The Effect of Sustained Transparency on Electoral Accountability[*]

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Abstract

Transparency is theorized to strengthen political accountability. Yet, initiatives undertaking one-shot dissemination of politician performance information directly prior to elections have yielded largely disappointing results. We argue that *sustained* transparency—dissemination of politician performance information early, regularly and predictably throughout the term— is critical. Using a formal model, we study how, in settings that are common in low-income countries, sustained transparency impacts a string of decisions by various actors in advance of elections—incumbents' choice to run, parties' nomination choice, and potential challengers' entry choice. These decisions affect the candidate slate, and ultimately electoral outcomes, conditional on incumbent performance and her relative party strength. We test our theory using a field experiment involving 354 subnational constituencies in Uganda. We find that an NGO's transparency initiative reduced poor performers' reelection and increased good performers' reelection probability, suggesting that sustained transparency can improve electoral accountability even in non-democracies holding periodic elections.

Electoral accountability hinges on the availability of information about politicians' performance, yet such information is scarce in Global South contexts. Although the international development community has devoted an increasing amount of funding to transparency initiatives, the empirical relationship between transparency and accountability has been called "uncertain" (Fox, 2007), while a recent set of coordinated field experimental studies yielded null results (Dunning et al., 2019). Understanding the conditions under which transparency initiatives can improve electoral accountability thus remains a question of paramount academic and policy importance.

In this paper, we investigate the conditions under which *sustained transparency*—the dissemination of politician performance information early, regularly and predictably throughout the electoral cycle—strengthens electoral accountability. Conventional theories focus on how transparency affects incumbent and voter behavior. However, our model also accounts for *pre-election decisions* by political parties and potential challengers that could alter the candidate slate. This innovation is consequential: informed by prior theoretical scholarship, existing empirical studies have focused on *one-shot* information dissemination campaigns to citizens *directly prior to elections*, after the candidate slate was already determined (e.g., Chong et al., 2015)). Meanwhile, studies focusing on party nominations and candidate entry have largely abstracted from incumbent performance transparency.

Our theory is tailored to plurality elections that revolve around valence issues and feature meaningful variation in the organizational capacity of political parties (e.g., owing to a history of one-party rule). This is the modal setting in sub-Saharan Africa and common elsewhere in the Global South. In our model, the incumbent's *relative party advantage*—which captures the party's electoral appeal and its comparative advantage in candidate recruitment—plays a key role moderating the relationship between transparency and accountability. Higher relative party advantage improves an incumbent's reputation at the start of the electoral term, which is updated based on subsequent performance signals (with transparency improving their accuracy).

Our model shows the effect of transparency on electoral accountability is more nuanced than previously considered. In existing models, transparency affects incumbents' reputation, and their re-election hinges on whether voters consider their reputations to exceed an exogenous cutoff of good performance. In our model, when (sustained) transparency improves the accuracy of per-

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formance signals early in the cycle, it affects not only incumbents' effort and their reputation, but also their running decisions, party leaders' nomination strategies, and potential challengers' entry choices. Transparency thus affects whether the incumbent reaches the general election, but it also endogenously determine the cutoff to which incumbent reputation is compared (a function of potential challengers' entry choice). Further, we show that the effects of transparency are moderated by incumbents' relative party advantage: in particular, the effect of transparency on incumbents' electoral outcomes (positive for high performers and negative for low performers) should be stronger when party advantage is large.

We test our theory using data from a field experiment conducted with 354 district councilors in Uganda, in collaboration with Advocates Coalition for Development and Environment (ACODE), a non-partisan Ugandan NGO that creates annual performance scorecards for councilors. Operating in 20 district governments, ACODE disseminates the scorecards at yearly events attended by district elites. During the 2011-2016 cycle, half of the incumbent councilors were randomly selected to have their scorecards further disseminated directly to constituents. Consistent with our model, Grossman and Michelitch (2018) find that the program improved incumbents' effort, but only outside of deep party strongholds. By fielding a politician survey toward the end of the term, and culling official electoral returns, this study assess the subsequent effect of the program on incumbent running decisions, party nominations, challenger entry, and voter choices.

