

**Not worth the paper
on which it is written:
Self-reported information and the
pursuit of NGO accountability**

Ronelle Burger & Trudy Owens
Presentation to Indiana University
Lilly Family School of Philanthropy
13 October 2015

Overview

- Rationale and analytical framework
 - The role of non-profit sector
 - Information asymmetry in the non-profit sector
- Methodology and data
- Descriptives on misrepresentation among NGOs
 - High prevalence of misrepresentation
 - Can reliably detect, but complex and multi-dimensional
- Factors associated with misrepresentation
 - Multi-stakeholder environment transparency and honesty not simple
- Conclusions and next steps

Rationale

- Recent dialogues regarding the post-2015 development agenda have sparked a renewed interest in transparency and accountability
- General consensus that goal of improved governance and global partnerships has been amongst the least successful of the millennium development goals
 - NGOs important and interesting case study for understanding transparency and accountability
 - As means to understanding transparency and accountability in local government, schools or clinics: similar in many respects, but easier to study because access to information and interviews are simpler
 - As an end in itself: governance increasingly important within NGO sector with growing realisation of a credibility gap between what NGOs say they do and how they govern their organisations

Rationale

- Growing disenchantment with reliance on self-reported information and a move towards external assurance
 - e.g. Global reporting initiative's G4 standard
- But high cost of project audits have often been cited as a constraint
 - Also by non-profit regulators in developed countries
- However, given that work by Olken shows that even a relatively low likelihood of an audit can significantly reduce potential waste and ineffectiveness, the cost of introducing project audits does not need to be prohibitive.

Rationale

- In this paper we present a workable and affordable financial oversight scheme for development projects by testing the viability and reliability of Benford's Law to detect misreporting
 - With cases of plausible misreporting then being flagged for further investigation
- The tool is widely used by tax authorities and corporate auditors to identify cases of potential irregularities and fraud which are then examined via an audit
- As far as we know it has never been used in the non-profit sector
- For instance: NGOs are likely to want to overreport project expenditure vs. admin costs
- We test its reliability and usefulness using a unique panel dataset of Ugandan NGOs

Analytical framework

- Information asymmetry problems in donor-NGO-beneficiary pyramid
 - NGO acting on behalf of the donor and foreign country citizens to serve the needy
 - However, complicated chain of contractors
 - donor acting on behalf of citizens
 - NGO serving beneficiaries on behalf of donors
 - Behaviour of NGO not observed by donor and outcomes complex to measure
 - Not all NGOs are inherently altruistic. Mixed motives
- Moral hazard due to once-off nature of contracts and practice of paying upfront
- Thus, may be difficult for donor to align NGO's behaviour

Analytical framework

- Reliance of donors on self-reported information increases their exposure
- These information problems may be worse in developing countries
 - Greater physical distance between donor and NGO/beneficiary
 - Cultural distance & lack of benchmarks
 - Scope for self-selection of altruists into sector lower due to high unemployment
 - Less mature institutions

Analytical framework

- This echoes research by Mazar et al. (2006) and Martinelli and Parker (2009) on choices for or against transparency which are shaped by trade-off between
 - external reward incentives
 - in the case of NGOs this would be donor expectations and associated revenue flows associated with satisfying such expectations
 - inherent motivation
 - organisational values
 - commitment to honesty
 - commitment to transparency
- External reward incentives are mediated via reputation loss that can occur by being caught lying
- Here we can interpret years of existence as window for showcasing influence of reputation (= longer period for building up relationship, better network, better understanding of sectoral norms)

Earlier findings on misrepresentation

- Burger and Owens (2010) on obstacles to promoting transparency amongst NGOs
 - NGO claims of involving community in projects vs. what community says
 - Almost all NGOs claim that they involve the community in both needs assessment and by requesting feedback after a project
 - However in 2002 39% of cases, where NGOs reported that they asked the community about their needs before initiating a project, community members maintained that the NGO in question did not.
 - Similarly, in 38% of cases, where NGOs claimed to have solicited feedback from communities, the community representatives said that they received no requests for feedback

Earlier findings on misrepresentation

- Also affects transparency on financial information
- According to the 2002 survey, 73% of NGOs with balance sheets said that they shared their accounts.
- But one quarter of the NGOs that said they compiled accounts that were publicly available did not provide information when requested to do so.
- With our 2008 survey all NGOs were asked whether they made their annual reports available to the public.
- If they had indicated that this was available to the public upon request, then the enumerator asked them for a copy of their annual report at the end of the interview.
- Only half of those who said the annual reports were available to the public, provided reports.

