The Political Economy of NGO Service Delivery: Evidence from a Downstream Field Experiment in Uganda

Jeremy Springman*
University of Pennsylvania
Department of Political Science
jspr@sas.upenn.edu

October 1, 2018

PRE-ANALYSIS PLAN

Abstract

Since the 1990s, the presence of NGOs in the developing world has undergone explosive growth, due in large part to sharp increases in international aid and philanthropy received by these organizations. While analyses of specific interventions implemented by NGOs are common, less work has been done to investigate the possible downstream effects that these organizations have on domestic politics. Research on the "fiscal link" between citizens and states and concerns expressed by practitioners on the ground suggest that NGO service delivery could undermine the incentives that drive citizens to be politically engaged. However, recent work on political credit attribution suggests that government actors often receive credit for policies and programs that they are not responsible for. I theorize that the effect of non-state service delivery on engagement is conditioned by credit attribution. To test this theory, this project leverages a large, highly effective, randomized NGO-implemented community health worker intervention in Uganda by surveying 1,600 households across 165 villages that participated the trial. This "downstream" field experiment will identify the long-term effects of providing communities with a substitute for the government-run CHW program. The findings will have implications for our understanding of how service delivery conditions state-society relations and for development aid policy, effective philanthropy practices, and social policy in developing countries.

*This project is receiving support from the National Science Foundation (SES-1747642; $14,996), an anonymous foundation ($38,600), a University of Pennsylvania Penfield Grant ($6,000), the Browne Center for International Politics ($3,000), and an American Political Science Association Centennial Grant ($1,100). This project has completed review by the Mildmay Uganda Research and Ethics Committee (REF 0410-2017), the Uganda National Council for Science and Technology (SS170ES), the University of Pennsylvania Institutional Review Board (REF 828451), and the Office of the President of Uganda.

1 Introduction

Since the 1990s, the role of non-governmental organizations (NGOs) in providing essential goods and services to citizens in the developing world has undergone "explosive growth", due in large part to the sharp increase in international aid and private philanthropy received by these organizations (Brass, 2010). Between 2005 and 2014, the share of bilateral development assistance being channeled directly through NGOs increased more than threefold from about 5% to about 17%. This increase is even more dramatic for countries in Sub-Saharan Africa, where the share of ODA received by NGOs over this nine year period increased from about 5% to nearly 25%. The health sector is an especially large recipient of NGO funding, with more than 50% of total health aid going through non-state actors rather than to recipient government budgets.

NGO service delivery is not typically designed to influence political outcomes, but the distribution of valuable services in resource scarce areas is likely to have political consequences. Service delivery is an extremely salient political issue in Africa. According to the 2014-2015 Afrobarometer survey, health was cited by the majority of Ugandan respondents (54%) as the most important problem for government to address (followed by education at 36%), while health was the second most important problem across the entire sample of 32 African countries (second to unemployment and followed by education). Despite this, a large share of the country's health services are delivered by NGOs.

According to the Uganda Protestant Medical Bureau, non-profit facilities were responsible for 45% of the country's hospital beds and employed $1/3$ of the country's health workers in 2013 (Tumwesigye, 2013). Non-profit facilities operated 31% as many health facilities as government in Uganda in 2016, 26% as many in Kenya in 2018, 17% as many in Liberia in 2012, and 18% as many in Tanzania in 2016. NGOs arguably play an even larger role in the delivery of non-facility based health services: according to interviews with Marie Stopes Uganda staff, the organization estimates that they provided more than 75% of the total Intrauterine Devices distributed in Uganda between 2006 and 2011.

Although political economy research in developed and developing countries has demonstrated that government service delivery promotes political engagement and accountability, there is still little evidence documenting how the provision of parallel welfare services by non-state actors impacts these outcomes. Research on the "fiscal link" between citizens and states and concerns expressed by practitioners on the ground suggest that NGO service delivery could undermine the incentives that drive citizens to be politically engaged. However, recent work on political credit attribution suggests that government actors often receive credit for policies and programs that they are not responsible for. I theorize that the effect of non-state service delivery on engagement is conditioned by credit attribution.

If NGOs receive exclusive credit for the welfare effects of their projects, I expect NGO service delivery to reduce political engagement by weakening the link between government performance and citizen welfare. Furthermore, this decreased engagement on the part of citizens is likely to undermine political incentives to invest in expanding government service delivery. Alternatively, if NGOs share credit for service delivery with government actors, I expect non-state service delivery to increase citizen engagement by improving perceptions of

state capacity and government responsiveness. While increased engagement may strengthen political incentives to provide government services, increased satisfaction with incumbent performance may offset these positive incentives.

This field experiment — conducted downstream from a large and highly effective cluster-randomized community health worker intervention in Uganda — will identify the long-term effects of an NGO service delivery program that provided treated communities with a substitute for a similar government health service.

2 National Context & the Role of NGOs

Uganda is regarded as a quintessential hybrid regime (Tripp, 2010). The President of Uganda—Yoweri Museveni—has been in office since he took power after winning the Ugandan Bush War in 1986. Since 2006, Uganda has conducted multi-party elections for both the Presidency and members of parliament, and although the campaign activities of opposition parties are frequently restricted by the state, correspondence between official returns and independent survey data and extensive election monitoring by international organizations suggests that outright election fraud is limited. Furthermore, Uganda's hybrid political system is one of the most common in the developing world, making it more likely that the political dynamics of non-state service delivery operating in this context can speak to dynamics in other aid-dependent countries (Tripp, 2010; Diamond, 2002).

Uganda also has a long history of non-state service delivery. The first nonprofit health facility was established by Catholic missionaries in 1897, and by most accounts, religious organizations were the dominant provider of essential services during much of the colonial period. After independence, the Government of Uganda took a leading role in service delivery, nationalizing many church-run schools and health facilities and substantially increasing recurrent spending. However, civil war in the 1980s and a brutal insurgency by the Lord's Resistance Army lasting through the early 2000s decimated much of this service delivery infrastructure. These conflicts attracted massive amounts of humanitarian and development aid, while the HIV/AIDS epidemic attracted massive international support to rebuild the country's health sector (Parkhurst, 2004). Today, the country has been one of the top recipients of development aid for several decades and is located in the region with the highest share of official aid bypassing government budgets. These high levels of NGO activity make Uganda a compelling example of what levels of NGO provision may look like for other aid-receiving countries if current trends in aid-channeling persist.

For the purposes of this paper, the term NGO refers to private, non-profit organizations that aim to improve societal well-being through service delivery. This broad definition of NGOs encompasses faith-based "umbrella" organizations (FBOs) which operate a large share of the schools and health facilities in Uganda and many African countries. Some scholars have argued that FBOs and NGOs should be treated separately due to the extensive history and unique operational logic of FBOs (Jennings, 2014). However, interviews with the directors of the two largest FBOs in Uganda and several large international health NGOs suggest that NGOs and FBOs collaborate extensively on service delivery and recognize each other as sharing common goals. This is evidenced by numerous accounts of successful collaboration

between even unlikely partners such as the Uganda Catholic Medical Bureau and Marie Stopes, an international health NGO focused on family-planning.

Although NGOs in developing countries are frequently associated with activism and advocacy, this represents a very small share of overall NGO activity, especially in Sub-Saharan Africa (Salamon et al., 2013, 2003; Robinson and White, 1997).[1] Although these groups — often referred to as civil-society organizations (CSOs) — are undoubtedly important, their objectives and interventions are very different from those of development NGOs, which go to great lengths to present themselves as apolitical (see Grebe (2016) for an account of the steps taken by one of Uganda's largest indigenous health NGOs to remain apolitical). For these reasons, this analysis focuses on service delivery NGOs.

3 Theory

In Western political philosophy, the provision of essential services has been treated as the basis for an implicit contract between states and citizens. This theoretical framework posits a virtuous cycle between taxation, political engagement, and public service delivery: When states levy taxes on the population, citizens demand public services in return. Reliance on citizens for tax revenue gives governments an incentive to promote citizen welfare by providing services, and as citizens come to rely on the state for these services, they gain an incentive to monitor government performance and sanction under-performance. This mutual reliance constitutes a "fiscal link" between state and society.

Fiscal link theories have traditionally assumed that this quasi-contractual relationship is initiated by the state's demand for taxes (Bodea and LeBas, 2014; Levi, 1989; Tilly, 1985). However, in many countries in Sub-Saharan Africa, the majority of citizens are employed outside of the formal economy and pay no direct taxes to government (Drummond et al., 2012). Despite the absence of direct taxation, poorer and rural (and less taxed) citizens in Africa have the highest rates of electoral and non-electoral political participation (Kuenzi and Lambright, 2011; MacLean, 2011) and the expansion of various public services are among the most frequently cited policy areas that citizens want political leaders to address. Taken together, these facts suggest that citizens expect governments to provide services and that the demand for these services is an important factor motivating political engagement even where citizens are not subject to direct taxation.

This project tests a key implication of fiscal link theories: that political engagement is conditioned by the degree to which citizens rely on the state for essential services. To do so, I leverage the random assignment of villages in Uganda to receive an NGO welfare program that operated parallel to a comparable government program. As I discuss later, this NGO

[1] According to a survey of NGOs in 32 countries, only 4% of the NGO workforce sampled worked primarily on advocacy and related activities (Salamon et al., 2003, 2013). Furthermore, the proliferation of legislation monitoring NGO activities and the systematic targeting of politically active NGOs in many countries likely dampens NGO activity in this sector (Christensen and Weinstein, 2013). In many of these countries, obtaining legal status requires that NGOs promise not to engage in political activities. According to data obtained from AidData, $6,455,498,798 of OECD funding through NGOs went to projects primarily focused on service provision, while just $738,476,934 went to projects primarily focused on advocacy or associational activity.

intervention is ideally suited to address the research questions outlined in this proposal for several reasons. Most importantly, this welfare program used an extremely common health intervention widely used by both governments and NGOs and had a large, positive impact on health outcomes in treated communities.

