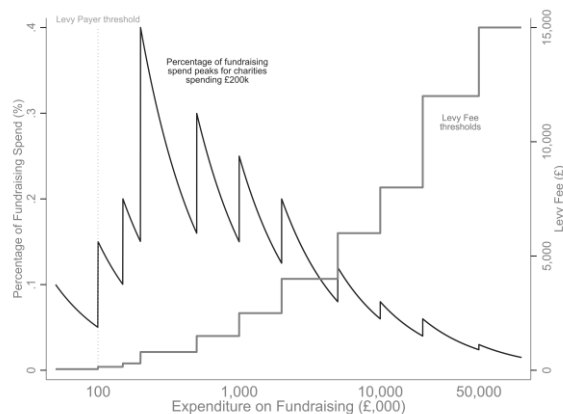
Tremblay-Boire, Joannie, Aseem Prakash, and Mary Kay Gugerty 2016. Regulation by Reputation: Monitoring and Sanctioning in Nonprofit Accountability Clubs. *Public Administration Review* 76:712–722.

Yee, Wai-Hang, Tang, Shui-Yan, and Carlos Wing-Hung Lo. 2016. Regulatory Compliance When the Rule of Law is Weak: Evidence from China's Environmental Reform. *Journal of Public Administration Research and Theory* 26:95–112.

Tables and Figures

Figure 1: Payment Categories for Stepped Rate Charities

Charities annual spend on generating voluntary income	Annual Levy (£'s)
£100k to £149k	£150
£150k to £199k	£300
£200k to £499k	£800
£500k to £999k	£1,500
£1m to £1.99m	£2,500
£2m to £4.99m	£4,000
£5m to £9.99m	£6,000
£10m to £19.99m	£8,000
£20m to £49.99m	£12,000
Over £50m	£15,000

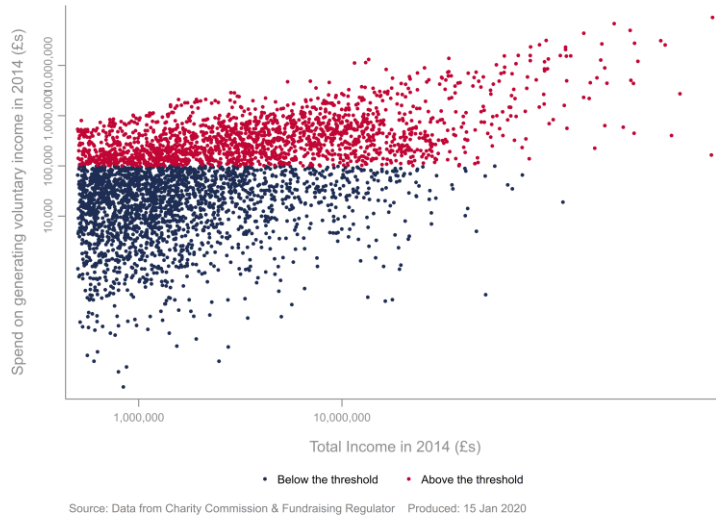


Source: Fundraising Regulator and Charity Commission

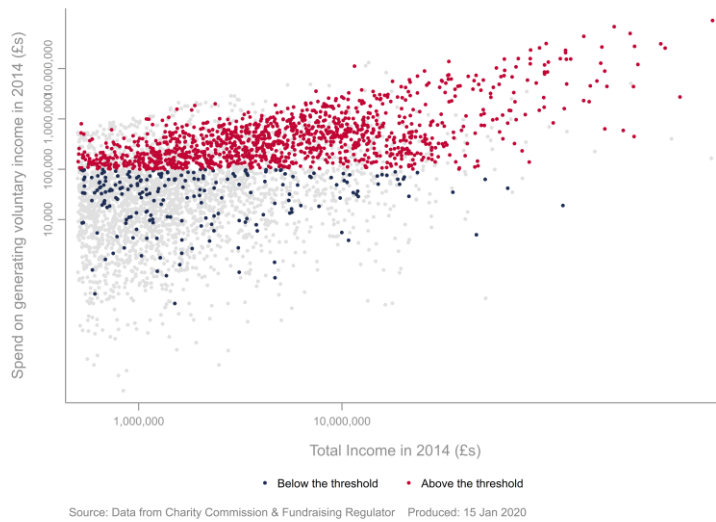
Note: The percentage of fundraising spend is calculated by dividing the levy payment by the annual expenditure on fundraising. This percentage peaks at 0.4% for charities spending £200k on fundraising.