Methodology

- To explore associations with misrepresentation in more depth, we supplement the transparency measures used in Burger and Owens (2010) with data reliability index compiled using Benford's Law
- In 1938 Benford published paper confirming empirical law formulated by Newcombe in 1881
- Idea is distribution of leading digits in relatively large data sets is not uniform
- Consistent and predictable relative proportions of digits occurring in typical real-life data
- In real life low digits (e.g. 1, 2 or 3) occur much more frequently than high digits (e.g. 7, 8 or 9)
- Intuition is that exponential growth produces logarithmic probability distribution of digits

Methodology

- By contrast, when numbers are not reported truthfully, but manufactured by respondents, this does not hold true
- When making up data mistaken assumption is that all digits should be equally likely to occur
- Benford's law has recently been rediscovered and has been shown to be successful in detecting:
 - fieldworker cheating in household surveys (Finn and Ranchod, 2013)
 - financial fraud in companies (Carslaw, 1988; Thomas, 1989)
 - falsified Greek financial data for entry into EU (Muller, 2011)
 - falsified voting in Iranian 2009 elections (Battersby, 2009)

Methodology

- Schrapler (2011) outlines three requirements for applying Benford's law to detect fraud in survey data, namely:
 - the data should not have a built-in maximum;
 - there should not be any externally assigned values and
 - the distribution should be positively skewed with a median that is lower than the mean.
- Encouragingly, our NGO survey data satisfies all three these criteria
- Based on its proven track record in these domains, we investigate its usefulness for the detection of dishonesty in NGOs

Methodology

- Schrapler (2011) outlines three requirements for applying Benford's law to detect fraud in survey data, namely:
 - the data should not have a built-in maximum;
 - there should not be any externally assigned values and
 - the distribution should be positively skewed with a median that is lower than the mean.
- Encouragingly, our NGO survey data satisfies all three these criteria
- Based on its proven track record in these domains, we investigate its usefulness for the detection of dishonesty in NGOs

