The Political Economy of NGO Service Provision: Evidence from an Ancillary Field Experiment *

WORD COUNT: 11,122

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April 12, 2021

Abstract

In developing countries, the share of basic services delivered by NGOs has grown dramatically due to increased receipt of aid and philanthropy. Many scholars and practitioners have worried that NGOs reduce reliance on government services, lowering demand for government provision and undermining political engagement. Others argue that NGOs prop-up poorly performing governments that receive undeserved credit for the production, allocation, or welfare effects of NGO services. Using original surveys and a randomized health intervention implemented parallel to a similar universal government program, I investigate the long-term effect of NGO provision on political attitudes and behavior. Access to NGO services increased preferences for NGO relative to government provision. However, political engagement and perceptions of government legitimacy were unaffected. Instead, the intervention generated political credit for the incumbent President. I find that citizens see NGOs as a resource controlled by powerful government actors, and they reward actors seen as responsible for allocation.

*I thank Guy Grossman, Jennifer Brass, Dorothy Kronick, Emmerich Davies, Erik Wibbels, Pablo Beramendi, Pia Raffler, Julie Weaver, Alyssa Huberts, Taylor Boas, Edmund Malesky, and participants and organizers at NEWEPS-12, WGAPE 2019, and the Duke Political Economy Working Group for comments. I am deeply indebted to Samuel Olweny and the staff at Matrice360 Uganda Ltd. for their tireless work and steadfast commitment to this project. This project would not have been possible without Martina Björkman Nyqvist. Support came from the National Science Foundation (SES-1747642), an anonymous foundation, the University of Pennsylvania, the Browne Center for International Politics, and an American Political Science Association Centennial Grant. This project was approved 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. A full pre-analysis plan was registered with Evidence in Governance and Politics (20181017AA) prior to data collection.

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1 Introduction

In Western political philosophy, government service provision has been the bedrock for theories about the ties that bind citizens to the state. In addition to the importance of service provision for poverty reduction, human development, and economic growth (Banerjee et al., 2011; Devarajan and Reinikka, 2004; Acemoglu et al., 2019), demand for government services is a key driver of political engagement and the supply of government services is a key determinant of government legitimacy and approval (Pierson, 1993; Harding, 2015; Risse and Stollenwerk, 2018). However, while the share of basic services provided by government varies considerably across institutional contexts and historical periods, we understand comparatively little about how non-state provision shapes politics.

Due in large part to changes in development aid and private philanthropy, citizens in developing countries — and African countries in particular — are receiving an increasingly large share of critical services from non-governmental organizations (NGOs) (Cammett and MacLean, 2011; Bratton, 1989).[1] Between 2005 and 2017, the share of bilateral aid bypassing recipient government coffers in Sub-Saharan Africa and being channeled directly through NGOs increased from about 5% to more than 29%. Between 2002 and 2012, charitable giving by U.S. foundations to African countries grew more than 400% (Needles et al., 2018).

Scholars, practitioners, and policymakers have expressed countervailing concerns about the proliferation of NGO services for political economy. Some have worried that the explosion of NGO services may reduce the reliance of citizens on government, eroding the material incentives for political participation and undermining perceptions of government performance and legitimacy. For example, Liberia's former Minister of Public Works alleged that branding development projects prevents governments from receiving credit and blocks fragile states from establishing legitimacy.[2] Similarly, Clough (2017) argues that when bureaucracies are

[1] In African countries, NGO funding comes overwhelmingly from foreign aid and philanthropy (Barr et al., 2005; Hulme and Edwards, 1997; Semboja et al., 1995). For the purposes of this project, the term NGO refers to private, non-profit organizations that aim to improve societal well-being through service delivery.

[2] Moore, Gyude. "The Case Against Branding Development Aid in Fragile States," Center for Global Development, June 5, 2018.

weak, 'parallel' NGO service provision causes citizens to "exit from the state sector", resulting in the "disengagement of the most mobilized" and diminishing "pressure on the government to maintain and improve services." As expressed in The Africa Report, "one of the biggest criticisms of NGOs is that they break the transmission line that historically has driven progress the world over: popular pressure on national leaders" because "in many African countries, people look to NGOs rather than governments to provide services".[3]

Alternatively, others have asserted that NGO service provision inflates support for political incumbents. This belief is captured by a district-level presidential appointee in Uganda who explained why he supports expanding NGO operations in his district, saying "Okay, well this program will come in, and people will become healthier because of it, and then they will vote for the president." A variety of arguments have been offered for this increased support. Citizens may accidentally credit government for NGO services or for regulating or attracting NGOs (Baldwin and Winters, 2020). Alternatively, citizens may credit national officials for regulating the NGO sector or local officials for monitoring specific NGO projects. Similarly, citizens may credit powerful political incumbents for influencing how NGO projects get allocated. Political credit may undermine accountability if credit is undeserved or even 'prop-up' politicians that spend government resource on patronage rather than providing critical services.

These theories generate ostensibly opposite predictions. If access to NGO services causes citizens to prefer NGOs and feel less reliant on government, political engagement and support for incumbents is likely to decline, even to the point where legitimacy is threatened. Alternatively, if political incumbents receive credit for NGO provision, support should increase, at least for the specific incumbents that are seen as responsible. I synthesize these theories, arguing that perceptions of political control over NGOs will preserve feelings of reliance on government, even as experience with NGO provision allows citizens to form preferences for NGOs as an alternative service provider to government. Specifically, I expect that in set-

[3]Anderson, Mark. "NGOs: Blessing or curse?," The African Report, November 29, 2017.

tings where government services are distributed according to politicians' strategic interests, NGOs' provision of similar services will blur the lines between NGOs and the state and encourage a perception of political influence over project allocation. Frequent co-production and co-branding of NGO projects likely exacerbates this 'impression of influence.'

Past empirical work has struggled to adjudicate between theories predicting negative and positive effects of non-state provision on incumbent support for several reasons. First, while data on foreign aid is widely available, data on NGO activities is scarce. This is especially true at the subnational level, where historical and institutional factors that drive variation in outcomes of interest can be held constant. Second, causal identification from observational data is difficult because the distribution of NGO activities is likely correlated with political factors. Specifically, NGOs often target communities that are under-served by government, raising concerns about selection driving correlations between NGO activity and political attitudes. While several studies have manipulated the information citizens have about the implementation or funding of NGO projects, actual access to NGO services does not vary in these contexts. Finally, existing work has focused on the effect of short-term access to NGO services. However, sustained access to high-quality NGO services may be required before they effect outcomes like trust, engagement, preferences over the role of government in service provision, and perceptions of incumbent performance.

To overcome these challenges to inference, I conduct original surveys 'downstream' from a large and highly effective NGO Community Health Worker (CHW) intervention in Uganda that was implemented parallel to a similar universal government program. The intervention was randomized at the village-level to accommodate an evaluation of the program's impact on health outcomes, which documented a huge positive effect. Although a non-random phase-in of the intervention started prior to my data collection, I present qualitative and quantitative evidence that the phase-in did not systematically target needier villages, did not disrupt balance, and is not driving the findings. Importantly, I document the effects of sustained access to NGO services by surveying treatment and control villages after eight

years of ongoing exposure to the NGO program. This 'ancillary field experiment' design is an under-utilized tools to study unintended and/or long-term effects of interventions on political outcomes (Baldwin and Bhavnani, 2015; Sondheimer, 2011). A full pre-analysis was registered prior to data collection.

Using attitudinal and behavioral measures, I find that access to high-quality parallel NGO services shifted citizen preferences over the role of government in health service provision, causing stronger preferences for NGO over government delivery. However, political engagement and perceptions of government legitimacy was not lower in treatment villages. Rather than encouraging apathy or antipathy toward the state, I show that citizens were aware that the intervention was implemented by an NGO, but see NGOs as a resource controlled by powerful incumbents and evaluate the performance of those incumbents more positively. Across both treatment and control groups, respondents saw the president (but not local politicians or government ministries) as controlling NGO project allocation even more than NGOs themselves. Respondents in treatment villages were even more likely to express this belief, suggesting that the intervention increased beliefs in political control over the allocation of NGO services.

This paper makes several contributions to the study of political accountability, non-state service provision, and effective aid and philanthropy. First, this paper joins a small but growing number of studies that test the unintended effects of NGO service provision on political outcomes using randomized control trials (RCTs) (Seim et al., 2020; Guiteras and Mobarak, 2015). Research on the effects of development NGOs on political attitudes and behavior has generally relied on qualitative data (Clough, 2017; Brass, 2016) or information experiments (Baldwin and Winters, 2020; de la Cuesta et al., 2019). Furthermore, this ancillary evaluation of an RCT provides a rare opportunity to examine the long-term effects of an intervention on political accountability and citizen beliefs about governance. Second, while numerous evaluations have demonstrated that NGO interventions can improve welfare, I demonstrate the importance of political economy factors for understanding the broader

impact of specific NGO projects and the rise of NGOs more generally. In doing so, I present evidence that the 'political blindspot' of effective altruism leaves major determinants of citizen welfare out of the equation and demonstrate how these factors can be accounted for in future evaluations.[4]

Finally, I provide new evidence in the debate over how the dramatic increases in NGO service provision over recent decades has affected political economy in developing countries. In the final section, I discuss the political conditions under which these findings are more likely to generalize and speculate about how these results may vary in other contexts. I call for future research on how NGO provision affects the incentives and behavior of politicians.