Figure 2: Levy Eligibility and Payment Status

(a)



(b)



Notes: Sample of 4,147 charities with an annual income greater than £0.5m in 2014. Of these, 1,865 (45%) are above the threshold, and 2,282 (55%) are below the threshold, shown in panel (a). Of those above the threshold, 1,255 (67.3%) paid the levy. Of those below the threshold, only 212 (9.3%) paid the membership fee. Total income is shown on a logarithmic scale.

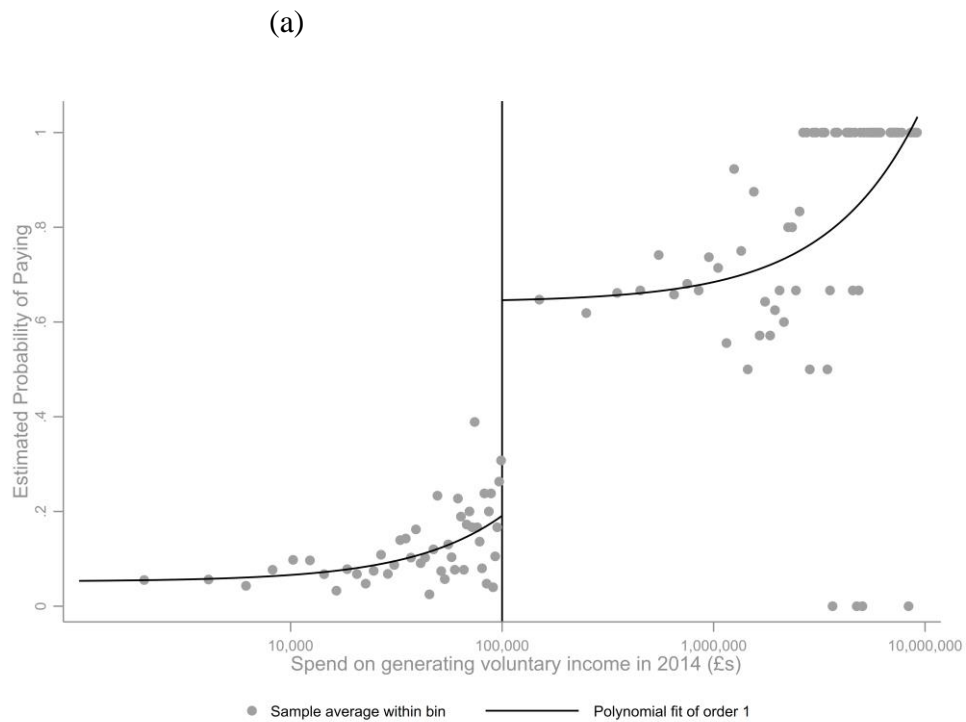
Table 1: RDD Estimates of the effect of Levy threshold on the probability of participation in funding the regulator

Sample	RD Model			
	Coef.	Std Error	95% Conf. Interval	Observations
Whole Sample	.367	.088***	.194 - .540	4,147
Sub-sample (£1-£200,000)	.399	.074***	.253 - .545	2,896

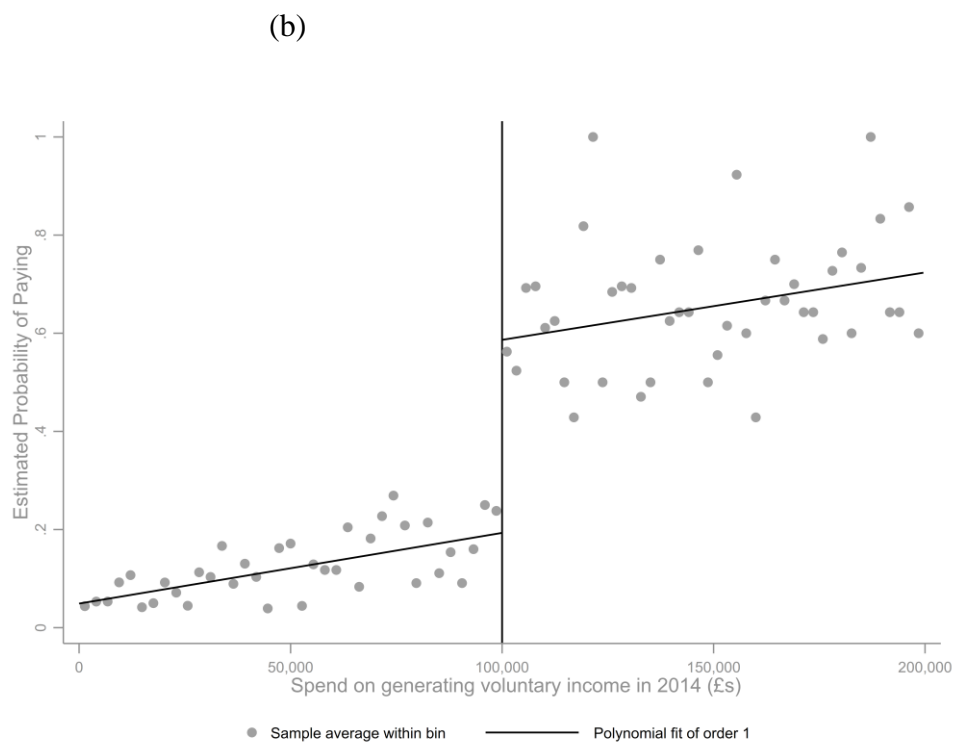
Notes: Standard errors in parentheses. Figures rounded to three decimal places. RDD models estimated as polynomials of order one. Further robustness checks of the polynomial and bandwidth selections are available in Appendix One.