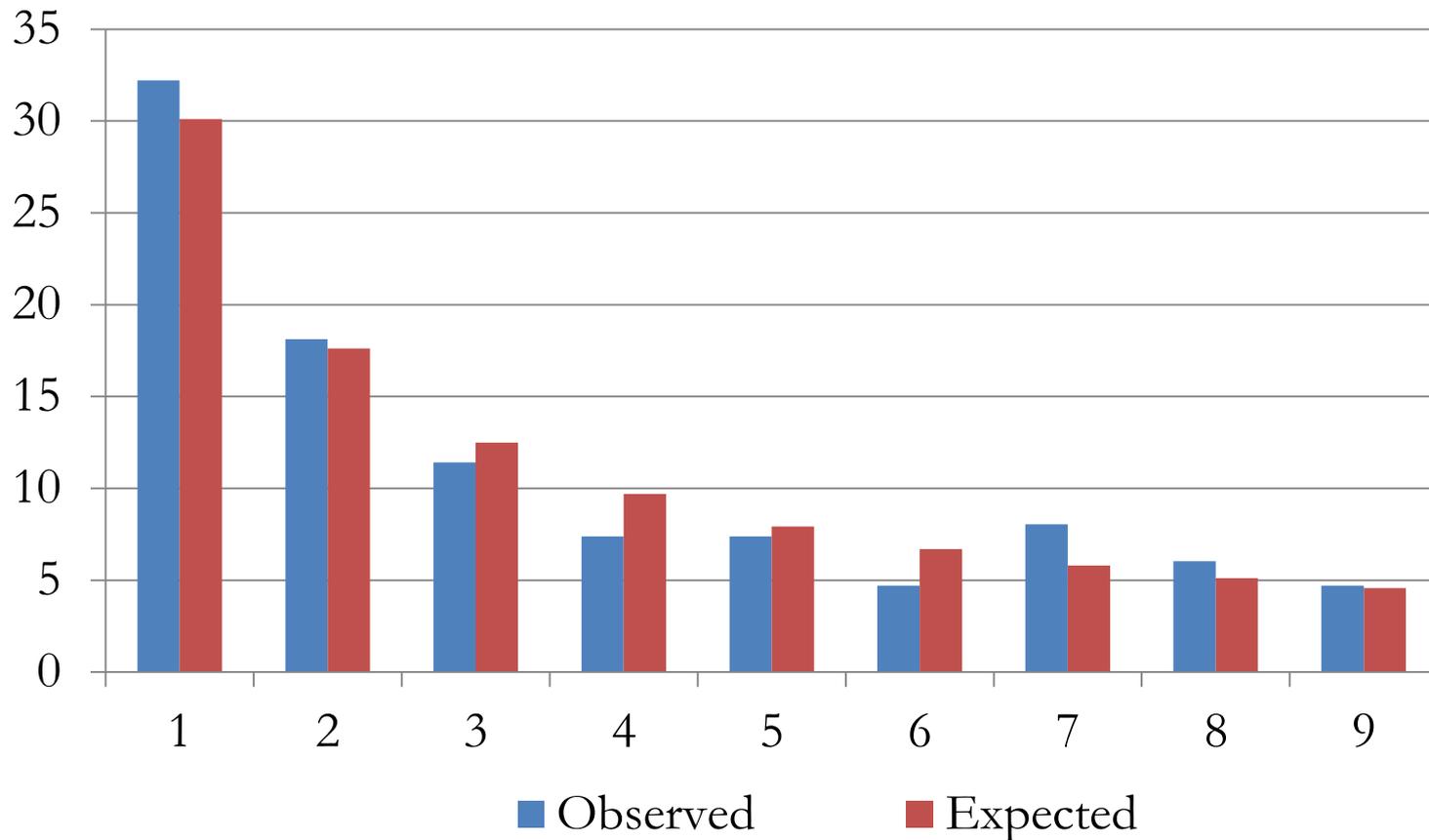
Data

- The study uses 2002 and 2008 waves that are representative surveys of the Ugandan NGO sector. Both sets of surveys incorporates two modules:
 - an NGO questionnaire to collect information on the organization's structure, finances and activities;
 - an interview with a community focus group to explore how the organizations are perceived by community members
- The sampling frame for the first survey module (NGO questionnaire) was constructed via a mini-census of the NGO population of 14 districts
- The survey sample (298 observations) was drawn from this sampling frame. With 255 questions, the questionnaire is extensive and includes information on funding, ownership, expenditure, assets and governance.

Data

- Communities were selected from a list of six communities which the NGO reported to be working in.
 - The communities were quite small – the 2002 Census reports that the average parish consisted of 4,625 individuals – so it was plausible that the focus group participants would know about an NGO working in their community.
- In each community visited, six to ten focus group participants were recruited via a community leader. This strategy was opted for to ensure comparability and consistency of the community perception variables across NGOs - a relatively simple approach that was easily replicable.
- The first module of the survey (NGO questionnaire) can be matched to 205 of the 268 observations from the second module (community focus groups).

Comparison of Benford's expected prevalence of first digits vs. actual occurrence in Ugandan NGO revenue data



Information reliability index

- Calculating a data reliability index with our NGO survey data proved demanding in terms of the data requirements.
- We used data for both 2002 and 2008, but because we gathered both expenditure and income data in 2002 and only income data in 2008, we were largely reliant on response rates in 2002.
- In 2002 only two thirds of NGOs reported any financial information that we could use for the calculation, and of these 199 that provided financial information in 2002 we only had enough observations to estimate a data reliability index for 63 NGOs.
- Unfortunately, the lack of detailed bookkeeping in the NGO sector constrains the usefulness of Benford's Law for the detection of misrepresentation..

Information reliability index

- Literature cites 100 observations as a minimum value for robust estimations
 - Assuming roughly 10 – 20 financial categories reported per year it would require five to ten years of NGO financial information to reliably detect problems w accuracy of reported information.
- With surveys there is the further complication of potential cheating by fieldworkers – as documented by Finn and Rancchod (2013), Schrapler (2011) and Schafer et al. (2004).
 - We therefore also calculated a data reliability index for each fieldworker.
 - There are 29 observations that have been enumerated by NGOs that appear to have been guilty of cheating, but fortunately only 10 of these NGOs had provided enough financial information to be included in the data reliability index.
 - To ensure that we capture the reliability of the data reported by NGOs and do not confound this with fieldworker cheating, we drop these 10 observations from our index.
 - All tables and regressions reported below exclude these observations

Descriptive analysis

	NGOs with low information reliability index scores	Whole sample
Dishonesty about annual report	0.54	0.50
Dishonesty about community feedback	0.50	0.31
Dishonesty about asking community about needs	0.33	0.31
Perceived value-added by NGO	0.679	0.625
Perceived NGO selfishness	1.5	1.75
Perceived NGO competence	4.58	4.42
Perceived NGO importance	4.33	4.33
Community satisfaction with NGO	4.50	4.14

Descriptive analysis

- Investigate NGOs that appeared to have provided inaccurate financial information that does not conform to Benford's law
 - Sizable and significant relationship with the likelihood to misrepresent requests for community feedback significantly higher for those NGOs with unreliable financial data.
 - However, we find no overlap with misrepresentation of the assessment of community needs.
 - Little evidence of the NGOs being more likely to lack transparency or to have more acrimonious relationships with their beneficiaries
- Not surprising because Olken (2009) shows that community members are imperfect monitors and frequently fail to uncover and detect ineffectiveness and dishonesty.
 - Financial reporting as an important weakness.