Our research design has several strengths. First, the availability of detailed information on local politicians' behavior, especially in the context of a randomized controlled trial in the Global South is very rare. Second, our theoretical framework is predicated on the notion that the transparency initiative represents a meaningful change in the informational environment for political elites and voters. It is thus important that the transparency initiative (i) involves a reputable local NGO with a sustainable initiative with broad stakeholder support, and (ii) has already been shown to be sufficiently powerful to affect incumbent performance (Grossman and Michelitch, 2018). Given ACODE's deep local roots, we are confident that our study's design has a large degree of ecological and construct validity.

However, we face several challenges in testing the hypotheses derived from our model (itself a stylized representation of more complex decision processes). Because we are examining a string

of behavioral responses, we have to consider that actors respond to previous decisions by other actors. The formal model allows us to specify hypotheses that account for this nested outcome structure. However, nested conditional hypotheses produce thorny estimation challenges. Moreover, while successfully executing a multi-year program across hundreds of constituencies is a herculean effort for a local NGO in a low-income country setting, our sample size yields lower-than-ideal statistical power. For this reason, we consider the evidence in terms of tendencies and patterns, assessing substantive significance and not only statistical significance.

Results are broadly consistent with our theory's predictions. Transparency increases the reelection probability of incumbents with above-median performance by over six percentage points and decreases it for incumbents with below-median performance by over thirteen percentage points. When conditioning on winning the party nomination, and taking into account incumbents' relative party advantage, these effects are stronger—in line with the model predictions. Citizens' vote choice, potential challengers' entry decisions and (to a lesser extent) parties' nomination strategies all contribute to these effects. In short, we find that sustained transparency has a genuine potential to improve electoral accountability, *even in an authoritarian setting*.

This study generates important insights. First, we contribute to the theoretical and empirical scholarship on electoral accountability. Theoretically, we formally study how endogenous entry and party nomination decisions shape the relationship between voter information and electoral accountability.[1] Against a backdrop of null findings from multi-country transparency campaigns undertaken directly prior to elections (Dunning et al., 2019), our study illuminates reasons behind more positive results in studies in which transparency initiatives occurred sufficiently early in the term to trigger improvements in politician performance (e.g., in spending discretionary funds (Ofosu, 2019), tax compliance (Malik, 2020), and party nominations (Banerjee et al., 2020)).[2]

Second, we contribute to the literature on candidate entry (for a review, see Gulzar, 2021) by

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[1]Recent formal theories generally focus on trade-offs between moral hazard and adverse selection (Duggan and Martinelli, 2020), and the effect of identity and bounded rationality (Prato and Wolton, 2016). We also join Izzo, Dewan and Wolton (2020) in directly responding to conceptual gaps in recent empirical findings.

[2]Other barriers to strengthen accountability via transparency regard the potential for politicians to discredit performance information, prevent its dissemination, or increase vote-buying to offset its effect (Cruz, Keefer and Labonne, 2020; Chong et al., 2015). Scholars also note potential barriers to citizens' use of information, such as uncertainty over attribution (Martin and Raffler, 2020), motivated reasoning (Adida et al., 2017), the salience of politician performance indicators (Bhandari, Larraguy and Marshall, 2021), and coordination problems (Arias et al., 2019).

introducing two novel elements—transparency and (relative) party advantage. Past work has largely focused on dynamics that are more relevant to high-income democracies and generally sidestepped the role of transparency.[3] Third, we contribute to the literature on uneven party competition in electoral authoritarian regimes and weakly institutionalized democracies (Morse, 2018; Weghorst, 2021). In addition to the introduction of debates (Platas and Raffler, 2020; Brierley, Kramon and Ofosu, 2020), we suggest that sustained transparency may reduce the dominance of ruling parties and improve the prospects for more even and performance-based party competition.