*p < .05. **p < .01. ***p < .001.

Figure 3: Regression Discontinuity Design Models



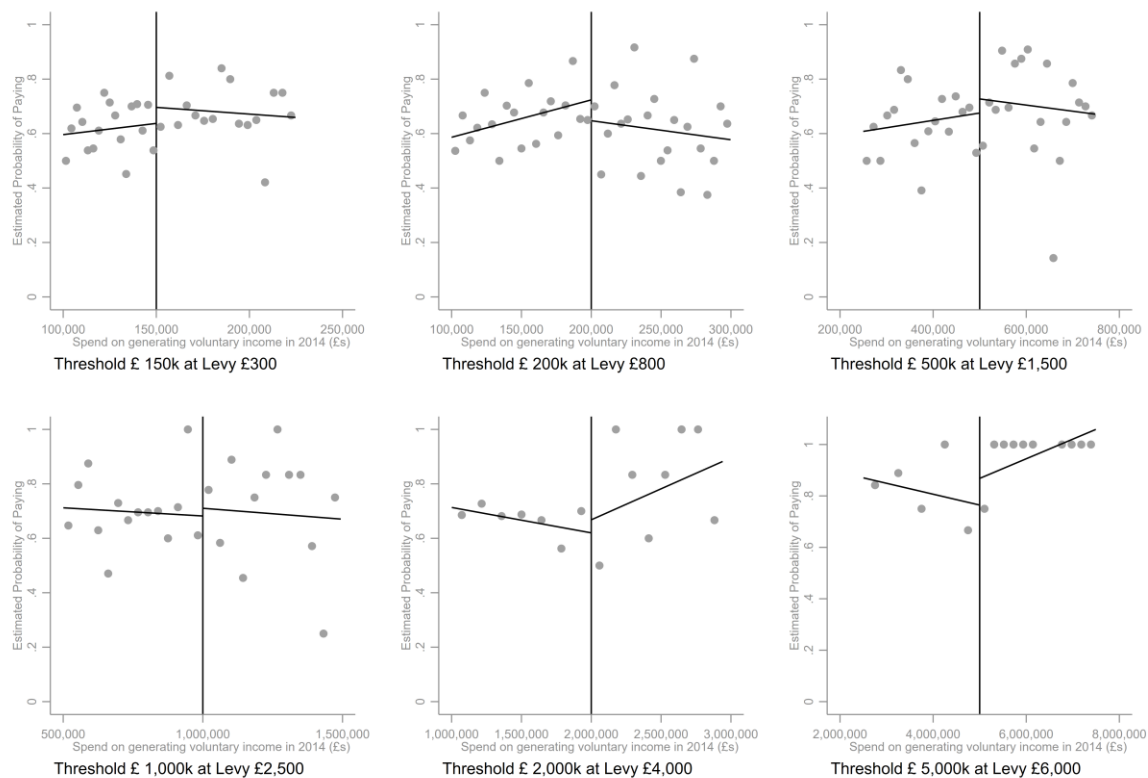
Source: Data from Charity Commission & Fundraising Regulator Produced: 21 Jan 2020



Source: Data from Charity Commission & Fundraising Regulator Produced: 21 Jan 2020