While the importance of government services for state-society relations has been a central topic in political economy, there has been far less investigation into the political effects of service provision by non-state actors (Cammett and MacLean, 2014). Although there is a long history of private actors — including religious charities and community organizations — supplying essential services in both developed and developing countries (Tebeau, 2012; Jennings, 2014), this question has gained renewed relevance due to the rise of development NGOs. Why focus on NGOs? In response to under-provision of essential services, both NGOs and for-profit organizations step in to fill gaps between citizen needs and access. However, I argue that NGOs' sociotropic preferences give them a unique ability to substitute for the state. By providing subsidized care to needy individuals and households, NGO projects often mimic state programs in a way that other private actors cannot (Meessen et al., 2011).

According to existing theories of political development, the availability of substitutes for state provided public services should reduce individual propensity to be engaged with politics. However, I argue that the effect of substitutes for state services on engagement is likely to be conditioned by contextual factors, specifically, how citizens assign credit for these services. If citizens attribute credit for an NGO provided service to the NGO exclusively, the proliferation of NGO services may depress political engagement. This explanation for engagement is intuitive; citizens that have more to lose/gain from changes in government policies have greater incentives to be engaged and to exercise political voice (Pierson, 1993). As the share of essential services provided by government decreases, so too do the expected returns to engagement. Similarly, if the presence of NGO services are interpreted as a signal of the state's inability to provide services independently or as apathy toward citizens' needs and demands, NGO service delivery may cause citizens to negatively update their perceptions of state capacity or responsiveness, further limiting the expected returns to engagement.

It is also possible that the availability of NGO substitutes will displace rather than reduce citizen engagement. Interviews with several NGO directors suggest that citizens dedicate significant effort to lobbying NGOs for improvements or expansions of their service delivery efforts. When NGOs provide key services that individuals rely on, it would be natural for citizens to direct requests and complaints, and perhaps their use of voice more generally, toward these organizations. Citizens may also develop preferences for services that are delivered by NGOs over comparable services provided by government agencies and may therefore be less likely to make claims on government for those services. This would comport with widespread perceptions that services provided by NGOs are of dramatically higher quality than those provided by the state (Katusiimeh, 2015; Meessen et al., 2011).

If outsourcing service delivery reduces political participation through any of these channels, disengagement threatens to be self-reinforcing. When citizens reduce public pressure on governments to expand access to services, governments are likely to respond by providing fewer services. Reducing the supply of government services then will not only damage citizen welfare and slow economic development, but will also forego the additional engagement that

access to these services would have encouraged.

Alternatively, if citizens attribute credit to government actors for the production, distribution, or welfare effects of NGO services, the proliferation of these services may cause citizens to positively update their beliefs about government responsiveness or state capacity, increasing the expected returns to political engagement. Because NGOs typically brand their service delivery activities, it is unlikely that citizens are entirely unaware of their involvement in service delivery projects.[2] However, it may be the case that citizens attribute credit to government actors because these actors (especially politicians operating at the local level) actively claim credit for their implementation or distribution. Similarly, citizens may see the procurement of external support as a key part of governing and reward government actors for attracting NGO projects. Because decisions regarding the location of NGO projects are typically unobservable to citizens, government actors may receive credit for project allocation even when they have no influence over the outcome. Finally, citizens may reward government actors for improvements in welfare that result from NGO activities, regardless of the specific cause of these improvements.

If citizens attribute credit for NGO service delivery programs to government actors, I argue that this is likely to cause increases in political engagement. In turn, higher levels of engagement in communities that receive NGO projects may cause governments to make complementary investments by increasing access to government services in these communities. However, improved perceptions of government performance or increased support for incumbent politicians resulting from credit attribution are likely to offset pressure from increased engagement.

While I expect political credit to increase political engagement in treated communities, there is at least one reason to expect that NGO service delivery could reduce political engagement even in contexts where government actors receive credit for non-state services. As citizens receive access to more welfare services, increases in individual welfare may result in diminished socio-economic grievances. If the intervention being evaluated has a substantial impact on welfare in treated communities, by narrowing the gap between citizen needs and access, the intervention may reduce the expected returns to political participation.

Similarly, even if governments receive partial credit for NGO activities, positive experiences with the CHP intervention may persuade citizens that NGOs should play a larger role in the delivery of health services. In this scenario, engagement with government may increase simultaneously with engagement with NGOs, and citizens may desire government to continue working to attract and monitor NGOs but may prefer that government cede ground to NGOs in the delivery of services.

Using original survey data and a two novel behavioral measures, this project will test the effect of NGO service delivery activities on citizen engagement and provide evidence for the contextual mechanisms that I expect to condition these effects. This project will also collect village-level data on service delivery to investigate the downstream consequences of any changes in levels of political engagement for the quality and extent of government provided

[2] See this article by Gyude Moore discussing the practice and potential consequences of aid branding in fragile states.

services in treated communities.

4 State of Knowledge

Existing research linking service delivery and political engagement and research into the political effects of non-state service delivery provide conflicting expectations for the impact of non-state service delivery on political engagement. Research from developed and developing countries provides evidence that reliance on government-provided services drives a great deal of civic engagement. In the United States, citizens that rely more on government services are more informed about political issues surrounding these services, are more likely to contact government officials about these services, and participate more in politics generally than those who rely less on the same services (Campbell, 2003; Wolfinger and Rosenstone, 1980). Similarly, using survey data from 18 African countries in 2006, MacLean (2011) finds that individuals that reported contact with a public school or health clinic within the past year had significantly higher levels of both electoral and non-electoral political participation than those with no contact, and they were more likely to have engaged with state rather than non-state actors relative to those with no contact. Research from the UK and US finds that expanded access to universal welfare programs increase political engagement across a variety of measures while conditional programs have the opposite effect (Watson, 2015; Bruch et al., 2010; Soss, 2002). Assuming that citizens attribute credit for NGO projects to NGOs themselves rather than to government actors, this literature bolsters expectations that by reducing citizen reliance on government services, the proliferation of NGOs is likely to reduce levels of political engagement.

Service delivery also shapes engagement through its impact on perceptions of state capacity. In DR Congo, Weigel (2017) finds that residents of neighborhoods randomly assigned to increased tax collection were significantly more likely to attend townhall meetings and contact government offices. In the study, tax collection increased perceptions of state capacity which increased expected returns to political participation. If the proliferation of NGOs signals a lack of state capacity to deliver services, NGO programs may demobilize citizens.

Soss (1999) provides evidence that citizens generalize from their experiences with government service delivery programs to make inferences about "how government works more generally". According to this model, positive experiences with government programs signal that government is responsive and that political engagement is likely to be productive. Although studies have investigated how positive and negative experiences with government programs condition engagement (Swartz et al., 2009), it is not clear what lessons citizens may draw from contact with nonprofit service providers. Citizens with positive experiences of NGOs may be likely to direct political engagement to NGOs and away from government actors; however, if citizens believe that NGO services are jointly produced with government agencies, these positive experiences may cause citizens to positively update their beliefs about government capacity or responsiveness.

A separate body of work has investigated the impact of foreign aid on support for incumbent politicians. Research in the Philippines and Bangladesh has shown that local politicians can benefit from foreign aid projects by claiming credit among their constituents (see Cruz and

Schneider (2016) and Guiteras and Mobarak (2015) for undeserved credit-claiming linked to government and NGO-implemented aid projects, respectively). This was true even though politicians had no role in project allocation or implementation in either project, but only when project allocation was unobservable to constituents (Guiteras and Mobarak, 2015). These findings correspond with work in the United States showing that national politicians are frequently punished/rewarded for the welfare effects of policies and events that are beyond their control (Sances, 2017; Healy et al., 2010a,b).

Recent work has also investigated how non-state service delivery impacts state legitimacy. Drawing on extensive evidence drawn from interviews and original survey data, Brass (2016) finds that individuals with higher trust in NGOs have more trust in government and shows that in the minds of citizens (and often in practice), the line between state agencies and NGOs is often thoroughly blurred, especially in rural areas. Sacks (2011) draws on Afrobarometer data from 17 countries in 2008 to show that views of NGO effectiveness, government effectiveness, and state legitimacy are positively correlated. Relatedly, survey experiments in Liberia and Bangladesh find that informing respondents that development programs are funded by foreign aid has a null or positive impact on perceptions of government legitimacy (Dietrich et al., 2018; Blair and Roessler, 2016; Dietrich and Winters, 2015). It is important to note that these studies focus on perceptions of foreign aid rather than NGOs. Also, the experimental treatment used in these studies relies on the provision of information that citizens may not encounter in the real world or which may not be salient in the absence of an artificial experimental manipulation. For this reason, I believe that the utility of lab or survey experiments to investigate the political consequences of NGO service provision are limited.

Taken together, these findings suggest that although reducing citizen reliance on government services is likely to undermine citizen engagement in some contexts, a growing body of results suggests that political credit for NGO and aid-funded service delivery frequently accrues to government actors in developing countries. For these reasons, the relationship between non-state service delivery and political engagement is likely to be more complicated than a naive application of fiscal link theories would predict. If the state receives credit for NGO service delivery efforts, I expect to see a positive effect of the treatment on political engagement with government actors and institutions. If citizens believe the state was partially responsible for their access to NGO services, I expect them to positively update their beliefs about state responsiveness, state capacity, or both. As perceptions of responsiveness or capacity rise, so should the expected returns to engaging with the state.