A Theory of Sustained Transparency and Accountability

In our theory, candidates compete in multi-party single member district plurality elections. We study how sustained transparency affects five nested outcomes: (i) incumbent effort, (ii) her decision to run for reelection, (iii) her ability to secure her party's (re)nomination, (iv) entry decisions by potential challengers, and (v) the incumbent's electoral performance. Our modeling choices reflect well-documented features of electoral competition in many developing countries.

First, citizens have limited information about incumbent performance and challenger quality (Bidwell, Casey and Glennerster, 2020), perhaps due to the dearth of strong independent media outlets, and so do party elites (Gulzar, Hai and Paudel, 2020). Incumbent performance information produced and disseminated by non-partisan NGOs can fill this void (Dunning et al., 2019).

Second, party competition revolves around valence issues (e.g., competence) rather than left-right positional issues (Bleck and Van de Walle, 2018). Since parties are generally not programmatic, party switching and independent candidacy may occur among incumbents who lose their party nomination (Ichino and Nathan, 2013). Further, while candidates derive benefits from holding office, they can also derive status merely from candidacy (Weghorst, 2021).

Third, there is local variation in the organizational capacity of political parties, owing in part to the spatial distribution of ethnic groups. We introduce the notion of relative party advantage—

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[3]Theoretical scholarship focuses on ideology and competence (Gordon and Landa, 2009) and private sector opportunities (Caselli and Morelli, 2004). With its focus on rent-seeking, Svolik (2013) represents an exception. Empirical studies of candidacy entry have focused on the role of dynasties (Cruz, Labonne and Querubin, 2017), party leaders' information (Gulzar, Hai and Paudel, 2020), electoral quotas (Hughes et al., 2019), career trajectories (Weghorst, 2021), and attractiveness of outside options (Grossman and Hanlon, 2014).

encompassing appeal, ability to recruit candidates and preferential access to funding and local media (Morse, 2018)—to capture these asymmetries.[4] These asymmetries also produce differences in candidate nomination procedures, which range from well-organized primaries to informal, opaque elite-level discussions (Ichino and Nathan, 2013).

Model Primitives

Actors. The model features a representative voter, an incumbent I, her party leader L, and n potential general election challengers (indexed by i). L and I's party also includes a non-strategic reservation candidate R.

Each politician can be high-ability ($\theta = 1$) or low-ability ($\theta = 0$), which is privately observed.[5] $\mu_j \in [0,1]$ denotes politician j's *reputation*: the public belief that j is high-ability. Each potential general election challengers' reputations are independently drawn from the distribution $F(\cdot)$—a truncated normal with parameters $(1/2, \sigma)$ and support $[0,1]$. The incumbent I begins the term with a reputation of $\mu_0 \in (0,1)$ and the reputation of the reserve candidate R is drawn from a truncated normal distribution $F_R(\cdot)$ with parameters (μ_0, σ) and support $[0,1]$. μ_0 captures, in a reduced form, a party's organizational capacity, its ability to recruit candidates, and its local electoral appeal.

The game is divided into four stages, summarized in Figure 1: Governance, Incumbent Running Decision, Party Nomination, and General Election.

Governance. I privately observes her ability $\theta_I \in \{0,1\}$, then chooses effort $e \in [0,1]$ at cost $C(e) = \frac{e^{1+\gamma}}{1+\gamma}$, with $\gamma > 1$. Effort and ability jointly improve the realization of *performance* π, which can be high ($\pi = h$), with probability $\Pr(\pi = h | \theta, e) = e\frac{1+\theta}{2}$, or low ($\pi = l$). I's performance cannot be perfectly monitored. All actors, instead, observe a public signal $s \in \{l, h\}$ with precision $\tau \in [0,1]$, so that $\Pr(s = \pi) = \frac{1+\tau}{2}$. NGO transparency initiatives increase the value of τ. Following the performance signal, the public updates I's reputation from μ_0 to $\mu_I(s)$ using Bayes rule.