Note: In panel (a) spend on generating voluntary income is shown on a logarithmic scale

Figure 4: Estimating Discontinuities in Levy Pay Bands



Source: Data from Charity Commission & Fundraising Regulator Produced: 15 Jan 2020

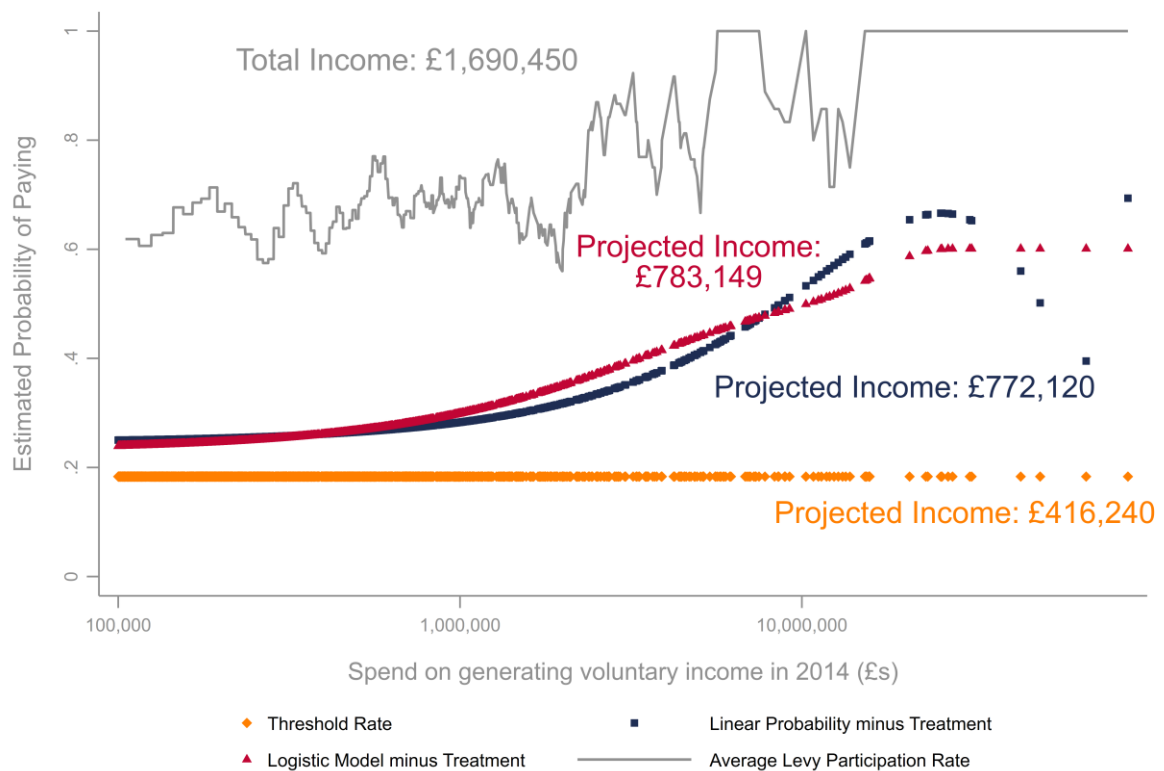
Note: Only the first six (of nine) higher payment thresholds are shown, as the sample sizes for the three highest thresholds are too low to estimate the RDD model.

Table 2: Forecasted Fundraising Regulator Income

Scenario	Projected Income
Status Quo	£1,690,450
1) Discontinuity threshold estimate of 18.3% applied across levy charities	£416,240
2) Linear probability model of participation minus RDD levy treatment effect	£772,120
3) Logistic model of participation minus RDD levy treatment effect	£783,149

Note: The Status Quo is calculated by summing the levy payments for each recorded paying charity above the threshold. Scenarios 1, 2 and 3 are the sum of the levy fees for each charity in the sample, weighted by: (1) the RDD estimated participation rate immediately below the discontinuity (18.3%); (2) the forecasted participation rate from third-order polynomial a linear probability model of fundraising expenditure minus the RDD treatment effect; and (3) the forecasted participation rate from third-order polynomial logistic model of fundraising expenditure minus the RDD treatment effect.

Figure 5: Forecasted Regulation Participation and Estimated Income Without Levy



Source: Data from Charity Commission & Fundraising Regulator Produced: 15 Jan 2020

Note: “Spend on generating voluntary income” is shown on a logarithmic scale