Alternatively, if credit for NGO service delivery goes primarily to NGOs themselves, I expect to see a decrease in these indicators of political engagement (with the possible exception of contentious participation) as citizens become less reliant on government services or come to see government actors as less responsive or capable. As mentioned in the previous section, it is also conceivable that access to new services could reduce political engagement even if the state receives credit for the intervention. Ongoing work from Dodlova (2016) finds that government-run conditional cash transfer programs in Mali and Ghana reduced political participation by increasing individual welfare and reducing socio-economic grievances. The logic here implies that as the gap between citizen needs and access shrink, so too does

the expected returns to political participation. Although this expectation is theoretically grounded, it is in tension with the dominant literature on government service delivery and political engagement.

5 Intervention & Downstream Evaluation

To address these questions, I leverage random assignment of villages in Uganda to receive a large NGO health program that operated parallel to a comparable government program. In 2001, the Ugandan government adopted a community health worker (CHW) strategy to act as a "bridge in health service delivery between community and health facilities" (Ministry of Health, 2015). Volunteers are recruited to form Village Health Teams (VHT) that receive training according to guidelines established by the Ministry of Health and are overseen by nearby government health facilities. While each village is supposed to have a functional VHT, in reality, some are defunct and many VHT members are under-trained.

Living Goods (henceforth LG) is an international NGO that uses an innovative CHW program to increase access to basic health services in Uganda and Kenya and aims to provide services to 50 million people over the next 10 years. While government VHTs and the LG Community Health Promoters (CHPs) program are designed with similar objectives, LG CHPs are equipped with superior training and offer a wider array of health-related goods and services. The LG model recruits and trains CHPs to diagnose and treat childhood illnesses, refer individuals to nearby health facilities, and earn an income by selling preventive and curative health products at highly subsidized rates. Products are sold for at least 20% below market value, and CHPs purchase products at 30-50% below market value allowing them to earn a small profit from sales. CHPs are trained to operate as micro-entrepreneurs, building their customer base by making home visits to provide free services and checkups and receiving small performance bonuses (approximately $0.65) for visiting households with pregnant women or newborn babies. These financial incentives were incorporated in order to reduce the need for active monitoring, which previous research suggests is necessary for CHW interventions to be effective (Nyqvist et al., 2018).

Between 2011 and 2014, LG carried out a cluster-randomized trial (CRT) in 214 villages (115 treatment and 99 control) encompassing more than 50,000 households in 10 districts across Uganda. CHPs were selected competitively from female (ages 18 - 45) applicants with basic writing and math skills. Eligible candidates received two weeks of training before taking a skills test to determine who would be selected, after which selected candidates received one-day training sessions every month. Nyqvist et al. (2018) used a cross-sectional survey of 8,119 households to measure the effect of the program on all-cause under-five mortality. After finding a 27% reduction in child mortality in treatment villages, LG is implementing a scaled-up CRT in 500 new villages. During the study period, the average LG CHP spent two days per week working as a health promoter, conducting 10 household visits per day and working eight hours per week. CHPs reported revisiting 13% of households each month and 48% of CHPs reported visiting a new household in the month before endline data collection. CHPs also reported arranging on average 1.5 health education meetings per month in their villages, and in treatment villages, 23% of households reported being visited by a CHP in the 30 days preceding the endline survey.

Because the LG model is financially sustainable, the program has operated continuously in treatment villages since 2011, while many villages in the control arm remain untreated. This ongoing treatment provides an opportunity to conduct a "downstream" analysis of the intervention, analyzing its impact on a new set of outcomes not considered by Nyqvist et al. (2018). A downstream survey evaluation provides several advantages for the internal validity of this study. First, a downstream evaluation will measure long-term effects of the intervention. Although changes in health outcomes considered by the original evaluation were expected to manifest rapidly after the introduction of new services, changes in political attitudes and behavior may require prolonged exposure to changes in service delivery. Second, the original evaluation assures that the intervention improved health outcomes by providing a substitute for government VHTs, satisfying a theoretical assumption that NGO services successfully improve welfare. Finally, the original evaluation documents that treatment spillovers into control villages were minimal, migration into treatment and control villages was similar, and households in treatment and control clusters were balanced on a wide-range of social and economic characteristics.

In addition to a household survey, village-level data will be collected from interviews with local government officials (LC1) in each village documenting NGO activity and the government investments in service delivery and infrastructure. This village-level data will be used to assess whether treatment villages receive complementary investments in service delivery at higher (or lower) levels than control villages. Using an original survey, village-level data on service delivery, and two behavioral measures, this project will measure the impact of the CHP intervention on one primary outcome— *political engagement* – -and five secondary outcomes that I expect to condition the effect of the intervention on political engagement: *credit attribution, perceptions of government responsiveness, perceptions of state capacity, expectations of government, and complementary investments*. In addition to these outcomes of interest, I will also investigate several alternative mechanisms and explanations, including *policy priorities, substitution, provider salience, deprivation, levels of trust, and social capital*.

6 Hypotheses & Outcomes of Interest

In this section, I describe the specific hypotheses being tested and the primary and secondary outcome measures that will be used to test these hypotheses. For each hypothesis, I present the survey questions that will be used to test it. I specify primary and secondary outcomes in advance; primary outcomes are those that will be interpreted as the strongest evidence for each hypothesis and secondary outcomes represent measures that are either less likely to be affected by the treatment or present less strong evidence in favor of the hypothesis under consideration.

To address concerns about multiple hypothesis testing (MHT), measures of related outcomes testing the same hypothesis will be combined to create an averaged z-score index. The z-score index is constructed by subtracting the mean of the control group and dividing the variable by the standard deviation of the control group. The averaged z-score index is the constructed by averaging across z-scores. Because some null hypotheses will be considered rejected if one of several possible measures are significant, I will report both standard p-values and MHT

corrected p-values in these cases. I adopt the less conservative Romano-Wolf correction for two reasons. First, the statistical power of this study is necessarily limited by the number of control clusters available. Romano-Wolf incorporates the dependence structure between outcomes and increases statistical power when dependence is present. Second, I am planning to replicate this study in a new sample drawn from an ongoing and scaled-up RCT of the same intervention. While the current study is not designed to be exploratory, identifying true hypotheses for replication is one anticipated contribution.

I will begin by testing the effect of the intervention on political engagement by estimating equation 1. I will then proceed to explore the mechanisms driving this effect or look for reasons why we do not find support for the theory being tested by re-estimating equation 1 and redefining the outcome variable for each of the secondary outcomes. If the treatment affects political engagement through its impact on these secondary outcomes, then we should also see an effect of the treatment on these outcomes.

6.1 Political Engagement

Khemani and de la Banque mondiale (2016) define political engagement as the "participation of citizens in selecting and sanctioning the leaders who wield power in government". Behaviors associated with political engagement are intended to enforce political accountability and can range from voting in an election to joining a protest. I focus on four types of political engagement in this study: information production (communicating directly with government institutions or actors), information consumption (political knowledge, news consumption), electoral participation (voting, attending a campaign rally, working for a party or candidate), and contentious actions (contacting the media[3], attending a protest). To measure the impact of the intervention on these types of political engagement, I include survey questions asking about behaviors associated with each type of engagement.

To overcome the limitations of self-reported measures, I will use a behavioral measures of engagement to back-up self-reported data on the primary outcome measures. First, I will present respondents with an opportunity to send a message to either government health agencies (described to respondents as "the Ministry of Health and your District Health Office") or to an unspecified NGO in their district (described to respondents as "a large health NGO with offices in Kampala and in your district"). This open-ended survey question will capture both the willingness of respondents to engage health service providers and whether respondents prefer to engage with state or non-state institutions. At the end of the survey, field officers will read the following script:

> *We have now collected all the information that we need. If you choose, we can end the survey right now and you will receive your compensation for participating in the survey. However, if you are willing to give us five more minutes of your time, we are collecting anonymous messages that will be sent to health service providers in your district. This is meant to provide you with the opportunity to describe what actions you believe should*

[3] It may seem odd to classify contacting the media as contentious participation. However, this strategy is likely to be used when citizens feel that contacting decision-makers directly is unlikely to yield results and they instead opt to effect change by spreading discontent.

be taken to improve health in your community. You may choose for a message to be sent to health agencies including the Ministry of Health and District Health Office or to a large health NGO operating in your district. If you would like to send a message, I will write down your message while you read it to me. When survey operations are complete, all messages will be sent anonymously to the group that you select. Would you like to give us five more minutes of your time so that you can send an anonymous message to a health service provider in your district?

By making clear that the survey is complete and respondents may take their compensation immediately, this measure imposes a direct cost on survey participants in the form of both time and mental energy. For this reason, I expect respondents to take up this opportunity to the extent that they perceive one of these institutions to be *responsive* to input from ordinary citizens and have the *capacity* to act on this input. Taking the time to conceive and report an open-ended question requires significantly more time and mental energy than answering a discrete survey question or signing a petition (another popular behavioral measure that relies on an anticipated social cost). This open-ended response also avoids excluding those without access to a mobile phone or carrier credits (as do behavioral measures that rely on SMS).

By collecting responses to an open-ended question, there is also the opportunity to measure not just whether respondents choose to send a message, but also the length and content of the message being sent. Responses will be translated into English (to harmonize across languages) and word count will be used as a measure of engagement intensity. To measure engagement with government, respondents that choose not to send a message or to message the NGO will be coded as zero while the value for those that message to government will be the word count. For the hypothesis testing engagement with NGOs, this coding process will be reversed.