2 NGOs, Service Delivery, and Political Economy

While NGO service delivery is not typically designed to influence political outcomes, the distribution of valuable services in resource scarce areas is likely to have political consequences. However, existing theories produce countervailing expectations about what these consequences are likely to be. I begin by reviewing theories of instrumental political engagement and the social contract and trace their expectations for non-state service provision. I then discuss theories of political accountability and recent research on credit attribution, deriving expectations of how NGO provision may affect citizens' assessment of incumbent performance. Finally, I synthesize these theories and argue that perceptions of political control over allocation might preclude the erosion of feelings of reliance on government, even where citizens want NGOs to challenge government as the primary services provider.

Political Engagement and Government Legitimacy

Government service provision is the basis for a theorized social contract between citizens and states. Citizens rely on the state for provision of basic services, and this reliance creates incentives for citizens to monitor government and sanction poor performance. Research from both developed and developing countries has shown that demand for and reliance on government services motivates a great deal of 'instrumental' political engagement (Kruks-Wisner,

[4]Clough, Emily. "Effective Altruism's Political Blind Spot," Boston Review, July 14, 2015.

2018; MacLean, 2011; Campbell, 2003). When many critical services are both funded and delivered by non-state actors, this may diminish material incentives to hold government accountable for poor performance (Clough, 2017; Pierson, 1993). This is especially true in the African context, where political parties are less programmatic and political engagement is often motivated by incumbents' "proffering of material goods" (Stokes, 2007). Disengagement can thereby diminish political pressure on governments to invest in providing service, contributing to a negative equilibrium of government under-provision.

Political support and government legitimacy are also rooted in citizen perceptions of government's ability to provide services. Theoretical and empirical research suggests that when states provide essential services to citizens, citizens are more likely to trust government, approve of performance, and pay taxes (Risse and Stollenwerk, 2018; Levi and Sacks, 2009; Levi, 1989). Social contract theories therefore present a range of expectations. At a minimum, when citizens perceive NGOs as providing viable substitutes for government services, the public may be less willing to expend time and resources on political engagement. More dramatically, if citizens see NGOs as a signal of government failure or apathy, political support for incumbents, and perhaps even government legitimacy, is likely to decline.

Most existing research on the politics of non-state service provision has focused on the expectation that it undermines the social contract. However, empirical work using both in-depth interview data and evidence from survey experiments manipulating information about funding and/or delivery of services has generally found null or even positive effects of NGO activities on perceptions of government performance and legitimacy (Tsai et al., 2020; Dietrich et al., 2018; Brass, 2016; Sacks, 2011) and citizen monitoring behavior (de la Cuesta et al., 2019). Baldwin and Winters (2020) is a partial exception. Using a sample of 18 NGO-implemented projects in Uganda funded by the Japanese government, Baldwin and Winters (2020) report that most citizens lacked information about the true funder and implementer. They find that informing citizens that projects were implemented by an NGO "reduces the willingness of citizens pay fees to the government or to donate to community

funds" but doesn't lower perceptions of government performance, while informing citizens that projects were implemented by an NGO and funded by foreign aid "undermines citizens' assessments of [local] government performance" but doesn't undermine legitimacy or affect perceptions of national government performance.

Political Accountability and Credit Attribution

Research on credit attribution provides several potential mechanisms linking non-state provision to increased, rather than decreased, support for incumbents. Most simply, citizens may increase support as the result of general improvements in welfare or be unable to differentiate between NGO and government provided services. Baldwin and Winters (2020) report that many citizens in Uganda didn't know who implemented NGO-implemented projects funded by the Japanese government, or mistakenly believed that these projects were implemented by government ministries.

However, there is considerable evidence that NGOs' branding of projects can be effective at conveying information about implementation. Empirical work has found that even when citizens are aware of the role of NGOs in implementation, NGO projects can have positive effects on perceptions of government legitimacy and capacity (Tsai et al., 2020; Brass, 2016; Dietrich and Winters, 2015). For example, political incumbents may receive credit for branded NGO projects if they engage in *active credit claiming* (Guiteras and Mobarak, 2015). While local politicians have opportunities to engage in credit claiming at the community-level, national politicians are typically unable to claim responsibility for individual projects in this manner.

Instead, national political incumbents may benefit from *passive credit attribution* for a perceived role in the allocation of NGO projects. In many developing (and developed) countries, the strategic interests of powerful politicians drive the allocation of state resources (Hicken, 2011). Rational voters attempting to assign credit for the presence of an NGO project in their community may draw on knowledge of how similar government resources are allocated in their country. Where incumbents foster perceptions of distributive politics as

transactional, citizens with limited information may rationally assume that NGO projects are similarly targeted transfers (Brass, 2016, p. 34).

In fact, direct contact with NGOs may *encourage* beliefs that incumbents are involved in NGO service provision by blurring the lines between these actors. When NGOs provide services that are traditionally seen as the jurisdiction of the state, observing NGO operations may cause citizens to associate NGO services with politicians. In some cases, direct contact with an NGO project may also give citizens an opportunity to observe cooperation between government and NGO workers. For instance, NGOs often provide complements to existing government health programs by filling gaps in the geographic reach or programmatic coverage of government programs (Tsai et al., 2020; Brass, 2016). Contact with an NGO project may also expose citizens to government-NGO co-branding.[5] Witnessing NGOs producing services associated with the state and exposure to co-production or co-branding may make citizens that gain access to NGO services more likely to believe that powerful government actors direct the allocation of NGO projects.

Finally, political incumbents may get credit for NGO interventions as the result of positive spillovers from NGO activities on related government programs. This is especially likely when governments and NGOs engage in co-production of the same services. However, this is also possible where NGOs engage in parallel provision, which allows for the diffusion of knowledge and skills between NGO and government workers (Clough, 2017, p. 12). This transfer of often intangible resources may increase citizen satisfaction with government service provision and political incumbents, but is less likely to contribute to an impression of political influence.

Which government actors get credit is likely to depend on both the political system and the mechanism through which credit accrues. If active credit is at work, credit will be confined to local incumbents. If monitoring the implementation of specific projects on the ground or attracting NGOs to the community generates credit, local political incumbents or bureaucrats are most likely to benefit. Alternatively, if credit flows from regulating the

[5]Co-branding between implementing NGOs and relevant government ministries is standard even when there is little or no role played by government.

NGO sector broadly, national political incumbents or bureaucrats are most likely to get credit. Similarly, if credit derives from perceptions of centralized political influence over the allocation of NGO projects, powerful national incumbents are most likely to receive credit. In many African countries, national political executives exert top-down control over the distribution of public goods (Morse, 2018). In such countries, presidents are most likely to receive credit for NGO projects. However, in contexts where party leaders or Members of Parliament are seen as controlling distributive politics, these actors may be more likely to enjoy increased support.

The Argument

I argue that due to near-universal branding of development projects, citizens are typically aware when NGOs are involved in service provision. When NGOs prove capable of providing high-quality services over a long period of time, access to NGO services is likely to increase citizen beliefs that NGOs represent a viable alternative service provider. Thus, positive experiences will shape beliefs about the role of non-state actors in governance and increase preferences for NGO service provision over government provision. However, in contexts where citizens expect the allocation of services to be transactional, they are likely to assume that the presence of these services is the result of political influence. Rather than reducing feelings of reliance on government and diminishing political engagement and government legitimacy, contact with NGOs that provide services typically associated with government will blur the line between NGOs and the state, reinforce perceptions of distributive politics as transactional, and increase support for powerful incumbents that benefit from a popular impression of influence over resource allocation.

3 Research Setting

To test this argument, I use a large and highly effective NGO Community Health Worker (CHW) intervention in Uganda: the Living Goods Community Health Promoter (CHP) program. The Living Goods CHP (henceforth LG CHP) intervention operates parallel to a

similar government-run system known as Village Health Teams (VHTs). Uganda's Ministry of Health adopted the VHT program in 2001 to act as the "bridge... between community and health facilities" (Ministry of Health, 2015). Each village has a VHT comprised of volunteers that are selected by their community (often through a popular vote) and overseen by a member of the District Health Team or a nearby health facility. VHT members are expected to serve 25–30 households, although they often serve many more in practice. Despite high levels of satisfaction with VHTs, many VHT members are under-trained and mortality from easily preventable or treatable diseases remains high.

While government VHTs and LG CHPs are designed with similar objectives, LG CHPs are equipped with superior training, receive financial remuneration, and offer a wider array of health products and services. LG 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 subsidized rates. CHPs are selected competitively from female applicants (ages 18–45) with basic writing and math skills. Eligible candidates receive two weeks of training before taking a skills test to determine who is selected, after which selected candidates receive one-day training sessions every month.

According to a survey of 196 CHPs conducted by LG, 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 in their village each month and 48% of CHPs reported visiting a new household in the month before data collection. CHPs also reported arranging on average 1.5 health education meetings per month, and 23% of households reported being visited by a CHP in the 30 days before the survey. A randomized evaluation found that the CHP program was highly effective at improving health outcomes, causing a 27% reduction in child mortality in treatment village over a three year period (Nyqvist et al., 2018).

A CHW program, and the LG CHP program in particular, is well-suited to study the political economy of NGO service provision. Although NGOs conduct programming in many

sectors including governance and education, health is the sector with the most NGO activity by a wide margin (Brass et al., 2018). CHWs provide primary health care and are the first point of contact with the health system for the majority of people living in rural Africa (Perry et al., 2014; Christopher et al., 2011). CHWs also provide services that are politically salient. According to Afrobarometer, health care was the most frequently cited priority for increased government spending among Ugandan respondents (mentioned by 61.6%) and the second most cited in the full sample of 31 African countries (54.1%).