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[4]Relative party advantage is similar to what Gordon and Landa (2009) and Prato and Wolton (2018) term, respectively, "partisan bias" and "partisan advantage."

[5]The assumption that party leaders and voters have the same information about candidate ability is for expositional simplicity. Our insights go through as long as leaders cannot credibly transmit their private information to voters, which in our empirical context is plausible.
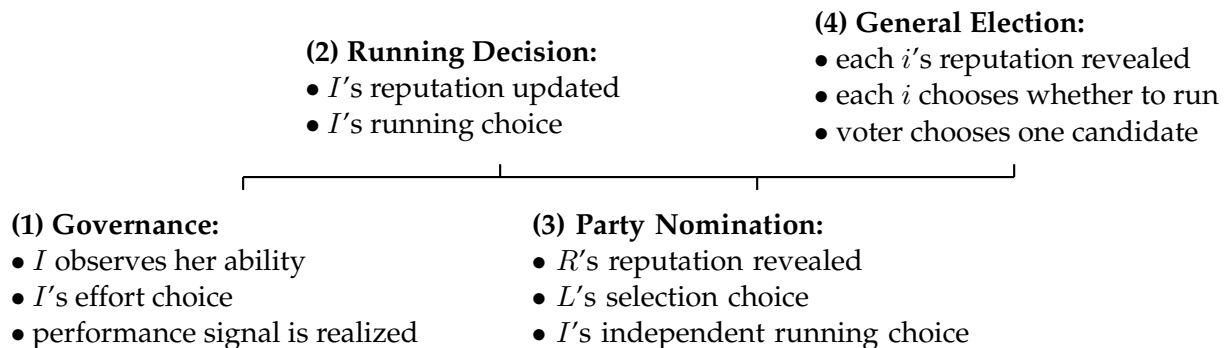
(2) Running Decision:
- I's reputation updated
- I's running choice

(4) General Election:
- each i's reputation revealed
- each i chooses whether to run
- voter chooses one candidate

(1) Governance:
- I observes her ability
- I's effort choice
- performance signal is realized

(3) Party Nomination:
- R's reputation revealed
- L's selection choice
- I's independent running choice

Figure 1: Timeline

Incumbent Running Decision. After observing s, I decides whether to run for reelection ($r_I = 1$) or not ($r_I = 0$). Running is associated with a cost $k \in (0,1)$, capturing the time and resources required for a campaign.

Party Nomination. The reserve candidate's reputation μ_R is drawn from G and publicly observed. If I chooses not to run, R becomes the nominee (denoted by N, so $R = N$). If instead I chooses to run, L chooses whether to nominate R and de-select I ($d_L = 1$, resulting in $N = R$) or I ($d_L = 0$, resulting in $N = I$).[6] If L nominates R, I can quit the party ($q_I = 1$) and run as an independent in the general election at an additional net cost ε, drawn from a distribution F_ε with mean zero and support $[-\bar{\varepsilon}, \bar{\varepsilon}]$. A negative value of ε captures the additional value of visibility or the availability of alternative employment opportunities.

General Election. Each potential general election challenger i observes her own reputation $\mu_i \in [0,1]$ and chooses whether to run for election ($r_i \in \{0,1\}$). After observing the slate of candidates, the voter elects the candidate with the highest reputation among those running. As a result, the party candidate $N \in \{I, R\}$ wins if and only if she has the highest reputation:[7]

$$\mu_N \geq \max\left\{ \max_i\{\mu_i r_i\}, q_I \mu_I \right\}.$$

Payoffs. We assume that the incumbent party leader L cares about keeping the seat (its value is normalized to one) and experience an additional net payoff $\zeta \in \{-1, 0, 1\}$ from keeping the

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[6]This reduced form nomination captures various forms of candidate selection procedures, ranging from a primary election (in which case L should be interpreted as the party selectorate or the median primary voter) to a more informal party leaders choice.