Hypothesis 1 *Access to the treatment will increase engagement with government.*

Primary Outcomes:

To increase statistical power, I will consider all primary outcomes in a single index to be tested without a corrected p-value. To probe the results, I will then present the components separately both with and without corrected p-values.

1. Behavioral measure: Contact with Government
2. Information production index (Government contact)
    (a) During the past twelve months, have you or a family member contacted [...] about an issue with health service delivery in your community? [A Constituency MP; A local Councilor (including District, Subcounty, or Village Councilors); A government agency in Kampala (Ministry of Health); A district health official (DHO, Health Inspectors)]? [Never; Once or twice; More than twice; More than five times; More than ten times]
    (b) Here is a list of actions that people sometimes take as citizens. For each of these, please tell me whether you or a family member have taken any of these actions

during the past twelve months. [Attended a community meeting; Raised an issue at a community meeting] [Never; Once or twice; More than twice; More than five times; More than ten times]?

(c) Here is a list of actions that people sometimes take when they are dissatisfied with conditions in their community. For each of these, please tell me whether you or a family member have taken any of these actions during the past twelve months [Contacted a government official to ask for help or make a complaint]? [Never; Once or twice; More than twice; More than five times; More than ten times]

Secondary Outcomes:

While electoral participation is an important indicator of political engagement, elections are a referendum on a very broad range of economic and societal issues which may drown out the impact of the treatment on this type of behavior. For this reason, I see electoral participation as less directly related to the treatment. Despite the weaker expectations that the treatment will effect these measures, I expect that they will move in the same directions as the other measures of engagement with government.

I include a series of questions asking about contentious modes of political participation. I consider contentious participation to include activities that involve bypassing direct channels of providing input to government actors (attending local council meetings, contacting elected officials and government agencies). I argue that contentious participation should increase as perceptions of responsiveness or capacity of political actors decline, so these indicators should move in the opposite direction of those measuring direct engagement with government (DiLorenzo, 2018).

1. Electoral participation index[4]

   (a) Did you cast a vote in the [2016 Election; 2011 Election; 2006 Election]?

   (b) In the [2016 Election; 2011 Election; 2006 Election], did you work for a candidate or party?

   (c) In the [2016 Election; 2011 Election; 2006 Election], did you attend a campaign rally? [Never; Once; Multiple times]

2. Contentious participation index

   (a) Here is a list of actions that people sometimes take when they are dissatisfied with conditions in their community. For each of these, please tell me whether you or a family member have taken any of these actions during the past twelve months [Never; Once or twice; More than twice; More than five times; More than ten times]? [Contacted the media, like calling a radio program or writing a letter to a newspaper; Participated in a demonstration or protest march; Refused to pay a tax or fee to government]

[4] Because these questions capture behavior before and after the intervention, the estimation will change slightly from the analyses for other questions by using a difference-in-differences model.

I have also argued that receiving services from an NGO may cause citizens to engage more with NGOs, especially if NGOs receive most of the credit for their interventions. This increased engagement with NGOs could be at the expense of engagement with government actors or could increase jointly with or independently from changes in engagement with government. The following measures test this expectation.

Hypothesis 2 *Access to the treatment will increase engagement with NGOs.*

1. Behavioral measure 1: Contact with NGO
2. Information production index (NGO contact)
   (a) During the past twelve months, have you or a family member contacted [...] about some pressing problem to give them your views [An NGO]? [Never; Once or twice; More than twice; More than five times; More than ten times]
   (b) Here is a list of actions that people sometimes take as citizens. For each of these, please tell me whether you or a family member have taken any of these actions during the past twelve months. [Never; Once or twice; More than twice; More than five times; More than ten times]? [Attended an event organized by an NGO]
   (c) Here is a list of actions that people sometimes take when they are dissatisfied with conditions in their community. For each of these, please tell me whether you or a family member have taken any of these actions during the past twelve months [Never; Once or twice; More than twice; More than five times; More than ten times]? [Contact an NGO to ask for help or make a complaint]

6.2 Credit Attribution

While traditional political economy theories predict that the availability of substitutes for government services — such as those provided by NGOs — will undermine citizen engagement, I expect that if governments receive credit for the availability of these substitutes, engagement is not likely to decrease and may even increase in response to NGO services. To test this conditional theory using the CHP intervention, I ask a series of questions about the perceived influence of government actors on NGO projects.

These questions ask respondents directly about their perceptions of the ability of government actors to attract and oversee NGO projects. If citizens attribute credit to government actors for NGO activities, I expect receiving the treatment to improve perceptions of these abilities in treatment villages. Unfortunately, this measure is likely to be noisy because villages have considerable variation in their exposure to other NGO service delivery activities beyond those provided by LG. For this reason, I intend to include a control variable for the number of NGO projects that respondents' report having knowledge of in their community.[5] Due to the noise caused by variation in access to other NGO services, this measure may fail to detect credit attribution. However, these questions will still provide valuable descriptive information on

[5] It is possible, though unlikely, that the CHP intervention caused a crowding-out effect on other NGOs. In this case, the inclusion of this control would induce severe post-treatment bias *against* finding a positive effect (Acharya et al., 2016). For this reason, this model will be run with and without this covariate.

the role that citizens believe government actors play in the allocation and oversight of NGO projects in their communities.

Hypothesis 3 *Receiving the treatment will increase perceptions that government actors have influence over NGO service delivery*

Political Credit Attribution:

1. Influence Index
    (a) How much do you think your [. . .] helped to bring NGOs to your community? [Constituency MP has; District Chairperson has; Local Councilors (including District, Subcounty, or Village Councilors) have; Civil servants in Kampala have; Civil servants in your district have]? [None; A little; Some; A lot]
    (b) How much do you think your [. . .] helped to plan or oversee NGO projects in your community [Constituency MP has; District Chairperson has; Local Councilors (including District, Subcounty, or Village Councilors) have; Civil servants in Kampala have; Civil servants in your district have]? [None; A little; Some; A lot]
    (c) How much power do you think [. . .] over where NGOs decide to put their projects and services [The president has; Your Constituency MP has; Your District Chairperson has; Your Local Councilors (including District, Subcounty, or Village Councilors) have; Civil servants in Kampala have; Civil servants in your district have]? [None; A little; Some; A lot]

If government actors receive credit for NGO projects, and citizens consider this to be part of their job, I expect NGO service delivery to cause improved perceptions of government performance. I include a series of questions asking respondents to rate their satisfaction with the performance (generally and specifically regarding health) of relevant political actors.

Hypothesis 4 *Access to the treatment will improve perceptions of government performance.*

Primary Outcomes:

1. Health performance index (elected 2011)
    (a) Thinking back to before the 2016 election, how satisfied or dissatisfied were you with the way [. . .] did their job in providing health services [Your Constituency MP; Your District Chairperson; Your Subcounty Chairperson]? [Very dissatisfied; Dissatisfied; Neither satisfied nor dissatisfied; Satisfied; Very satisfied]
2. General performance index (elected 2011)
    (a) Thinking back to before the 2016 election, how satisfied or dissatisfied were you with the way [. . .] did their job in general [Your Constituency MP; Your District Chairperson; Your Subcounty Chairperson]? [Very dissatisfied; Dissatisfied; Neither satisfied nor dissatisfied; Satisfied; Very satisfied]

Secondary Outcomes:

While the primary outcome measures focus on the performance of elected officials who held office when the CHP intervention was initially introduced to treated villages, these secondary outcome questions focus on elected officials who may have entered office after the intervention. For this reason, I consider them less likely to be affected by the intervention.

1. Health performance index (current)
    (a) Are you satisfied or dissatisfied with the way [. . .] currently doing their job in providing health services? [The president is; Your constituency MP is; Your local councilors (including District, Subcounty, or Village Councilors) are; Government health agencies are; NGOs working in Uganda are]? [Very dissatisfied; Dissatisfied; Neither satisfied nor dissatisfied; Satisfied; Very satisfied]
2. General performance index (current)
    (a) Are you satisfied or dissatisfied with the way [. . .] currently doing their job in general? [The president is; Your constituency MP is; Your local councilors (including District, Subcounty, or Village Councilors) are; Government health agencies are; NGOs working in Uganda are]? [Very dissatisfied; Dissatisfied; Neither satisfied nor dissatisfied; Satisfied; Very satisfied]

If individuals generalize from their experience with the CHP intervention, I expect to see that individuals living in treated villages have higher perceptions of the performance of NGOs in the country.

Hypothesis 5 *Access to the treatment will improve perceptions of NGO performance.*

1. Health performance index (NGO)
    (a) Are you satisfied or dissatisfied with the way [. . .] currently doing their job in providing health services? [NGOs working in Uganda are]? [Very dissatisfied; Dissatisfied; Neither satisfied nor dissatisfied; Satisfied; Very satisfied]
2. General performance index (NGO)
    (a) Are you satisfied or dissatisfied with the way [. . .] currently doing their job in general? [NGOs working in Uganda are]? [Very dissatisfied; Dissatisfied; Neither satisfied nor dissatisfied; Satisfied; Very satisfied]

6.3 Perceptions of Responsiveness

I identify changes in respondents' perceptions of government responsiveness — resulting from receiving credit for NGO projects — as a likely mechanisms driving changes in political engagement. The large positive effect of the CHP intervention on health outcomes indicates a clear need for improved health services at the community level. Furthermore, in the 2014-2015 Afrobarometer survey, health was cited by the majority of Ugandan respondents (54%) as the most important issue for government to address. If government actors or institutions are credited with attracting the LG project to treated communities, their efforts to attract these services may be interpreted as responsiveness to citizen needs and policy preferences. The more responsive a target of engagement is seen as being, the higher the expected returns

to engaging should be. To measure responsiveness, I ask respondents to report whether they believe that they could influence the actions of government actors and how effective various lobbying activities directed at government would be.