The CHP intervention provides residents of treatment villages with an opportunity to directly compare CHW programs operated by the Ugandan government (VHT) and an NGO (the LG CHP). The LG intervention is heavily branded, with CHPs wearing LG-branded clothing and distributing health products bearing the LG logo. This common practice increases the information available to citizens and reduces chances that citizens believe these services are provided by government health workers. LG also engages in extensive co-branding with government. Like many NGOs, LG has both 'direct operations' that provide health services directly to citizens and 'indirect operations' designed to strengthen the government health system (for example, by equipping VHTs with mobile devices and software). For this reason, LG engages in extensive co-branding with government, and their promotional materials and public outreach frequently features the Ministry of Health logo.[6] Furthermore, LG often recruits former or current government VHT members, another common practice among health NGOs. Because the CHP intervention is operated independently of government, this provides an opportunity to investigate whether contact with an NGO 'blurs' the line between NGOs and government actors even when government is not directly involved in co-production (Brass, 2016, p. 44).

Uganda is a low-income country in East Africa ruled by an electoral authoritarian regime and characterized by a powerful chief executive. President Yoweri Museveni came to power in 1986 following a civil war, and his National Resistance Movement (NRM) party firmly

[6]Living Goods. "Partnering with government to deliver community health," Internet Archive, June 14, 2020.

controls the national legislature, with 69% of MPs currently NRM affiliates. Museveni has been able to continue winning elections in part by exerting tight control over resource allocation (Tripp, 2010), and the president and other politicians frequently make public statements characterizing service provision as a reward for or an inducement to political support. This is typical of African countries, where presidents "wield disproportionate formal powers vis-à-vis other political institutions", including "the ability to channel state resources" (Morse, 2018). According to the presidential Power Index which ranks countries according to levels of formal presidential power, Uganda (0.436) scores near the average for African countries (mean=0.44, min=0.04, max=0.79).

In 1994, responsibility for the delivery of basic health services was decentralized to the district level. However, the Ministry of Health establishes guidelines and sets sectoral priorities, and districts remain reliant on central government transfers for more than 80% of their annual budgets. This dispersion of responsibility for health provision exacerbates challenges in assigning responsibility for the quality and availability of health care (Mani and Mukand, 2007). Given top-down executive control over the flow of state resources, decentralization has not concentrated citizens' perceptions of responsibility on local officials. As one Ugandan political scientist expressed it, "The president automatically receives credit [for service delivery] as an individual, but local governments have to claim it".

This section gives reason to believe that the effects of the LG CHP intervention are likely to generalize to other NGO operations in developing countries with weak institutions and a strong executive. In the conclusion, I return to the question of generalizability and discuss how these results may vary in other contexts.

4 Research Design

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 all four regions of Uganda. Important for this analysis, the program has operated

continuously in treatment villages since 2011. LG's randomization of their intervention provides the opportunity for an "ancillary" analysis of the unintended long-term effects of NGO activities on political outcomes (Baldwin and Bhavnani, 2015). This approach provides several advantages for the internal validity of the study. First, I am able to measure the long-term effects of the intervention. Although changes in health outcomes were expected to manifest rapidly, changes in political attitudes and behavior often require prolonged exposure to environmental changes (Gisselquist and Niño-Zarazúa, 2015). Many RCTs across a range of subjects have documented short-term effects that do not persist in the long-run (Deaton and Cartwright, 2018); this study surveys treatment villages after eight years of continous exposure to NGO services.

Second, the original evaluation documents that the intervention improved health outcomes dramatically, satisfying a theoretical assumption that NGO services successfully improve welfare. According to Nyqvist et al. (2018), the CHP intervention "reduced under-five mortality rate by 27%, infant mortality rate by 33%, and neonatal mortality rate by 27% after three years" and increased health knowledge, utilization of preventive and treatment approaches, and health service coverage. 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 before treatment.

Ancillary evaluations often entail drawbacks as well, including a lack of researcher control over the intervention. In this case, a non-random phase-in of the intervention into control villages started in 2014. Due to limited resources, household-level data was only collected for the subset of control villages that had not received the phased-in intervention by October 2018. Although bias from this phase-in cannot be ruled out definitively, I present qualitative and quantitative evidence that the phase-in was not driven by village characteristics that are likely to bias estimation. Village-level data was collected for all villages originally assigned control status; analyses show that control villages that did and did not receive the phased-

in intervention after 2014 are balanced on a wide range of characteristics both before and after phase-in. Most importantly, the main findings are robust to the exclusion of villages in districts where the phase-in was most intense.

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

While data collected in 2013 demonstrated the large, positive effects of the intervention on health outcomes, it is critical to establish that program activities continued through ancillary data collection in 2018. Appendix C shows that respondents in treatment village were aware of the CHP program (almost 25% of respondents in treatment villages listed LG in response to an open-ended question asking for a list of NGOs operating in their village), knew that it was implemented by an NGO rather than the government, saw it as non-profit rather than for-profit, expressed high levels of satisfaction, and were more likely to report that their household had contact with and benefited from health NGOs (but not non-health NGOs) than respondents in control villages. Reassuringly, the median household in control villages reports zero instances of contact with the LG CHP program in the past year while the median treatment household reports 1 instance of contact. Appendix E shows that respondents in treatment communities were no more likely to believe that the survey team was sent by an NGO or government, mitigating concerns about researcher-demand bias.

4.1 Randomization & Sampling

The original study was a cluster randomized trial embedded in the roll-out of the Living Goods Community Health Promoter program. Clusters correspond to villages, and branches

correspond to headquarters that oversee operations within that district. Randomization was stratified by branch. To ensure that the CHP(s) in each village could access all households in their community, only villages with fewer than 400 households were eligible to receive the treatment. In 9 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. In 2014, a non-random phase-in of the intervention into control villages started. Of the 99 villages assigned to control status, 47 remained unexposed to the intervention in October 2018. Of the 115 original treatment villages, 4 villages ceased to have an active CHP after their CHPs died or moved away. I sample all 47 control villages that remained untreated and all 115 treated villages. See Appendix A for the number of villages in each treatment condition by district. In sample villages, team leaders met with local councilors to create a list of households. Seven households were randomly selected for enumeration in treatment villages while 14 households were selected for enumeration in control villages. This imbalance accounts for the smaller number of control villages relative to treatment villages. Within each household, either the male or female head of household was selected for enumeration.

4.2 Treatment Definition & Estimation

Following the original evaluation, I define the treatment as *giving households the opportunity to benefit from NGO services* and use a binary indicator and Intent-to-Treat (ITT) as the causal estimand of interest. I estimate the following model:

$$\mathrm{Y}_{ij} = \beta_1 T_{ij} + \beta_2 b_j + \beta_3 b_j * T_{ij} + \beta_4 X_{ij} + \beta_5 X_{ij} * T_{ij} + \epsilon_{ij}$$

Y_{ij} is the outcome of interest in village i located in branch j. T_{ij} is a binary treatment indicator taking a value of one for households in treatment villages, and β_1 is the average treatment effect. b_j are branch fixed effects to account for stratification, and X_{ij} is a vector of covariates. I include individual (age, sex, and level of education measured on a six point scale)

and (pre-treatment) village-level covariates (the president's vote share in the parish in which the villages is located and distance to the nearest health facility, hospital, upgraded road, and transmission line). I demean all covariates and fully interact them with the treatment (Gibbons et al., 2018; Lin and Green, 2016). Standard errors are clustered at the village level.

To address concerns about multiple hypothesis testing (MHT), measures of related outcomes testing the same hypothesis are combined into an index. For each variable, I compute z-scores by subtracting the mean of the control group and dividing the variable by the standard deviation of the control group. An index is constructed by averaging across z-scores. Prior to standardization, I impute missing values on dependent variables by setting them equal to the mean of each outcome variable for the relevant treatment arm Kling et al. (2007). Most outcomes exhibit very little missingness, and the main results are unaffected to estimation without imputation. Outcomes and index construction were pre-registered. All departures from the PAP are described and justified in Appendix B.

4.3 Violations of Random Assignment

Non-random phase-in of the intervention into control villages started in 2014. Due to limited resources, household-level data was only collected for the subset of control villages that had not received the phased-in intervention by October 2018. I take two approaches to minimize concerns about these violations of random assignment. First, I draw on multiple sources of data and more than forty variables collected at multiple points in time to demonstrate balance (a) *between remaining control and phased-in control villages* and (b) *between treatment and control villages* with and without excluding control villages that received the phased-in intervention. For all balance tests, I report both the results of a block-adjusted omnibus balance test and the one-by-one comparisons (Hansen and Bowers, 2008). A detailed discussion of these data, methods, and results is available in Appendix D.

I begin by showing pre-treatment balance using household and village-level data from Nyqvist et al. (2018) measuring village size, infrastructure, accessibility, and health charac-

teristics. I then use endline survey data from 7,000 households collected by Nyqvist et al. (2018) and variables from my original household survey to show balance on respondent and household characteristics measuring size, education, health, and consumption.[7] Finally, I use data from my village-level survey measuring the number of NGOs providing services in the village, the number of health facilities and schools residents have access to, road quality, water source, LC1 satisfaction with the village's VHT services, and the number of years residents have had access to piped water, the electricity grid, and piped sewage.

I find no evidence that the non-random phase-in generated imbalances (a) between control villages that did and did not received the phased-in intervention or (b) between treatment and control villages (with and without excluding control villages that received the phased-in intervention). These results comport with anecdotal evidence suggesting that the phase-in, which was determined by branch offices (which oversaw between three and thirty original control villages each), was not conducted in a systematic way. According to an interview with one Living Goods branch manager, all control villages were prioritized for treatment, but plans were often thwarted by unanticipated events. For instance, in their branch, one woman had successfully completed the full training sequence but got married and moved away from the district before beginning her post, while another trainee passed away shortly after beginning work. Due to the significant costs associated with this training, such events frequently caused substantial delays in roll-out. A CHP working in a neighboring district told a similar story: one CHP recruited and trained to serve a nearby village relocated to care for a sick relative after only a few days of work.