Regression analysis

- Following the contributions of Mazar and Ariely (2006) and Martinelli and Parker (2009) on tax evasion, the four main determinants of misrepresentation are:
 - having something to gain from misrepresentation
 - assumed to be precondition
 - reputation gain as motive for misrepresentation
 - likelihood of detection and resulting reputation loss as expected cost of hiding the truth
 - determined by ability or opportunity to hide the truth represented by the extent of imperfect information and the lack of oversight
 - individual taste for misrepresentation
 - approximated via rule-based ethics and religious affiliation

Regression analysis

- First consider the determinants of the availability of data:
 - Use number of staff members classified as professional (skilled) as an exclusion restriction and is positive and significant as expected
 - We find that being a member of an umbrella organisation increases the likelihood that an NGO will report information, perhaps because increase awareness of sectoral norms?
 - Years of existence variables are here interpreted as proxies for reputation and learning about sector norms and thus the positive and significant coefficient is in line with expectations
 - NGOs that have existed for longer are more likely to provide information
 - Rule-based ethics proxies are not significant
 - Describing government as a hindrance decreases the likelihood of the NGO providing information

Availability of reported information

Staff member with a professional qualification	0.03*
Years of existence	0.11*
Years of existence squared	-0.002+
Independent monitoring	-0.49
Visits by funder or NGO Registration Board	1.70**
Financial reporting required by funders?	-0.17
Member of NGO network or umbrella	1.09**
NGO has ever received a grant	-0.82
Government described as a hindrance	-0.78**
Constant	-2.39**
Athrho	-0.80+
Ln(sigma)	3.33**
Number of observations (censored observations)	193 (150)

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$

Notes: These regressions include controls for the size of the organisation, the type of organisation (international, involved in advocacy work, religious affiliation) and managerial characteristics (age, education, how long has manager been with NGO).

Regression analysis

- Umbrella membership does not have a significant relationship with the data reliability index, which may be seen as further (tentative) support for a literature arguing that while peer monitoring may be helpful in many ways, it can be a deficient and weak oversight mechanism (Gugerty, 2008).
- In contrast, we see that while funders requiring accounts as part of routine reporting enhances the reliability of information, it does not promote transparency (providing information to public when requested)
- As expected, a heavier reporting burden (financial accounts required to be submitted with greater frequency during the year) decreases the reliability and accuracy of information provided, but makes no difference to the likelihood of information being provided.
- Having received a grant is interpreted as an important indicator of the orientation and exposure of an NGO and has a negative and significant relationship with the data reliability indicator.

Results: reliability of information

Years of existence	-0.76
Years of existence squared	0.004
Independent monitoring	-5.46
Visits by funder or NGO Registration Board	-14.14
Financial reporting required by funders?	22.79+
How often do funders require financial reporting?	-2.93+
Member of NGO network or umbrella	-11.30
NGO has ever received a grant	-21.50+
Government described as a hindrance	-4.56
Constant	98.44*

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$

Notes: These regressions include controls for the size of the organisation, the type of organisation (international, involved in advocacy work, religious affiliation) and managerial characteristics (age, education, how long has manager been with NGO).

Conclusion

- Encouraging that results are aligned with previous findings
- Our analysis suggests that heavy reporting burden is associated with less reliable data.
- When reporting burden is too onerous, it may encourage cynicism that could obstruct efforts to promote transparency and accountability.
- NGOs with grants more likely to misrepresent financial information
- Membership of NGO umbrellas or networks may raise awareness of norms regarding provision of financial information, but does not necessarily improve reliability of the information provided
- As previous results showed, antagonistic relationship with government increases likelihood of hiding information
- Analysis thus has obvious links to questions around the regulation and monitoring required to safeguard the reputation of the NGO sector and promote ethical and responsible practices

Conclusion

- Research highlights continued problems with a lack of publicly available financial data – both because of a lack of skills and due to concealment
- In promoting transparency, it is important to set realistic goals to ensure that the emerging sector norms are achievable and are widely regarded as important for protecting the reputation and promoting the growth and vitality of the sector.
- Regard these results as tentative because of the small sample of NGOs for which we could derive data reliability estimate
- Sadly, we suspect that Benford's Law will be of limited use as a monitoring tool for donors funding midsized and small NGOs in developing countries (such as those in our sample of NGOs)
- Another obvious deficiency of any data reliability indicator is that it does not deal with concealment through non-disclosure and may thus inadvertently increase the attractiveness of non-disclosure

Next steps

- Expand and deepen analysis with Ugandan data
 - Use second digits and third digit distribution?
- Further analysis
 - Larger data sets with longer time period
 - Guidestar
 - UK Charity Commission financial data