Hypothesis 6 *Access to the treatment will increase perceptions of government responsiveness.*

1. Service Delivery Responsiveness index
    (a) Imagine that you felt strongly about an issue related to service delivery in your community. For each of these, please tell me how effective you would expect this action to be in addressing the issue [Raising the issue at a community meeting; Contacting a government official to ask for help or make a complaint; Contacting the media, like calling a radio program or writing a letter to a newspaper; Participating in a demonstration or protest march]. [Not at all; Not very; Somewhat; Very]
2. General Responsiveness index
    (a) After each statement, tell me if you agree or disagree: "People like me can do things that can have an influence on the actions of [My constituency MP; My District Chairperson, My local Councilors (including District, Subcounty, or Village Councilors); A government agency in Kampala; A government agency in my district]". [Strongly Disagree; Disagree; Neither Agree nor Disagree; Agree; Strongly Agree]

I also ask the same battery of questions for people's beliefs about NGOs. If individuals have a positive experience with the CHP intervention and believe that LG is responding to their needs rather than operating for selfish reasons, I expect treated villages to have more positive beliefs about NGO responsiveness generally.

Hypothesis 7 *Access to the treatment will increase perceptions of NGO responsiveness.*

1. After each statement, tell me if you agree or disagree: "People like you can do things that can have an influence on the actions of [An NGO]". [Strongly Disagree; Disagree; Neither Agree nor Disagree; Agree; Strongly Agree]
2. Imagine that you felt strongly about an issue related to service delivery in your community. For each of these, please tell me how effective you would expect this action to be in addressing the issue [Contacting an NGO to ask for help or make a complaint]. [Not at all; Not very; Somewhat; Very]

6.4 Perceptions of Capacity

I also identify changes in respondents' perceptions of government capacity as a possible mechanisms driving changes in political engagement. If government actors or institutions receive credit for NGO projects, their ability to procure or co-produce these services may cause improved perceptions of government capacity. As with responsiveness, the more capable a target is seen as being, the higher the expected returns to engaging. To measure respondent

perceptions of government capacity, I ask respondents whether they agree or disagree with statements asserting that government's ability to carry out a health-related task that it sets out to accomplish.

Hypothesis 8 *Access to the treatment will increase perceptions of government capacity.*

1. Thinking hypothetically, if your district wants to provide health services to everyone in your district, it will do this efficiently? [Strongly Disagree; Disagree; Neither Agree nor Disagree; Agree; Strongly Agree]
2. Thinking hypothetically, if the national government wants to provide health services to everyone in the country, it will do this efficiently? [Strongly Disagree; Disagree; Neither Agree nor Disagree; Agree; Strongly Agree]

Alternatively, if NGOs receive credit for their services, I expect the treatment to increase respondent perceptions of NGO capacity.

Hypothesis 9 *Access to the treatment will increase perceptions of NGO capacity.*

1. Thinking hypothetically, if NGOs want to provide health services to everyone in the country, they will do this efficiently? [Strongly Disagree; Disagree; Neither Agree nor Disagree; Agree; Strongly Agree]

To measure capacity on a relative scale, I ask respondents to estimate the share of services in the country provided by state and non-state actors. This question is designed to tap into beliefs about the role that these actors are currently playing in service delivery throughout the country.

Hypothesis 10 *Access to the treatment will increase perceptions of the share of services in the country that are provided by NGOs.*

1. Here are ten tokens. Think of these ten tokens as representing all the money spent providing health services at health clinics and hospitals that benefited ordinary citizens in Uganda in the last twelve months. How many of the tokens do you think were spent by [. . .]? [The government; Christian and Islamic organizations (Catholic Medical Bureau, Muslim Medical Bureau, etc.); NGOs working in Uganda]
2. Here are ten tokens. Think of these ten tokens as representing all the money spent providing free health services outside of health clinics and hospitals (such as mobile health clinics or the distribution of mosquito nets) that benefited ordinary citizens in Uganda in the last twelve months. How many of the tokens do you think were spent by [. . .]? [The government; Christian and Islamic organizations (Catholic Medical Bureau, Muslim Medical Bureau, etc.); NGOs working in Uganda]
3. Here are ten tokens. Think of these ten tokens as representing all the money spent providing free education services that benefited ordinary citizens in Uganda in the last twelve months. How many of the tokens do you think were spent by [. . .]? [The government; Christian and Islamic organizations (Catholic Medical Bureau, Muslim Medical Bureau, etc.); NGOs working in Uganda]

6.5 Citizen Expectations

Finally, I turn to the issue of expectations. While questions about responsiveness capture government's motivation to respond to citizen demands and questions about capacity capture perceptions of government's ability to complete tasks that it sets out to accomplish, expectations capture what respondents want governments to do (which likely depends partially on perceptions of both government responsiveness and capacity). If respondents in treatment communities have had a positive experience with the CHP intervention, this may cause a shift in respondents' preferences about who provides essential services. This could be due either to superior quality of the services provided or an impact on the normative expectations of the state.

Hypothesis 11 *Access to the treatment will increase expectations of NGOs.*

To test this using a behavioral measure, respondents will be given the opportunity to vote on the allocation of a donation that will be made by the research team at the end of the study. After the survey is complete, field officers will read the following script:

> *The research team working on this project will donate 500,000 USh to a community health worker program as a token of our appreciation for your time. We would like your help in deciding how we distribute this money. You may recommend for us to donate this money to either a Village Health Team fund or to the Living Goods/BRAC Community Health Promoter Program to facilitate their activities, or you may recommend that we give some portion of these funds to each of them. After the conclusion of this survey, we will count all of these recommendations and donate the money according to these recommendations.*
>
> *Village Health Teams are a government program with a mandate to strengthen access to and provision of quality health services to individuals, households and communities through active engagement and participation of individuals and communities. The Living Goods/BRAC Community Health Promoter program is a large NGO program offering free health services and affordable health products to citizens throughout Uganda and in your district. The goal of Living Goods/BRAC CHP program is to build a sustainable distribution platform for health products and services that are designed to fight poverty and disease in Uganda.*
>
> *Here are ten tokens. Each token represents 50,000 USh. Please allocate these tokens based on which program you think would be more beneficial. How many of these tokens do you think we should donate to each program?*

This donation opportunity measures respondent preferences by allowing them to vote on the allocation of real money to either an NGO or government-run CHW program (or a combination of the two). I expect respondents to choose to allocate these resources according to their preferences between services from these two providers.

Even if politicians receive credit for the CHP intervention, it may be the case that a positive experience with the program might normalize a reliance on NGOs. In this scenario, citizens may prefer that NGOs play a larger role in service delivery. To measure individual expectations of government, I will ask respondents to rank the importance of NGOs and government

in improving living conditions and to report their attitudes toward the optimal roles of these providers in the nation's healthcare system. I will create an index for each category listed below, with higher values indicating higher expectations of NGOs.

Expectations index (NGOs vs. Government)

1. Behavioral measure
2. Several different types of groups work to provide essential health care services to citizens in Uganda. These include governments and non-profit organizations such as NGOs and Christian and Islamic organizations (Catholic Medical Bureau, Muslim Medical Bureau, etc.). Which of the following statements is closest to your view? [It is better if government provides most of the health care in the country and non-profits play a minimal role.; It is better if non-profits provide most of the health care in the country and government plays a minimal role.]? [Strongly agree with A; Agree with A; Agree with neither; Agree with B; Strongly agree with B]
3. Which of the following statements is closest to your view [The government should both pay for and provide health services.; The government should pay for, but non-profits should provide health services.; Non-profits should both pay for and provide health services.]? [Strongly agree with A; Agree with A; Agree with B; Strongly agree with B; Agree with C; Strongly agree with C]
4. When it comes to NGOs or the government, which do you think will do a better job of addressing concerns related to development in your community? [NGOs will do a better job than government; Both will do about an equally good job; Government will do a better job than NGOs; Neither will do a good job]

6.6 Complementary Investments

Hypothesis 12 *Access to the treatment will increase government investments in service delivery and related infrastructure.*

If the CHP intervention caused a substantial increase/decrease in citizen engagement, this is likely to have consequences for government's willingness to investment in local service delivery. Because service delivery and infrastructure are reported as the top priority of Ugandans, decreased engagement should result in fewer demands being made on government to make these investments. Alternatively, if engagement increased, more demands are likely being made for these investments in treated villages.

To measure whether the government has made greater/lesser investments into services and infrastructure in treated villages, this project will collect village-level data on whether and when each village received access to basic infrastructure. For each village, I track the introduction of electricity, sewage, piped water, and upgraded roads. I will create an index of the questions below; variables will take a value of one if infrastructure was improved during in the post-treatment period.[6]

[6] Because these questions capture investments before and after the intervention, the estimation will change slightly from the analyses for other questions by using a difference-in-differences model.

1. Upgraded Infrastructure[7] (Village-level Data)
   (a) In what year did this village receive access to the electricity grid?
   (b) In what year did this village receive access to the sewage system?
   (c) In what year did this village receive access to piped water source?
   (d) Has this road been upgraded in the last ten years? [Record year]

7 Alternative Mechanisms & Explanations

In addition to the five outcomes described above, the instrument is designed to investigate alternative mechanisms and explanations that may help to explain unexpected findings or elucidate causal mechanisms.