My second approach to dealing with violations of random assignment is intended to minimizes concerns about the potential for non-random phase-in to bias estimation. If village characteristics that drove the phase-in of the intervention are also associated with my outcome variables, we should expect to see treatment effects attenuate when looking at within-district variation in districts where the phase-in was least intense. I repeat all analy-

[7]These variables are measured post-treatment but are unlikely to have been impacted by treatment.

ses on subsets of the sample excluding villages in districts where more than 60%, 50%, and then 40% of control villages received the phase-in. The most restrictive sample includes 336 respondents across 22 control and 211 respondents across 30 treatment villages from four of the ten districts (see Appendix A). The main findings are robust — and actually stronger — in all of these restricted samples. In the main text, I report results using both the full sample and the most restrictive sample (excluding villages in districts where more than 40% of control villages received the phased-in intervention).

5 Results

I present the results of OLS regressions taking each outcome as the dependent variable. All outcome variables are converted to z-scores and coefficients can be interpreted as standard deviations. The exact wording of each question and the components of each index are presented in Appendix L. For each table, columns alternate between results for the full sample and the restricted sample. Results without covariates are available in Appendix N.

I begin by presenting results about citizen preferences over the role of NGOs and government in health service provision. Respondents in control (and treatment) villages express very positive views of NGOs. When compared with government actors across a variety of measures, NGOs and the President are always viewed more positively than other government actors and agencies (see Appendix M.1). Despite these positive views, most respondents in both treatment and control villages preferred government to be primarily responsible for health service provision. If access to NGO services makes citizens less willing to demand services from or otherwise engage with government, it seems probable that access to NGO services must first weaken this preferences for government to deliver most health services. Consistent with this expectation, respondents in treatment villages were significantly more likely to prefer NGO provision of health services.

Next, I look at the effect of the intervention on political engagement. Using more than a dozen measures, results provide no support for the expectation that access to NGO services

decreased engagement. I then look to measures of political credit. This section provides evidence that the President received political credit for the intervention. Consistent with expectations, respondents in treatment villages were *more likely* to see the President and controlling the allocation of NGO projects. Notably, I find no evidence that the intervention affects perceptions of lower level political actors. These findings are especially striking given that they are measured a full eight years after the introduction of the LG CHP intervention into treatment villages. In the final sections, I unpack the mechanisms driving political credit for the president and provide evidence against alternative explanations.

5.1 Service Delivery Preferences

I measure respondent preferences over the role of government and NGOs in service provision using two attitudinal and one behavioral measure. The two attitudinal measures ask about preferences over the role of NGOs and government generally in health service provision. This captures respondents' broad feelings about the extent to which NGOs are seen as a viable and desirable alternative to government. The behavioral measure focuses specifically on preferences between the LG CHP and government VHT program.

Figures 1 and 2 show the distribution of responses to the attitudinal questions in treatment and control villages. When asked whether government or NGOs should "provide most of the health care in the country" while the other plays a "minimal role", citizens in both groups report wanting government to provide most care. However, respondents in treatment villages are much more likely to report a preference for NGOs. When asked about whether government or NGOs "should both pay for and provide health services" or whether government should pay while NGOs provide, a plurality of respondents in both treatment and control villages report that government should both finance and deliver the majority of health services. However, in treatment villages in the full sample, almost as many respondents believe that although government should finance provision, NGOs should take the lead in health service delivery.

The behavioral measure gives respondents the opportunity to vote on the division of a *real*

donation made by the research team between the LG CHP program and the government VHT program. This exercise is designed to capture respondent beliefs over which program would use the money in a more beneficial manner for the citizens of Uganda. Since the donation was small (approximately $140) and respondents were made aware that both programs operated across the entire country, it is unlikely that respondents expected to benefit directly from the donation to either service provider.

At the end of the survey, respondents were read a description of each program that detailed their similar objectives and emphasized that the LG program operates throughout the country and in their district (the universal VHT program is already very widely known). Then field officers 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 Community Health Promoter Program to facilitate their activities, or you may recommend that we give some portion of these funds to each of them.... Please allocate these tokens based on which program you think would be more beneficial.*

Figure 3 plots the distribution of responses. For the full sample, respondents in control villages voted to give an average of 31% of the money to the NGO, while those in treated villages voted to give 37% to the NGO.

Across all three measures, the preference for government as the primary health service provider is visibly weaker in communities that were randomly assigned to receive the CHP intervention. To test this relationship statistically, I create an index where higher values indicate a greater preference for NGO service provision. Table 1 reports the results. The index is significant and substantively large, ranging from 0.18 to 0.25 standard deviations. Inspecting the individual components of this index, we see that respondents in treatment villages vote to give a much larger share of the donation to the NGO program, ranging from $\frac{1}{3}$ to $\frac{1}{2}$ of a standard deviation (although only significant for the restricted sample).

Turning to questions asking about respondents' preferences over the role of NGOs in health service provision relative to government, we see clear evidence that treated respondents are more likely to believe that it would be better if NGOs provided most of the health care in Uganda (ranging from 0.13 to 0.16 standard deviations), and some evidence that they believe government should either finance NGO-delivery of services or allow NGOs to take over both financing and delivery (ranging from 0.8 to 0.9 standard deviation, although neither are significant). Importantly, respondents in treatment villages also report seeing health service provision as a significantly lower priority for the national government to address (see Appendix J), reinforcing these findings. Overall, these results suggest that NGO provision changed how citizens view the role of government, weakening perceptions of government as the ultimate providing of health services.

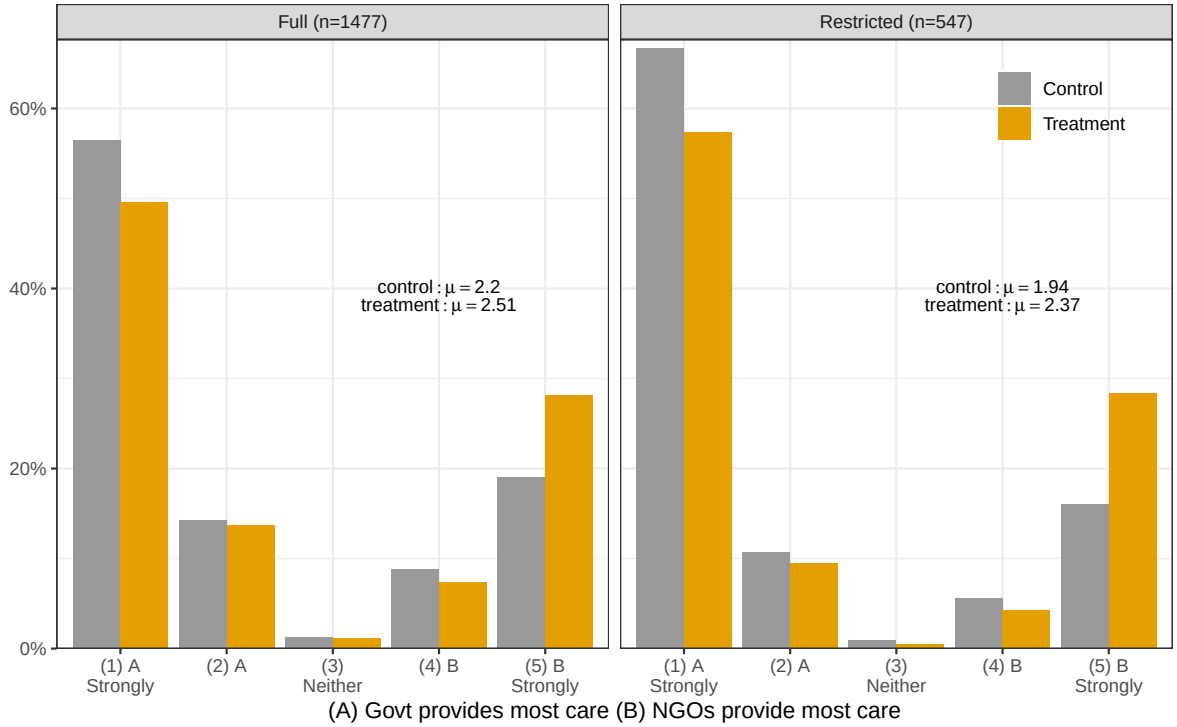

Figure 1: Preferred Role of Government and NGOs in Health Care Provision: This question asks which statement respondents agree with, and whether they agree or agree strongly; (A) It is better if government provides most of the health care in the country and non-profits play a minimal role. (B) It is better if non-profits provide most of the health care in the country and government plays a minimal role.