[7]Ties in this model are zero probability events, so we do not specify how they are resolved.

incumbent, capturing additional considerations that voters do not directly value, such as party loyalty. We assume that the incumbent is uncertain about the value of ζ and let $\chi_\zeta = \Pr(\zeta)$. Let W denote the general election winner and $\mathbf{1}\{\cdot\}$ denote the indicator function. We have $u_L = \mathbf{1}\{N = W\} + \zeta\mathbf{1}\{N = I\}$.

Potential general election challengers value being elected and suffer the net cost k if they run. Hence, i's payoff is given by $u_i = \mathbf{1}\{i = W\} - r_i k$. The incumbent similarly values winning the election. She can reach it as the party nominee with probability $1 - d_L$; or as an independent with probability $d_L q_I$, net of the cost of running (with its uncertain component ε) and the cost of effort. Her payoff is then $u_I = r_I\big(\mathbf{1}\{I = W\} - k - d_L q_I \epsilon\big) - C(e)$. To ensure tractability, we assume that σ (the variance of F and F_R) is large enough, that $\bar{\varepsilon}$ is small enough, and that τ is not too large.[8]

Equilibrium. We study sequential equilibria with the restriction that politicians' running decisions can only depend on their reputation (not directly on their ability).[9] An equilibrium specifies a strategy profile $\{e_I, r_I, d_L, q_I, r_i\}$ and a belief system $\{\mu_I(l), \mu_I(h)\}$.

Equilibrium Analysis

We proceed by backward induction: first, we begin with the general election, then the party nomination stage, then the incumbent's running decision, and finally the governance stage.

General Election. A potential challenger runs if and only if her winning probability exceeds the cost of running k. When making her entry decision, i can observe the reputation of the party nominee N and, when he is running as an independent, that of the incumbent I. i can only win if her reputation exceeds them, i.e., if $\mu_i > \max\{\mu_N, q_I \mu_I\}$. This is the *outsider hurdle*. This is necessary but not sufficient to win: i's reputation also needs to exceed that of the other general election candidates, whose reputation and behavior i can only conjecture. Given these conjectures, her reputation needs to generate a sufficiently large winning probability to compensate for the cost k. This is the *contestability hurdle*. In SI E, we show that this is equivalent to: $\mu_i \geq F^{-1}\left(k^{\frac{1}{n-1}}\right)$. Combining outsider and contestability hurdle yields our first result:

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[8] See SI E for details and formal statements of these assumptions.

[9] This assumption allows us to focus on symmetric equilibria in the challenger entry subgame and to abstract from situations in which a politician's running decision is itself informative about her ability (Alexander, 2018) and about the incumbent's ability (Gordon and Landa, 2009) .

Lemma 1 *A potential challenger i runs if and only if her reputation exceeds both outsider and contestability hurdles, i.e., when*

$$\mu_i \geq \widehat{\mu} \equiv \max\left\{ F^{-1}\left(k^{\frac{1}{n-1}}\right), \mu_N, q_I \mu_I \right\}. \tag{1}$$

Party nomination. By the same reasoning of Lemma 1, an incumbent who lost the party nomination quits the party and runs as an independent if she is either visibility-motivated ($\varepsilon < 0$) or when her reputation exceeds that of the party nominee R (see Lemma E1 in SI E). When the incumbent I chooses to run for reelection, the party leader's decision between I and the replacement candidate R depends on (i) his non-electoral value of keeping the incumbent (captured by the bias ζ) and (ii) the electoral value of keeping I, i.e., how nominating R changes the party's likelihood of keeping the seat. Under the assumptions, the party leader confirms the incumbent if (i) the non-electoral value of the incumbent is high (i.e., the bias favors the incumbent) or (ii) the leader is unbiased and I has a higher reputation.