7.1 Policy Priorities

One mechanisms that may explain a decrease in satisfaction with government actors even if these actors receive credit for the CHP intervention is a "ratcheting" up of citizen expectations, whereby once supplied with a given service citizens shift their preferences to demand new and currently unsupplied services (De Kadt and Lieberman, 2017). To test this possibility, I measure whether health is cited less frequently as a policy priority in treated villages. Variables will be coded as ordered categorical variables taking a value of zero if a target is not listed, taking a value of one if a target is listed as the third most helpful, a value of two if the target is listed as the second, and a value of three if the target is listed as the first.

1. Prioritization of Health
   (a) In your opinion, what are the most important problems facing this country that the national government should address? [Most important, Second most important, Third most important]
   (b) In your opinion, what are the most important problems facing this country that the district government should address? [Most important, Second most important, Third most important]

7.2 Substitution

One mechanism that could drive disengagement without necessarily affecting perceptions of responsiveness or capacity is the ability of NGO services to substitute for similar government services, thereby reducing reliance on government. To test if the availability of NGO services reduces consumption of government services, I ask about contact with government VHTs and NGO CHPs in the treatment period.[8] Because they capture different information about

[7] These questions are only asked for villages that have access to the infrastructure in question. Villages that do not have access will be coded as zero.

[8] Nyqvist et al. (2018) "...find some evidence of substitutability between different types of community health workers: households in treatment clusters are significantly more likely to interact with CHPs and significantly less likely to interact with VHTs."

contact with CHWs, these variables will not be combined into an index.

VHT Use

1. Has your household been visited by a Village Health Team member to receive health related care or advice [. . .] [Within the past one month; Within the past three months, Within the past six months; Within the past year; More than 1 year ago; Never]?
2. Has anyone in your household gone to visit a Village Health Team member to seek health related care or advice [. . .] [Within the past one month; Within the past three months, Within the past six months; Within the past year; More than 1 year ago; Never]?
3. About how many times, total, has your household received care or advice from a Village Health Team member?

VHT Quality

1. Overall, are you satisfied or unsatisfied with the health services offered by your community's Village Health Team? [Very dissatisfied; Somewhat dissatisfied; Neither satisfied nor dissatisfied; Somewhat satisfied; Very satisfied]

7.3 Provider Salience

Government actors could receive credit for NGO services for a variety of reasons. One mechanism that could drive the attribution of political credit to government actors is the salience of provider identity. If respondents are broadly unaware of the identity of non-state service providers, then it may be assumed that these services are provided by government actors. To identify how salient provider identity is to consumers, I include a descriptive component of the survey measuring respondents' ability to identify the provider of a variety of services in their community. I ask respondents to identify the name and sector of any NGOs operating in their community within the last year. I will then use true information collected at the village-level to present descriptive data on respondent accuracy.

1. Are there any NGOs that have been active in your village within the last year? Can you recall the name of any of these NGOs or the type of work that they do?

7.4 Deprivation in Control Villages

One mechanism that could result in higher levels of satisfaction with political actors in treatment villages is feelings of deprivation in control villages. Because many control villages in the sample are located within a few kilometers of treated villages, it is possible that control villages are aware that the intervention is available in nearby communities. This could result in political blame (as opposed to political credit). To test whether respondents in control villages see their villages as deprived of NGO services, I ask respondents to compare the amount of charity (described to respondents to include NGO activity) that their village receives relative to other communities in the country.

1. Some communities in Uganda get many NGO projects while others do not get any at all. Would you say that in the past twelve months, your community has received [. . .] NGO projects than other communities in Uganda? [Much more; Somewhat more; About the same; Somewhat less; Much less]

7.5 Trust

Another outcome that may be driven by credit attribution is levels of trust in government actors and NGOs. Using data from 25 European countries in 2008, Cammett et al. (2015) find that trust in government is significantly lower in countries with more private financing of health care due to greater perceived risk of not obtaining needed care among low-income citizens. If government actors receive credit for the intervention, it may drive an increase in trust in these actors due to lower perceived risk of going without care. Alternatively, if LG receives exclusive credit for the intervention, the opposite may result if respondents do not see LG as a permanent actor. To test this possibility, I ask respondents about their trust in government actors and NGOs and about the share of available funds that each actor actually spends on service delivery.

Trust in Government index

1. Here are ten tokens. Think of these 10 tokens as representing all the money that [. . .] has in its budget. How many of these tokens do you think actually get spent on programs and services that benefit ordinary citizens in Uganda? How many tokens do you think are wasted? How many tokens do you think are or stolen? [The national government; Your district government; NGOs working in Uganda]
2. How much do you trust [. . .] to do the right thing for ordinary people like you? [Your constituency MP; Your local Councilors (including District, Subcounty, and Village Councilors); Government agencies; The president; NGOs working in Uganda]

Trust in NGOs index

1. Here are ten tokens. Think of these 10 tokens as representing all the money that [. . .] has in its budget. How many of these tokens do you think actually get spent on programs and services that benefit ordinary citizens in Uganda? How many tokens do you think are wasted? How many tokens do you think are or stolen? [NGOs working in Uganda]
2. How much do you trust [. . .] to do the right thing for ordinary people like you? [NGOs working in Uganda]

7.6 Social Capital

Another mechanism through which NGO service delivery could create increased political engagement with government without working through political credit is through social capital. Several studies have speculated that even service delivery NGOs may build social capital (Boulding, 2010, 2014). To test this possibility, I ask about respondent membership in community groups.

Social Capital index

1. Now I am going to read out a list of groups that people join or attend. For each one, could you tell me whether you or a member of your family are a current official leader, an active member, an inactive member, or not a member. [A religious group that meets outside of regular worship services; A Savings and Credit Cooperative Organisation (SACCO); An organization associated with a political party (ex. NRM, FDC, etc.); Some other voluntary association or community group] [Official Leader; Active member; Inactive member; Not a member]

7.7 Actual Government Responsiveness

It is possible that, if political engagement increases, government will respond to this pressure by increasing actual responsiveness. To measure this possibility, I will measure whether respondents who contact government officials received a response from the contacted official. These results are likely to be underpowered due to the fact that these questions are only asked if respondents report having contacted an official in the past twelve months.

Hypothesis 13 *Access to the treatment will increase government responsiveness.*

1. Health Service Delivery
   (a) When you or a family member contacted [. . .], how many of those times did they give you feedback? [A Constituency MP; A local Councilor (including District, Subcounty, or Village Councilors); A government agency in Kampala (Ministry of Health); A district health official (DHO, Health Inspectors)]? [Never; Once or twice; More than twice; More than five times; More than ten times]
2. General Service Delivery
   (a) When you or a family member contacted [. . .], how many of those times did they give you feedback? [A Constituency MP; A local Councilor (including District, Subcounty, or Village Councilors); A government agency in Kampala (Ministry of Health); A district health official (DHO, Health Inspectors)]? [Never; Once or twice; More than twice; More than five times; More than ten times]

8 Evaluation Design

8.1 Data Sources

Data for this evaluation will come from two sources. First, a household level survey in treatment and control villages will be used to test the main hypotheses presented above. Second, village-level data on service delivery and infrastructure has been collected using a mix of phone and in-person interviews with local council and VHT members. Phone interviews are conducted using contact information obtained from LG; in cases where no VHT member can be reached by phone, field officers are sent to conduct the interview in-person. All village-level data is being meticulously verified by enumerating both the LC1 and one VHT member in each village and by performing call-backs to rectify discordant

information. These interviews are also being used to verify information provided by the NGO on the current status of villages that were assigned to the control group.

8.2 Randomization & Sampling

The original study was a parallel-group stratified cluster randomized trial embedded in the roll-out of the joint Living Goods and BRAC Community Health Promoter program. Clusters correspond to villages drawn from 12 NGO branches across 10 districts in Uganda. Randomization was stratified by branch, and eligible clusters were limited to those with fewer than 400 households (this was to ensure that it was feasible for CHPs to visit a non-trivial share of households). In 11 branches, randomization was balanced while in one zone randomization was unbalanced for operational purposes (2:1). This resulted in a sample of 115 treatment villages and 99 control villages. 106 of these villages (53 treatment and 53 control) were managed by BRAC, while 108 (62 treatment and 46 control) were managed by Living Goods.

Because this survey is being conducted "downstream" from an earlier evaluation, there are several unique issues to be addressed. First, the original evaluation period ended in 2013, and in 2014, the implementing NGOs began slowly introducing the intervention to some control villages. Of the 99 villages assigned to the control arm of the intervention, approximately 50 villages remain unexposed to the intervention.[9] The order of this phase-in of the intervention was not randomized. To achieve sufficient statistical power, I will sample *all* villages from the original control condition that remain untreated (n=50) and all villages from the original treatment condition (n=115).

In sample villages, team leaders will meet with local councilors to draw up a list of households. Team leaders will also meet with the VHT/CHP team in each village to draw up a list of households that have had pregnancies during the intervention period.[10] Because LG CHPs receive financial incentives to visit households with pregnant women or newborn babies, half of the households in each sample village will be drawn from the full list of households and half will be drawn from the list of households with at least one pregnancy during the intervention period (rounding up in treatment villages). Within each household, either the male or female head of household will be selected for enumeration (assuming that they are Ugandan citizens between 18 and 75 years of age). If the individual selected for enumeration cannot be reached after two attempts, a replacement household will be drawn randomly from the list.