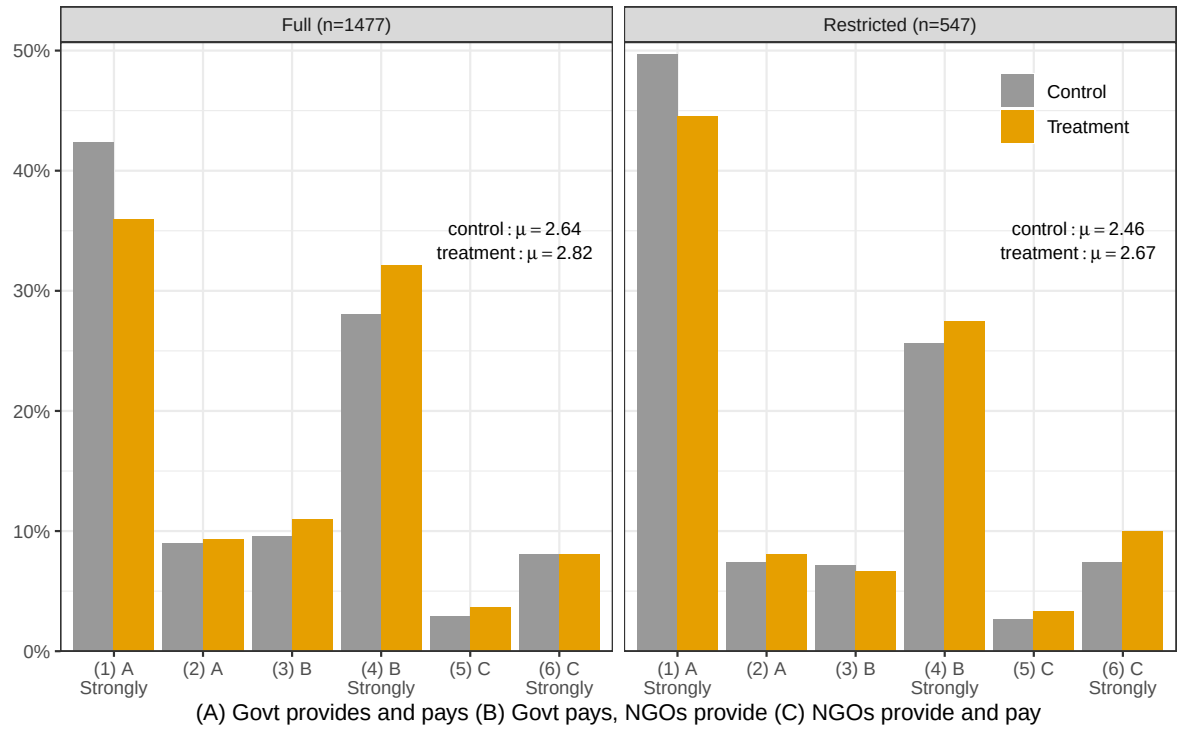

Figure 2: Preferred Role of Government and NGOs in Health Care Financing and Provision: This question asks which statement respondents agree with, and whether they agree or agree strongly; (A) The government should both pay for and provide health services. (B) The government should pay for, but non-profits should provide health services. (C) Non-profits should both pay for and provide health services.

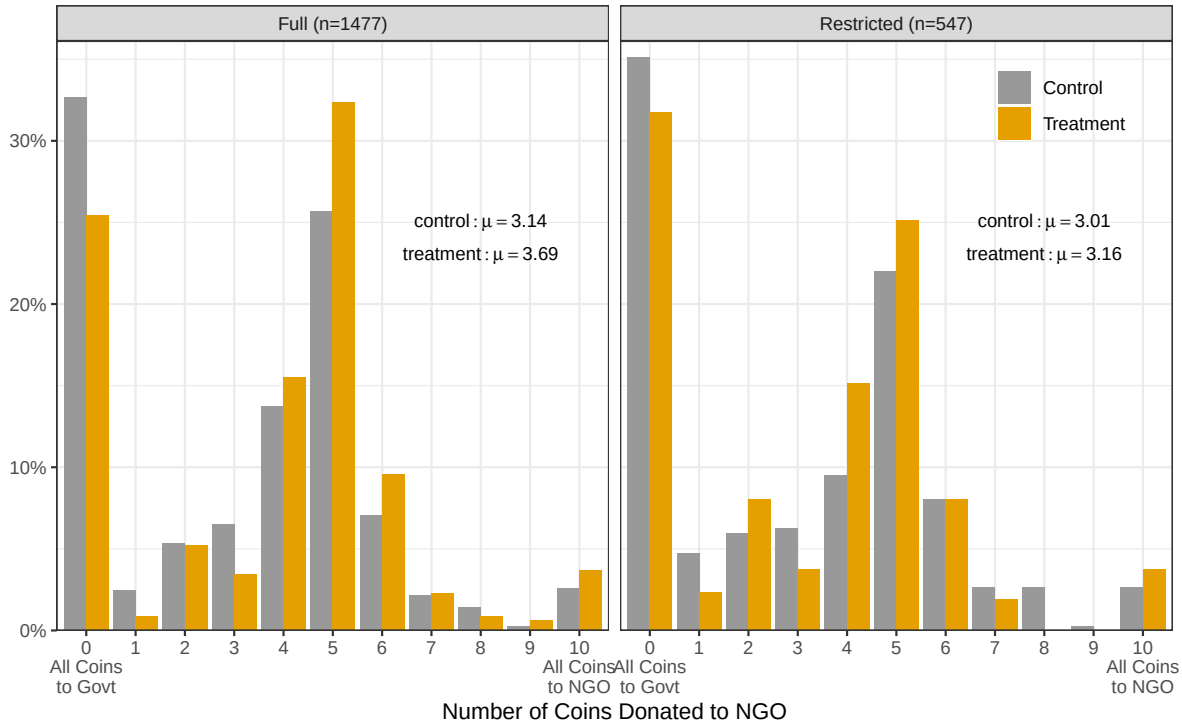

Figure 3: Distribution of Donation Allocation between Government and CHP Program: This question asks respondents to divide a donation (represented by 10 coints) between the government and NGO CHW programs.

Table 1: Effect of CHP Intervention on Citizen Preferences

	Index		Donation		Provision		Payment	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treatment	0.179*	0.254**	0.331	0.504*	0.127*	0.163**	0.081	0.093
	(0.095)	(0.113)	(0.237)	(0.276)	(0.066)	(0.075)	(0.056)	(0.101)
Restricted	No	Yes	No	Yes	No	Yes	No	Yes
Observations	1,477	547	1,477	547	1,477	547	1,477	547

Standard errors are clustered at the village level. *p<0.1; **p<0.05; ***p<0.01

5.2 Engagement & Legitimacy

Theories of instrumental political engagement and the social contract expect that when non-state actors provide viable substitutes for critical government services, engagement with and legitimacy of government will suffer. The LG CHP program provides a most-likely case to uncover these effects, given its parallel provision of a widely used service over a long period of time and its shifting of citizens' preferences away from government and toward NGO provision.

To measure engagement, I ask respondents about their household's contact with government actors and NGOs, attendance and participation at community meetings and NGO events, political knowledge, media consumption, and voting and other participation in three recent elections. To measure engagement behaviorally, I give respondents an opportunity at the end of the survey to send a message to either government health agencies (described 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"). The prompt makes clear that sending a message is optional, meaning that responding imposes a direct cost on survey participants in time and cognitive effort. Responses were translated into English and word counts used as a measure of engagement intensity.[8] These measures are combined into eleven index variables measuring engagement with six

[8]Although not pre-registered, I tested several alternative codings of this variable, including a simple binary coding of whether the respondent provided an answer. These alternative codings do not change the results.

distinct government actors, information consumption, political knowledge, organizational membership, contentious participation, and participation in election-related activities.

These index variables, as well as an investigation of their component variables, yield no evidence that the CHP intervention affected levels of engagement with government actors or with NGOs. If anything, treatment villages reported slightly higher levels of engagement with government. However, coefficients for most index variables are unstable across the full and restricted samples and rarely reach statistical significance. See Appendix F for a full description and presentation of results and Appendix L.1 for a list of questions.

To measure legitimacy, I ask respondents about their trust in government actors and NGOs, the share of designated service delivery funds that each actor spends, wastes, or steals, and about tax compliance. Evidence that trust in government is lower in treatment villages is very weak, and NGOs are also seen slightly more negatively. Levels of trust in the President are somewhat higher in treatment villages while trust in local councilors and MPs is somewhat lower, though the differences are not significant. I also ask about contentious forms of participation, including contacting the media with a complaint, attending protests, or refusing to pay a tax or fee. When asked whether they have withheld any taxes or fees owed to government (never, once or twice, more than twice, more than five, or more than ten times), the average response is slightly *lower* in treatment (0.38) relative to control (0.43) villages, indicating higher levels of tax compliance. See Appendix F for a full description and results and Appendix L.8 for a list of questions. Overall, this provides compelling evidence from a variety of measures that despite providing a high-quality service parallel to a similar government program over a long period of time, NGO provision did not have a negative effect on political engagement or government legitimacy.

5.3 Credit Attribution

LG CHP resembles a least-likely case for generating political credit. Operations are carried out largely independently of the government health system, and the intervention was randomly assigned across villages. Interviews with more than a dozen LG staff confirmed that

the program operates independently and revealed no instances of government interference or political credit claiming at the local or national level. However, the provision of health care relies on many inputs and multiple levels of oversight (Niedzwiecki, 2016; Mani and Mukand, 2007), and consumers of NGO services typically lack information on whether government contributed to or influenced their production or allocation. When NGOs provide services that are traditionally associated with the state, citizens are likely to draw on their knowledge of how those resources are typically distributed in order to assign credit.

I measure credit attribution using five questions about six government actors. Three questions are asked for all six actors. Two of these questions ask about satisfaction with the job performance of politicians and government agencies generally and in providing health services specifically.[9] The third asks about each actors' power over where NGOs locate projects. Two more questions ask specifically about the role of local politicians and agencies in attracting or overseeing NGO projects at the local level, and are asked only for Local Councilors, District Chairs, Members of Parliament, and District Agencies who could plausibly oversee the implementation NGO projects on the ground.

I combine these questions into a single index variable for each distinct government actor, which includes all questions asked for that actor.[10] Across specifications, results provide no evidence that local councilors, district chairs, MPs, or district or national health agencies receive credit for the intervention. However, Figure 4 suggests that the president did benefit from the intervention, with the effect on the credit index ranging from 0.09 to 0.24 standard deviations.