8.3 Treatment Definition & Estimation

I define the treatment under consideration as *giving households the opportunity to benefit from NGO services*. Following the original study, the primary operationalization of the treatment variable will be a binary indicator taking a value of one for villages that have received the intervention and a value of zero for villages that have not. Non-compliance

[9] This figure was arrived at using data provided by LG and data collected from the LC1 and VHT in each village.

[10] Keeping records of pregnancies is a primary function of VHTs, so this information should be readily available.

would be introduced if households in treatment villages are unaware that these services are available to them or by households in control villages mistakenly believing that their village has received access to the treatment (see the discussion of spillovers). For this reason, the Intent-to-Treat (ITT) is the primary causal estimand of interest:

$$\mathrm{Y}_{ij} = \beta T_{ij} + b_j + \epsilon_{ij} \tag{1}$$

Y_{ij} is the outcome of interest in village i located in NGO branch j, b_j are branch fixed effects to account for stratification, T_{ij} is a binary treatment indicator taking a value of one for households in treatment villages and a value of zero for households in control villages, and ϵ_{ij} is an error term. Standard errors are clustered at the village level.

The Local Average Treatment Effect (LATE) is also of interest to this study. While the ITT provides a more policy-relevant estimate of the causal effect over the period being observed, the LATE may give an impression of the size of the intervention's long-run effect assuming that knowledge of the intervention will continue to spread over time. To account for this, I will estimate two stage least squares regression:

$$I_{ij} = \beta T_{ij} + b_j + \epsilon_{ij} \tag{2}$$

$$\mathrm{Y}_{ij} = \beta I_{ij} + b_j + \epsilon_{ij} \tag{3}$$

In equation 2, I_{ij} is a binary indicator taking a value of one if respondents report that their village has an active CHP and a value of zero if respondents report that their village does not have an active CHP regressed on T_{ij}, a binary treatment assignment indicator. Equation 3 estimates the second stage relationship.

To increase precision, all models will be estimated with a vector of covariates that could impact political engagement or levels of approval for the incumbent government, including pre-treatment parish-level NRM vote share, gender, pre-treatment distance to the nearest health facility (using distance to the nearest health facility in 2011), and pre-treatment access to electricity, sewage, and piped water. Proximity to a health center is an especially important control, as villages that have a nearby health center are likely to be much less reliant on CHW services (whether government or NGO) generally. Depending on the number of households, some villages were assigned to multiple CHPs while others were assigned only one. As a measure of treatment strength, I will re-run the equations above defining the treatment as the number of CHPs per household.

While the primary analysis conceives of the treatment as the opportunity to benefit from NGO services, the literature also suggests one alternative conceptualization. In the literature on the impact of government welfare programs on political engagement, one channel

through which welfare programs impact engagement is through *contact* with the agencies that administer these services (Swartz et al., 2009; Soss, 1999). It is likely that some households in treatment villages have never had contact with a CHP while some households in control villages have had contact with a CHP (despite rules against CHPs providing services to households outside their village). If the effect of the intervention on political attitudes or engagement relies on contact, this would change how we estimate the LATE. For this alternative conceptualization, I_{ij} in equation 2 will be continuous variable measuring the number of times that members of a respondent's household have had contact with a CHP.

8.4 Manipulation Check & Subgroup Analysis

The original study provides ample evidence that the intervention reached a substantial share of households in treatment villages and that the intervention had a substantial impact on health outcomes. However, there are two reasons that this intervention could fail to manipulate individual beliefs about their access to NGO services. First, it is possible that effort by CHPs has declined over time. To estimate the extent of CHP activity, respondents will be asked to report their level of satisfaction with CHP services and their history of contact with CHPs. While this will only provide descriptive evidence for the manipulation, these data can be used to verify that CHPs are still active in their assigned communities.

Second, because CHPs sell health products for a small profit, it is possible that the program is perceived as for-profit rather than as an NGO service. This is more likely if CHPs have reduced their efforts to monitor community health and focus exclusively on selling LG's subsidized health products. Although it is true that CHPs operate for-profit on an individual basis, we do not expect the broader program to be perceived as operating for-profit. In-depth interviews with CHPs suggest that respondents in communities that have received the intervention are familiar with the LG brand and overwhelmingly see the CHP program as providing free care and highly subsidized health products (due to the dramatically lower cost of medicines relative to equivalents sold in private pharmacies). However, if the program is perceived as for-profit, this will indicate a much different manipulation than that hypothesized above. To test this possibility, I include a question asking respondents whether they think the LG program operates for-profit or for charity.

Descriptive Manipulation Checks

1. Has your household been visited by a Community Health Promoter to receive health related care or advice [. . .]?[Within the past one month; Within the past three months, Within the past six months; Within the past year; More than 1 year ago; Never]
2. Has anyone in your household gone to visit a Community Health Promoter to seek health related care or advice [. . .]?[Within the past one month; Within the past three months, Within the past six months; Within the past year; More than 1 year ago; Never]
3. About how many times, total, has your household received health care or advice from a Community Health Promoter in the last twelve months?

Descriptive Manipulation Checks

1. Thinking of the Community Health Promoter program run by BRAC or Living Goods: Do you think that this program helps by providing mainly provides charity to people in the communities where it operates by subsidizing health products and paying health promoters to give advice, or does the program operate for a profit? [Charity; For-profit]
2. Overall , are you satisfied or unsatisfied with the services offered by your community's Community Health Promoter program? [Very dissatisfied; Somewhat dissatisfied; Neither satisfied nor dissatisfied; Somewhat satisfied; Very satisfied]

Because the intervention was designed with the primary objective of reducing child mortality, I will repeat the analyses described above on the subset of households that experienced at least one birth during the intervention period. Although this sub-group analysis will likely be under-powered, it could provide suggestive evidence of whether the intervention is stronger for those that CHPs were incentivized to visit.

8.5 Heterogeneous effects on state actors and institutions

In the main analysis, I look at the impact of the CHP intervention on a basket of government actors, including political and bureaucratic actors at both the national, district, and local level. This will return an estimate of effect of the intervention on their relationship with government broadly. However, it is possible that credit for NGO services accrues only to specific government actors. For example, extensive interviews with NGO directors reveal that politicians sometimes attempt to claim credit for NGO services.[11] If the attribution of credit to government actors relies on active credit claiming, local politicians are uniquely positioned to benefit from NGO service delivery while state institutions are not. If this is the case, I expect to see higher levels of contact with politicians (MPs, local councilors) and higher levels of participation in local council meetings. I also expect that elevated perceptions of performance, capacity, and responsiveness are limited to politicians. Alternatively, if state agencies receive credit because they are tasked with oversight of NGO activities in their sector, the opposite may be true. In this case, I expect to see higher levels of contact with state agencies and elevated perceptions of performance, capacity, and responsiveness of state agencies.

Similarly, it may be the case that only actors at a given level of government (national, district, local) receive credit for the intervention. In this case, my expectations of increased engagement with and improved perceptions of government will be restricted to only these actors.

For this reason, I will use two questions to guide an analysis. These questions are designed to measure perceptions of both the responsiveness and capacity of these actors. These variables will be coded as an ordered categorical variable taking a value of zero if a target is not listed, taking a value of one if a target is listed as the third most helpful, a value of two if the target is listed as the second, and a value of three if the target is listed as the first. Ranking of Actor responsiveness/capacity

[11] Though government actors frequently do play a role in helping to coordinate or co-produce NGO service delivery efforts, credit-claiming also happens when their role is a political fabrication.

1. Let's say that there is a problem with health services in your village. Who would be the FIRST, SECOND, and THIRD most useful figures you could approach to ask for help? [Your constituency MP; Your District Chairperson, Your local Councilors (including District, Subcounty, or Village Councilors); A government agency in Kampala; A government agency in your district]
2. Let's say that there is a problem with some other service in your village. Who would be the FIRST, SECOND, and THIRD most useful figures you could approach to ask for help? [Your constituency MP; Your District Chairperson, Your local Councilors (including District, Subcounty, or Village Councilors); A government agency in Kampala; A government agency in your district]

If these questions reveal that increased engagement is specific to either politicians or government agencies or to actors at a specific level of government, I will only reject the null hypothesis if variables measuring credit attribution to those government actors are jointly significant. Similarly, I expect the null may be rejected if variables measuring the responsiveness or capacity of those actors are significant.

Below is a list of all response categories measuring respondent perceptions of government actors:

Targets of Engagement

1. General
   (a) A government official
   (b) The national government in Kampala
   (c) Local governments in your district
   (d) The national government
   (e) Your district government
2. Political
   (a) The President
   (b) Your Constituency MP
   (c) Your District Chairperson
   (d) Your local Councilors (including District, Subcounty, or Village Councilors)
   (e) Your District Council
   (f) Your Subcounty Council
3. Bureaucratic
   (a) A government agency in Kampala
   (b) A government agency in your district

(c) Government health agencies

8.6 Spillovers & Migration

The original analysis documents minimal spillovers, with 5.4% of households in control villages reporting having been visited by a CHP in the 30 days preceding the endline survey (compared to 23% in treatment clusters). Furthermore, according to in-depth interviews with ten CHPs operating in two districts in our sample, CHPs are instructed not to provide medicine or health-related services to any households that live outside of their assigned village (although they are allowed to sell certain products, such as solar lamps and cooking stoves). To account for the possibility that spillovers have increased dramatically in the years since the trial period ended, I will repeat the main analyses using weighted regression that weights control observations by their distance to the nearest treatment village. These weights will attenuate the downward bias that large spillovers would introduce. The original analysis also documents that migration in and out of treatment and control villages and the number of households living in their village for the entire study period were not significantly different. To confirm that this is still the case, I include a question asking how long respondents have been living in their current village of residence.