Section 2 argues that access to NGO services may encourage beliefs that government is involved in NGO service provision. Contact with the LG CHP exposed citizens to government-

[9]Two additional questions asked about satisfaction with local politicians who held office during the previous electoral cycle, in case credit was limited to those in office at the start of the intervention (some of which no longer held office at the time of the survey). These questions are asked only for District Chairs and Members of Parliament (the only two offices with electoral turnover over the study period). Results were similar when assessing these retrospective performance questions.

[10]The index consists of three questions for the President and National Agencies, and five questions for Local Councilors, District Chairs, Members of Parliament, and District Agencies.

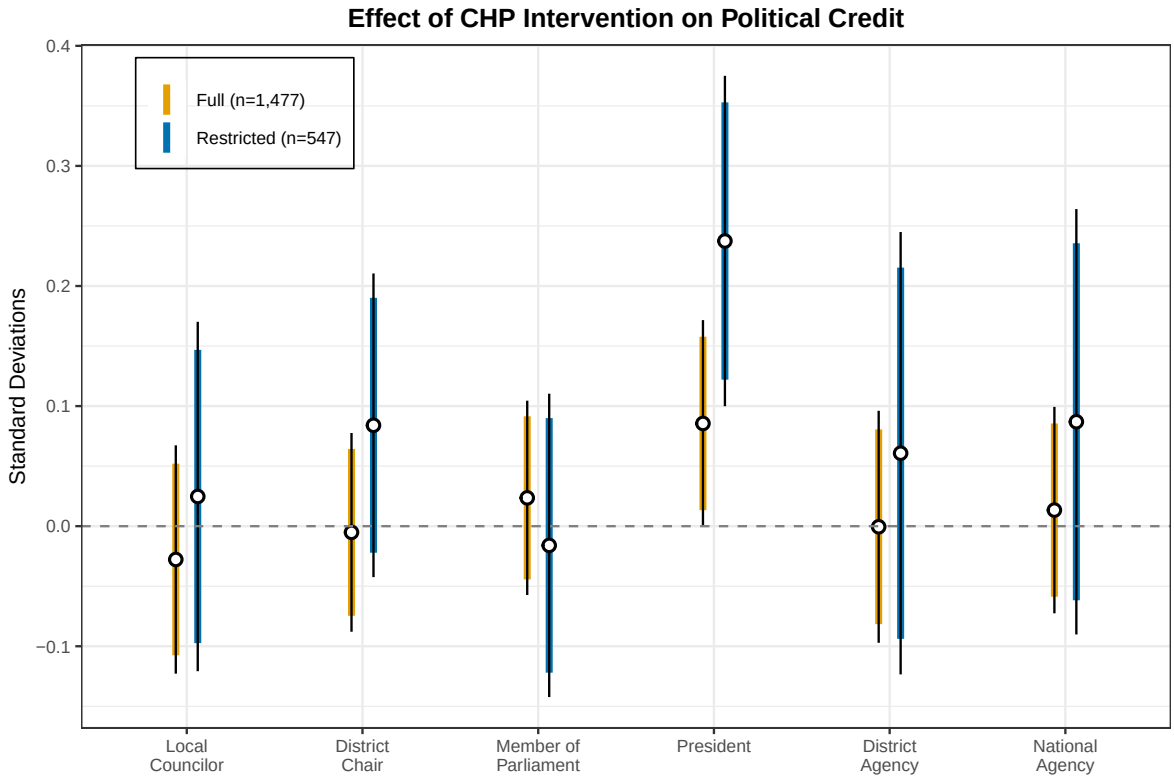

Figure 4: Political Credit: Index variable including measures of satisfaction with job performance generally and in providing health services specifically, and perceptions of power over where NGOs locate projects. Index for local actors (Local Councilors, District Chairs, Members of Parliament, and District Agencies) also include two questions asking about their role in attracting or overseeing NGO projects.

NGO co-branding in the form of fliers, signage, and online resources. Furthermore, LG CHP provides a parallel service and even hires government VHT members as health promoters. Figure 5 provides support for this mechanism: respondents in treatment villages believe that the president has significantly more power over the allocation of NGO projects than those in control villages. Table 2 presents results for each component of the president's political credit index. While all measures of credit are positive and substantively meaningful, the largest effect is on perceptions of power, ranging from 0.11 to 0.26 standard deviations. Interestingly, I find no evidence that the effect is moderated by pre-treatment partisanship (measured by the President's vote from the 2006 election for the parish in which each village is located), suggesting that these results are not driven by motivated reasoning.

Figures 6 and 7 plots the distribution of responses for perceptions of the President's health-specific and general job performance. Both measures also show some evidence that the

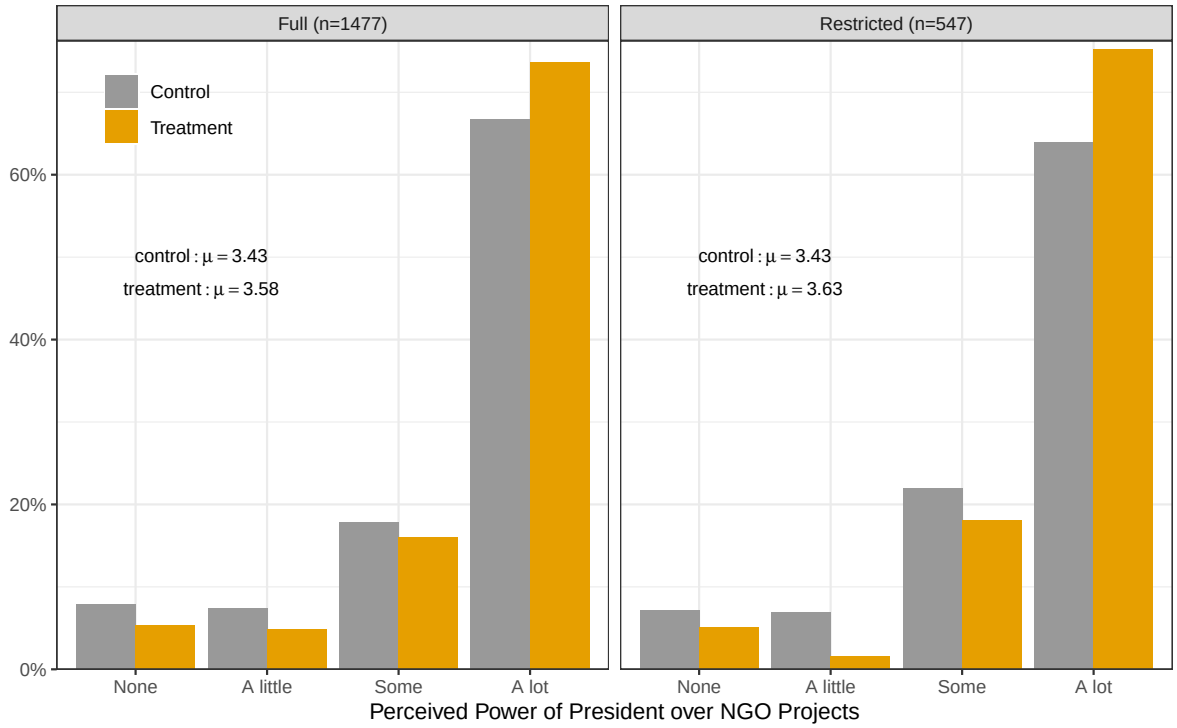

Figure 5: Perception of President's power over where NGOs locate their projects: How much power do you think the president has over where NGOs decide to put their projects and services?

Table 2: Effect of CHP Intervention on Full Index of Credit to the President

	Index		Power		Health Performance		General Performance	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treatment	0.086*	0.237***	0.113**	0.264***	0.061	0.216**	0.082	0.232**
	(0.044)	(0.070)	(0.054)	(0.065)	(0.058)	(0.101)	(0.059)	(0.108)
Restricted	No	Yes	No	Yes	No	Yes	No	Yes
Observations	1,477	547	1,477	547	1,477	547	1,477	547

Standard errors are clustered at the village level. *p<0.1; **p<0.05; ***p<0.01

intervention increased perceptions of the president's job performance in treatment villages. However, we see no such evidence for other government actors. Why do other actors not receive credit for NGO services?

Looking specifically at measures of perceived influence over NGO projects in control villages (to get a sense of 'pre-treatment' beliefs), only the president is seen as influencing the location of NGO projects. When asked how much power NGOs and various government

actors have over where NGOs locate their projects on a 4-point scale ranging from "None" to "A lot", 62% of respondents *in control villages* reported that the president has "A lot" of power. The second most powerful actor was NGOs themselves at 32%, followed by Members of Parliament (MPs) with 30% (see Appendix K). Looking at questions that ask specifically about the role of local politicians and government agencies in attracting or overseeing NGO projects at the local level, MPs are seen as having the most influence with only 8% of respondents reporting that they have helped *a lot* to bring NGOs to or oversee NGOs in their community Given that citizens without direct contact do not see other government actors as responsible for the allocation or oversight of NGO projects, and direct contact does not increase perceptions that other government actors are responsible, it is not surprising that these actors get no credit for NGO projects.

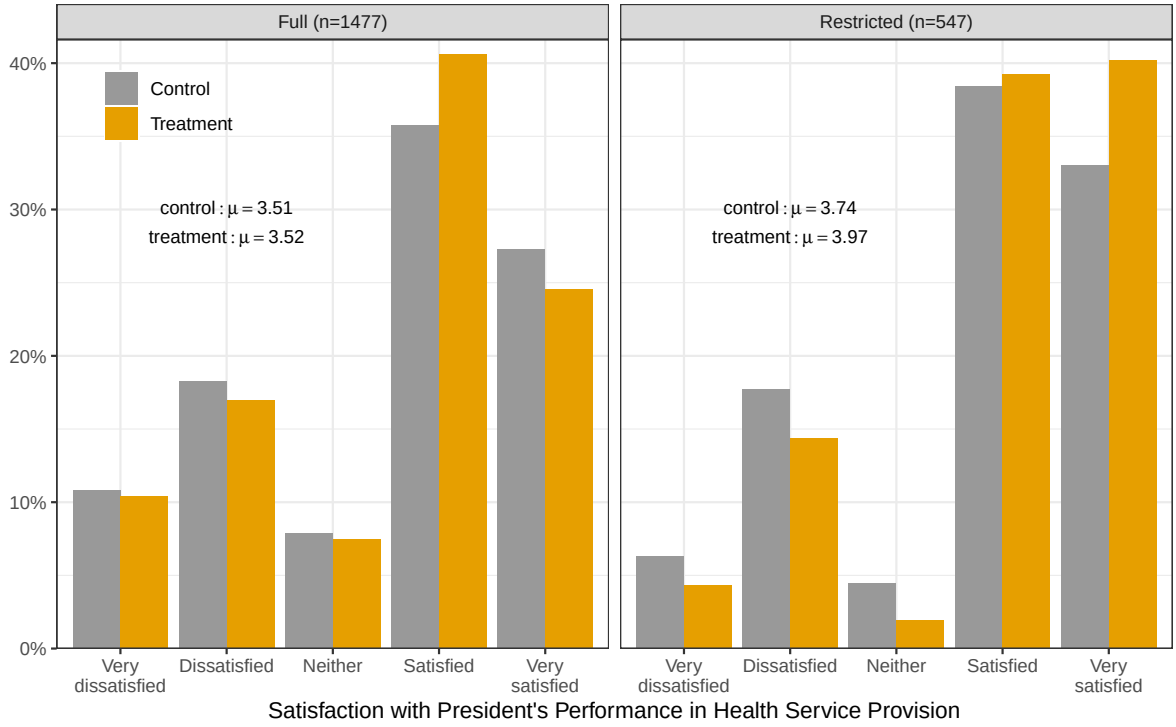

Figure 6: Perception of President's job performance in health service provision: Are you satisfied or dissatisfied with the way the president is currently doing their job in providing health services?

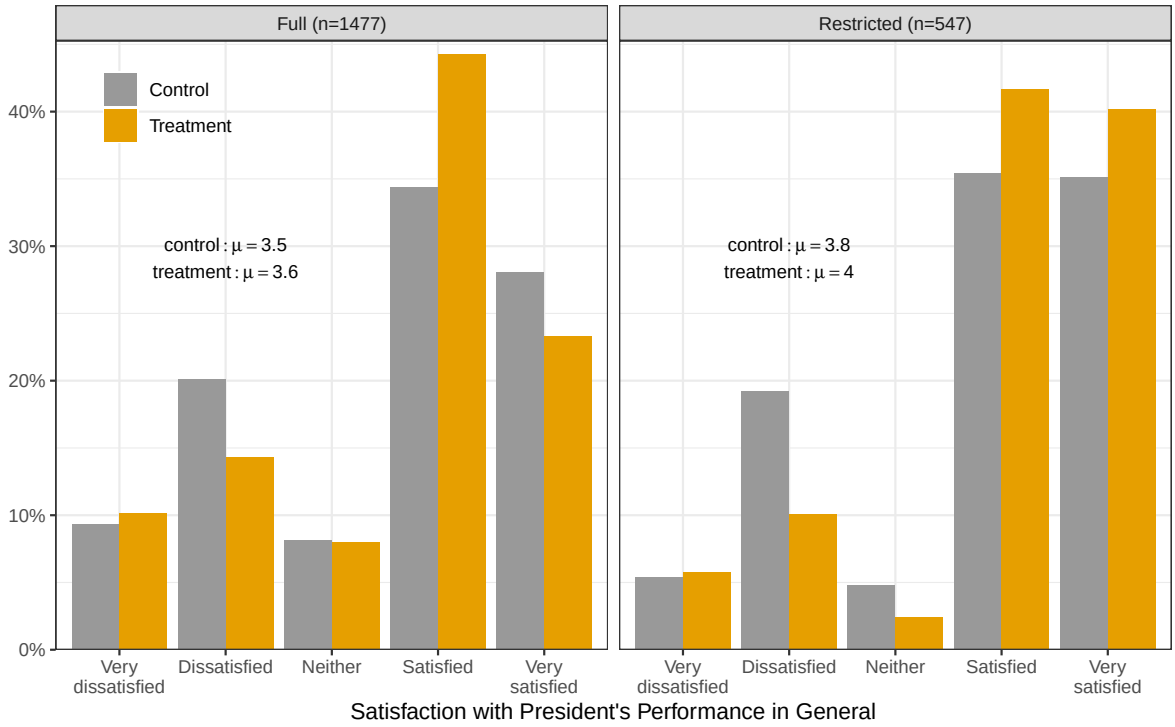

Figure 7: Perception of President's job performance in general: Are you satisfied or dissatisfied with the way the president is currently doing their job in general?

6 Mechanisms & Alternative Explanations

Findings suggest that the CHP intervention increased preferences for NGO relative to government service delivery and generated political credit for the incumbent president even after eight full years of access to the program. I argue that direct contact with NGO services increased the valuation of NGO services, blurred lines between state and non-state efforts, and reinforced the belief that the president determines the allocation of NGO projects (as he does with government resources).

Substitution & Capacity Spillovers

Despite not receiving credit for the NGO program, we did not see evidence for reduced engagement with the local politicians and district officials who oversee the parallel government program. The prediction that access to parallel NGO services would undermine political engagement assumes that NGO services are a substitute for government services or reflect negatively on the performance of government. Interviews with LG and government health

workers revealed that in some cases, VHT members were recruited as CHPs and maintained close social ties with their former associates. This created opportunities for learning between the NGO and government health workers.

Table 3: Effect of CHP Intervention on Perceptions and Use of VHTs

	VHT Satisfaction		VHT Use	
	(1)	(2)	(3)	(4)
Treatment	0.159***	0.349***	0.212***	0.110
	(0.061)	(0.059)	(0.073)	(0.091)
Restricted	No	Yes	No	Yes
Observations	1,477	547	1,477	547

Standard errors are clustered at the village level.
*p<0.1; **p<0.05; ***p<0.01

To investigate this possibility, I ask respondents about levels of contact and satisfaction with government VHTs. Results suggest that the intervention *increased* respondent satisfaction with the parallel government VHT program and contact with VHT members. This evidence that the programs served as complements makes findings that access to the NGO program increased preferences for NGO service provision even more striking. While these positive spillovers could also explain credit for the President, evidence that citizens update their beliefs about the President's power over NGO allocation as strongly as they update about his performance suggests that political credit is not a result of positive spillovers on the quality of the parallel government VHT program.

Respondent Awareness of the Treatment

To further test whether the increased preference for NGO services and political credit for the President was generated by respondents' awareness of access to NGO services (rather than misattribution of NGO services to government, misattribution of improvements in household or community welfare to government policy, or positive spillovers on government capacity), I look at the strength of these effects among the subset of respondents in treatment villages that (1) reported being aware of the CHP intervention or (2) reported that they believed

the CHP program was operated not-for-profit (rather than for-profit). In treatment villages, 49% of respondents were aware of the CHP program and 49% believed that the intervention was non-profit.

If the effects of the intervention were not a product of citizens' awareness of the NGO program or were the result of pre-treatment differences, the main effects should be similarly sized for respondents in treatment villages that were not aware of the LG intervention or believed that it was for-profit. For both alternative definitions of the treatment variable, the effect of the treatment on the index measuring preferences for NGO services remains significant and becomes substantially larger. For credit to the president, coefficients for the full sample also remain significant and become substantially larger, although coefficients for the restricted sample remain similar in size (see Appendix K). This reinforces my interpretation of the main findings as reflecting a genuine increase in preferences for NGO service delivery over government service delivery and a genuine effect on political credit for the president.

Responsiveness & Capacity

Receiving health services from an NGO may allow citizens to compare the responsiveness or capacity of NGOs and government. This may explain why respondents in treatment villages are more likely to prefer NGO over government service provision. To measure perceptions of responsiveness, I ask about respondents' beliefs that they could influence the actions of local or national government actors or NGOs and how effective various lobbying activities aimed at these actors would be. Results provide no evidence that NGOs or government are seen as more (or less) responsive in treatment villages. See Appendix G for a full description and presentation of results and Appendix L.6 for a list of questions.

To measure perceptions of government capacity, I ask respondents whether they agree or disagree with statements asserting the ability of local and national government agencies to carry out health-related tasks. To measure capacity on a relative scale, I ask respondents to estimate the share of services in the country provided by government versus non-state actors. There is no evidence that respondents in treatment villages see the capacity of

NGOs or local or national government more negatively (or positively). See Appendix L.7 for a list of questions and Appendix H for a presentation of results.

Reallocation of Government Spending

If NGO spending on health services in treatment villages allowed government to divert spending to new activities in those villages, this could provide an alternative explanation for increased political support for the President. Using village-level data, I compare remaining control villages to phased-in control villages and remaining control villages with all villages that have received the CHP intervention (treatment villages plus phased-in control villages). I provide evidence that these groups are similar on both pre and post-treatment access to a variety of local infrastructure and public goods (see Appendix I and D). These findings comport with Seim et al. (2020), finding that NGO projects have a minimal effect on how local governments allocate spending between recipient and non-recipient communities.