8.7 Statistical Power

To generate assumptions about parameter values, I use data from Afrobarometer Rounds 2–6.[12] Incorporating data from rounds fielded shortly before, shortly after, and midway between elections relieves concerns about variation in engagement or desirability bias at different points in the election cycle. I consider seven questions measuring non-electoral political engagement, an inverse covariance weighted index of these measures, and two questions measuring perceived responsiveness of local councilors and MPs. For each variable, I calculate the village-level intra-cluster correlation (ICC) and standard deviation (SD) in each round separately and in all rounds pooled together; I then extract the maximum values from this list of 60 values for each parameter. By extracting the highest observed value for each parameter, I create a plausible worst-case scenario for statistical power. Assuming an ICC of 0.14, an SD of 1.2, and an alpha of 0.05, this design is 80% powered to detect an effect of 0.27 (on a five point scale, or 0.23 standard deviations) with a sample of 1,505 respondents from 165 villages (700 respondents drawn from 50 control villages and 805 respondents drawn from 115 treatment villages). Using an alpha of 0.1, the design is powered to detect an effect of size 0.24 (or 0.2 standard deviations).

[12] Rounds were collected in 2002, 2005, 2008, 2012, 2015.

9 Appendix

9.1 List of Outcomes

Outcomes of Interest:

- Political Engagement
- Credit Attribution
- Perceptions of Responsiveness
- Perceptions of Capacity
- Complementary Investments

Targets of Engagement:

1. Political
   (a) National: A Member of Parliament
   (b) Local: A District Councilor; A Subcounty Councilor; A Village Councilor
2. Bureaucratic
   (a) National: A national government agency
   (b) Local: A district government agency
3. Non-state
   (a) NGOs
   (b) Traditional leaders
   (c) Religious actors

References

Acharya, A., Blackwell, M., and Sen, M. (2016). Explaining causal findings without bias: Detecting and assessing direct effects. *American Political Science Review*, 110(3):512–529.

Blair, R. and Roessler, P. (2016). China and the african state: Evidence from surveys, survey experiments and behavioral games in liberia. *USAID Research and Innovation Grants Working Papers Series. USAID, Washington, DC*.

Bodea, C. and LeBas, A. (2014). The Origins of Voluntary Compliance: Attitudes toward Taxation in Urban Nigeria. *British Journal of Political Science*, pages 1–24.

Boulding, C. (2014). *NGOs, Political Protest, and Civil Society*. Cambridge University Press.

Boulding, C. E. (2010). Ngos and political participation in weak democracies: Subnational evidence on protest and voter turnout from bolivia. *The Journal of Politics*, 72(2):456–468.

Brass, J. (2016). *Allies or adversaries: NGOs and the state in Africa*. Cambridge University Press.

Brass, J. N. (2010). *Surrogates for Government? NGOs and the State in Kenya*. PhD thesis, University of California, Berkeley.

Bruch, S. K., Ferree, M. M., and Soss, J. (2010). From policy to polity: Democracy, paternalism, and the incorporation of disadvantaged citizens. *American Sociological Review*, 75(2):205–226.

Cammett, M., Lynch, J., and Bilev, G. (2015). The Influence of Private Health Care Financing on Citizen Trust in Government. *Perspectives on Politics*, 13:938–957.

Cammett, M. and MacLean, L. M. (2014). *The politics of non-state welfare*. Cornell University Press.

Campbell, A. L. (2003). *How policies make citizens: Senior political activism and the American welfare state*. Princeton University Press.

Christensen, D. and Weinstein, J. M. (2013). Defunding Dissent: Restrictions on Aid to NGOs. *Journal of Democracy*, 24(2):77–91.

Cruz, C. and Schneider, C. J. (2016). Foreign Aid and Undeserved Credit Claiming. *American Journal of Political Science*.

De Kadt, D. and Lieberman, E. S. (2017). Nuanced accountability: Voter responses to service delivery in southern africa. *British Journal of Political Science*, pages 1–31.

Diamond, L. J. (2002). Thinking About Hybrid Regimes. *Journal of Democracy*, 13(2):21–35.

Dietrich, S., Mahmud, M., and Winters, M. S. (2018). Foreign aid, foreign policy, and domestic government legitimacy: experimental evidence from bangladesh. *The Journal of Politics*, 80(1):133–148.

Dietrich, S. and Winters, M. S. (2015). Foreign aid and government legitimacy. *Journal of Experimental Political Science*, 2(2):164–171.

DiLorenzo, M. (2018). Bypass aid and unrest in autocracies. *International Studies Quarterly*, 62(1):208–219.

Dodlova, M. (2016). Social Transfers and Political Participation: Evidence from Mali and Ghana. *Working Paper*.

Drummond, P., Daal, W., Srivastava, N., and Oliveira, L. (2012). Mobilizing revenue in sub-saharan africa: empirical norms and key determinants.

Grebe, E. (2016). The ambiguities of the âĂŸpartnershipâĂŹbetween civil society and the state in uganda's aids response during the 1990s and 2000s as demonstrated in the development of taso. *Global public health*, 11(4):496–512.

Guiteras, R. P. and Mobarak, A. M. (2015). Does Development Aid Undermine Political Accountability? Leader and Constituent Responses to a Large-Scale Intervention. Technical report, National Bureau of Economic Research.

Healy, A., Malhotra, N., et al. (2010a). Random events, economic losses, and retrospective voting: Implications for democratic competence. *Quarterly Journal of Political Science*, 5(2):193–208.

Healy, A. J., Malhotra, N., and Mo, C. H. (2010b). Irrelevant events affect voters' evaluations of government performance. *Proceedings of the National Academy of Sciences*, 107(29):12804–12809.

Jennings, M. (2014). Bridging the Local and the Global: Faith-Based Organisations and the Emergence of the Non-State Provider Sector in Tanzania. *The Politics of Non-state Welfare*.

Katusiimeh, M. W. (2015). The nonstate provision of health services and citizen accountability in uganda. *Africa Today*, 62(1):84–105.

Khemani, S. and de la Banque mondiale, G. (2016). *Making politics work for development: harnessing transparency and citizen engagement*.

Kuenzi, M. and Lambright, G. M. (2011). Who votes in africa? an examination of electoral participation in 10 african countries. *Party Politics*, 17(6):767–799.

Levi, M. (1989). *Of rule and revenue*, volume 13. Univ of California Press.

MacLean, L. M. (2011). State retrenchment and the exercise of citizenship in africa. *Comparative Political Studies*, 44(9):1238–1266.

Meessen, B., Hercot, D., Noirhomme, M., Ridde, V., Tibouti, A., Tashobya, C. K., and Gilson, L. (2011). Removing User Fees in the Health Sector: A Review of Policy Processes in Six Sub-Saharan African Countries. *Health policy and planning*, 26(suppl 2):ii16–ii29.

Ministry of Health (2015). National village health teams assessment in uganda. Technical report, Uganda Ministry of Health.

Nyqvist, M. B., Guariso, A., Svensson, J., and Yanagizawa-Drott, D. (2018). Reducing child mortality in the last mile: A randomized social entrepreneurship intervention in uganda.

Parkhurst, J. O. (2004). The Political Environment of HIV: Lessons from a Comparison of Uganda and South Africa. *Social science & medicine*, 59(9):1913–1924.

Pierson, P. (1993). When effect becomes cause: Policy feedback and political change. *World politics*, 45(4):595–628.

Robinson, M. and White, G. (1997). The Role of Civic Organizations in the Provision of Social Services. *Research for Action*, 37.

Sacks, A. (2011). Can donor and non-state actor service provision strengthen legitimating beliefs? *Unpublished Manuscript, Department of Sociology, University of Washington*.

Salamon, L., Sokolowski, S. W., Haddock, M., and Tice, H. S. (2013). The State of Global Civil Society and Volunteering. *Center for civic society University Johns Hopkins*, pages 3–5.

Salamon, L. M., Sokolowski, S. W., and List, R. (2003). *Global Civil Society*. Johns Hopkins Center for Civil Society Studies.

Sances, M. W. (2017). Attribution Errors in Federalist Systems: When Voters Punish the President for Local Tax Increases. *The Journal of Politics*, 79(4):1286–1301.

Soss, J. (1999). Lessons of welfare: Policy design, political learning, and political action. *American Political Science Review*, 93(2):363–380.

Soss, J. (2002). *Unwanted Claims: The Politics of Participation in the US Welfare System*. University of Michigan Press.

Swartz, T. T., Blackstone, A., Uggen, C., and McLaughlin, H. (2009). Welfare and citizenship: The effects of government assistance on young adults' civic participation. *The Sociological Quarterly*, 50(4):633–665.

Tebeau, M. (2012). *Eating Smoke: Fire in urban America, 1800–1950*. JHU Press.

Tilly, C. (1985). War making and state making as organized crime. *Violence: A reader*, pages 35–60.

Tripp, A. M. (2010). *Museveni's Uganda: paradoxes of power in a hybrid regime*, volume 6. Lynne Rienner Publishers Boulder, CO.

Tumwesigye, T. (2013). Health Service Delivery by the PNFP Subsector in Uganda. Technical report, Uganda Protestant Medical Bureau.

Watson, S. (2015). Does Welfare Conditionality Reduce Democratic Participation? *Comparative Political Studies*, 48(5):645–686.

Weigel, J. L. (2017). Building state and citizen: How tax collection in congo engenders citizen engagement with the state. Technical report, Working Paper.

Wolfinger, R. E. and Rosenstone, S. J. (1980). *Who votes?*, volume 22. Yale University Press.