7 Conclusion

Political economy research has produced opposing expectations about the likely effects of non-state service provision on important political outcomes. On one hand, theories of instrumental engagement and the social contract suggest that decreasing the role of the state in service provision may reduce citizen engagement and perceptions of government legitimacy. Alternatively, work on credit attribution in complex political environments gives reason to expect that non-state provision may inflate support for incumbents that receive credit for the production, allocation, or welfare effects of NGO services. I synthesize these theoretical disagreements and argue that perceptions of political control over allocation will preclude the erosion of feelings of reliance on government, even as citizens positively update their beliefs about the viability and desirability of NGOs as an alternative service provider to government. Instead, NGOs' provision of services that are traditionally associated with the state, as well as the common practices of NGO-government co-branding and co-production, will foster an impression of political influence that benefits powerful incumbents.

To test these expectations, I field original surveys 'downstream' from a highly-effective randomized health intervention implemented parallel to a similar universal government program in Uganda. The LG CHP program resembled a most-likely case in which to find evidence for political disengagement. The program provided a more effective and more popular alternative delivered parallel to a salient, 'front-line' universal government program. Consistent with concerns about a weakening of the social contract, access to NGO services changed citizen preferences over the role of government in service provision, causing stronger preferences for NGO over government delivery.

However, these preferences did not result in lower levels of political engagement or damage perceptions of government performance or legitimacy, even after eight full years of continuous access to the program. Instead, citizens saw NGOs as a valuable resource controlled by powerful government actors and updated their beliefs about the quality of actors seen as responsible for their allocation. Looking at a broad range of government actors, evidence suggests only the President received credit for the intervention. Not only did citizens express strong "ex-ante" beliefs that the President influences the allocation of NGO services, but contact with the NGO program strengthened this belief. Although access to NGO services did cause citizens to "look to NGOs rather than governments to provide services", this did not imply a weakening of the social contract. Rather than feeling less reliant on government, citizens with access to the intervention were more likely to believe that the President actively controls which communities receive NGO services and which do not.

Alternatively, the CHP program resembled a least-likely case for the generation of political credit. The program was carried out largely independently of the government health system and was randomly assigned across villages. However, respondents believed the president was controlling NGO project allocation, and the intervention strengthened this belief in political control over the allocation of NGO services. The least-likely design may account for the null effects of the program on political credit for local government actors who are likely to be involved in interventions that involve explicit co-production with government.

Furthermore, President Museveni's long tenure and top-down control over the distribution of government resources may crowd-out the ability of local politicians to effectively claim credit for themselves. Investigating the effect of similar interventions that involve more inputs or oversight from local government, especially in contexts with weaker chief executives or less restrictions on political competition from opposition groups, could enrich our understanding of credit attribution and non-state service delivery.

These findings have ambiguous normative implications. On one hand, NGO activities may let under-performing governments "off the hook" by inflating public support. This may be especially problematic in contexts where credit flows to a powerful chief executive with autocratic tendencies. If governments respond to increased political support or changing citizen preferences by retrenching from service delivery and diverting spending to less publicly oriented tasks, this could contribute to the long-term deterioration of state capacity. However, although respondents with access to the CHP intervention were more likely to believe NGOs should provide most of the country's health services, a clear majority still believe that government should at least finance health services. This suggests that citizens are unlikely to reduce their demand for government involvement in service provision. Furthermore, the ability of at least some political actors to receive credit may also provide an incentive for governments to create a facilitating environment for non-profits.

These findings advance our understanding of how the provision of services conditions individual preferences over the role of government and how citizens attribute political credit in complex governance environments. The findings also carry important implications for practical questions about the role of non-state actors in securing citizen welfare and the potential costs that donors and policy-makers face when invoking these actors. Going forward, donors should think carefully about whether channeling resources to NGOs undermines political incentives to invest in state capacity. However, the results do suggest complementarities between NGO programs and government programs are possible even without explicit co-production. While I provide some evidence that the intervention being studied here did

not cause differential government investments in local public goods, further research into the impact of citizen expectations on government behavior is necessary to understand the consequences of NGO service delivery for political accountability.

References

Acemoglu, D., Naidu, S., Restrepo, P., and Robinson, J. A. (2019). Democracy does cause growth. *Journal of Political Economy*, 127(1):47–100.

Baldwin, K. and Bhavnani, R. R. (2015). Ancillary studies of experiments: Opportunities and challenges. *Journal of Globalization and Development*, 6(1):113–146.

Baldwin, K. and Winters, M. S. (2020). How do different forms of foreign aid affect government legitimacy? evidence from an informational experiment in uganda. *Studies in Comparative International Development*.

Banerjee, A. V., Banerjee, A., and Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty*. Public Affairs.

Barr, A., Fafchamps, M., and Owens, T. (2005). The Governance of Non-governmental Organizations in Uganda. *World development*, 33(4):657–679.

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

Brass, J. N., Longhofer, W., Robinson, R. S., and Schnable, A. (2018). Ngos and international development: A review of thirty-five years of scholarship. *World Development*, 112:136–149.

Bratton, M. (1989). The politics of government-ngo relations in africa. *World Development*, 17(4):569–587.

Cammett, M. C. and MacLean, L. M. (2011). Introduction: the political consequences of non-state social welfare in the global south. *Studies in Comparative International Development*, 46(1):1–21.

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

Christopher, J. B., Le May, A., Lewin, S., and Ross, D. A. (2011). Thirty years after alma-ata: a systematic review of the impact of community health workers delivering curative interventions against malaria, pneumonia and diarrhoea on child mortality and morbidity in sub-saharan africa. *Human resources for health*, 9(1):27.

Clough, E. R. (2017). *Exit, Voice, and Resources: How NGOs Shape State Performance in India*. PhD thesis.

de la Cuesta, B., Milner, H. V., Nielson, D. L., and Knack, S. F. (2019). Oil and aid revenue produce equal demands for accountability as taxes in ghana and uganda. *Proceedings of the National Academy of Sciences*, 116(36):17717–17722.

Deaton, A. and Cartwright, N. (2018). Understanding and misunderstanding randomized controlled trials. *Social Science & Medicine*, 210:2–21.

Devarajan, S. and Reinikka, R. (2004). Making services work for poor people. *Journal of African economies*, 13(suppl_1):i142–i166.

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.

Gibbons, C. E., Serrato, J. C. S., and Urbancic, M. B. (2018). Broken or fixed effects? *Journal of Econometric Methods*.

Gisselquist, R. M. and Niño-Zarazúa, M. (2015). What can experiments tell us about how to improve government performance? *Journal of Globalization and Development*, 6(1):1–45.

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.

Hansen, B. B. and Bowers, J. (2008). Covariate balance in simple, stratified and clustered comparative studies. *Statistical Science*, pages 219–236.

Harding, R. (2015). Attribution and accountability: Voting for roads in ghana. *World Politics*, 67(4):656–689.

Hicken, A. (2011). Clientelism. *Annual review of political science*, 14:289–310.

Hulme, D. and Edwards, M. (1997). *NGOs, states and donors; too close for comfort?* Number 361.763 N576. Save the Children Fund, New York, NY (EUA).

Kling, J. R., Liebman, J. B., and Katz, L. F. (2007). Experimental analysis of neighborhood effects. *Econometrica*, 75(1):83–119.

Kruks-Wisner, G. (2018). *Claiming the State: Active Citizenship and Social Welfare in Rural India*. Cambridge University Press.

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

Levi, M. and Sacks, A. (2009). Legitimating beliefs: Sources and indicators. *Regulation & Governance*, 3(4):311–333.

Lin, W. and Green, D. P. (2016). Standard operating procedures: A safety net for pre-analysis plans. *PS: Political Science & Politics*, 49(3):495–500.

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

Mani, A. and Mukand, S. (2007). Democracy, visibility and public good provision. *Journal of Development Economics*, 83(2):506–529.

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

Morse, Y. L. (2018). Presidential power and democratization by elections in africa. *Democratization*, 25(4):709–727.

Needles, C., Wolcheck, D., Sato, G., Ingulfsen, I., McGill, L., Bradford, L., and Ross, N. (2018). The state of global giving by u.s. foundations, 2011-2015. Technical report, Council on Foundations.

Niedzwiecki, S. (2016). Social policies, attribution of responsibility, and political alignments: A subnational analysis of argentina and brazil. *Comparative Political Studies*, 49(4):457–498.

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.

Perry, H. B., Zulliger, R., and Rogers, M. M. (2014). Community health workers in low-, middle-, and high-income countries: an overview of their history, recent evolution, and current effectiveness. *Annual review of public health*, 35:399–421.

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

Risse, T. and Stollenwerk, E. (2018). Legitimacy in areas of limited statehood. *Annual Review of Political Science*, 21:403–418.

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

Seim, B., Jablonski, R. S., and Ahlback, J. (2020). How information about foreign aid affects public spending decisions: Evidence from a field experiment in malawi. *Journal of Development Economics*.

Semboja, J., Therkildsen, O., et al. (1995). Service Provision Under Stress in East Africa: The State, NGOs and People's Organizations in Kenya, Tanzania and Uganda.

Sondheimer, R. M. (2011). Analyzing the downstream effects of randomized experiments. *Cambridge Handbook of Experimental Political Science*, pages 932–958.

Stokes, S. C. (2007). Political clientelism. In *The Oxford handbook of political science*.

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

Tsai, L. L., Morse, B. S., and Blair, R. A. (2020). Building credibility and cooperation in low-trust settings: persuasion and source accountability in liberia during the 2014–2015 ebola crisis. *Comparative Political Studies*, page 0010414019897698.