Lemma 2 *The party leader replaces the incumbent either he is biased against her ($\zeta = -1$), or he is unbiased ($\zeta = -1$) and $\mu_I > \mu_R$: $d_L(\mu_I, \mu_R, \zeta) = \mathbf{1}\{\zeta = 1\} + \mathbf{1}\{\zeta = 0\}\mathbf{1}\{\mu_I \geq \mu_R\}$.*

Incumbent's Running Decision. After observing her performance signal s, an incumbent runs for reelection if and only if the expected payoff of doing so exceeds the running cost k. In SI E, we show that this expected payoff is strictly increasing in her reputation μ_R.[10] We then obtain that the incumbent runs if and only iff her reputation exceeds a threshold μ^*:

Lemma 3 *There exists $\mu^* \in (0,1)$ such that the incumbent runs for reelection if and only if $\mu_I \geq \mu^*$.*

Combining Lemmas 1-3, we can characterize V_s, the incumbent's expected payoff as a function of her signal realization (SI E, page 3). The incumbent's optimal effort choice then solves $e(\theta) = \arg\max_{e \in [0,1]} \mathbf{E}\{V_s | e; \theta\} - C(e)$. In SI E, we show that the value of effort is proportional to the difference $V_h - V_l$, i.e., to how much the increase reputation of a high performance signal improves the incumbent's chances. We also show that this difference crucially depends on relative party

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[10] I's expected payoff depends on (i) how her reputation compares to μ_R, (ii) the party leader's bias ζ, (iii) her non-electoral motivation ε, and (iv) how her reputation compares to that of her general election opponents.

advantage (the prior reputation of the incumbent and the expected reputation of her internal challenger). Specifically, we identify two thresholds for relative party advantage (one for each possible signal realization) above which I runs for reelection:

Lemma 4 *There exist thresholds $\underline{\mu}, \overline{\mu}$ for relative party advantage such that an incumbent*
(i) never runs for reelection when $\mu_0 < \underline{\mu}$;
(ii) runs for reelection only after a positive performance signal when $\mu_0 \in [\underline{\mu}, \overline{\mu}]$;
(iii) always runs for reelection when $\mu_0 > \overline{\mu}$.

Intuitively, a higher relative party advantage improves the baseline from which the incumbent performance will be evaluated, thereby improving her electoral prospects and deterring potential general election challengers. A key implication of this result is that performance information is pivotal for I's running decisions only when party advantage is intermediate.

Governance. A consequence of Lemma 4 is that equilibrium effort depends on party advantage μ_0. When μ_0 is intermediate, effort is most valuable: it increases both the incumbent's probability of running *and* her winning probability conditional on running. Conversely, when μ_0 is large ($\mu_0 > \overline{\mu}$), effort only increases the incumbent's winning probability. When instead μ_0 is low ($\mu_0 < \underline{\mu}$), incumbents choose low effort because they anticipate that they will (likely) not run for reelection. In SI E we show that effort is indeed quasi-concave in party advantage.

The Effect of Transparency

How does sustained transparency affect the choices of incumbents, parties, potential opponents, and voters? Since our outcomes of interest are contingent on one another, the model allows us to formulate hypotheses that take this chain of dependence into account. Table 1 summarizes the empirical implications of our theory.

Governance. Under a benchmark of no transparency ($\tau = 0$), the public signal s is uninformative about performance, and so does not change the incumbent's reputation. As a result, effort is not valuable for the incumbent, who then sets it to zero. As transparency increases, the performance signal becomes increasingly more accurate and the incumbent's reputation increasingly sensitive

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to s: a larger improvement when the signal is high ($s = h$) and a larger decline when the signal is low ($s = l$). This increases equilibrium effort. Since higher effort increases the difference in performance between types, transparency widens the gap between the two posteriors $\mu_I(h)$ and $\mu_I(h)$ both directly and indirectly (through effort).

Proposition 1 *An increase in transparency*

(i) increases incumbent effort for all abilities and costs of running

(ii) increases the incumbent's reputation conditional on a high performance signal $\mu_I(h)$

(iii) decreases the incumbent's reputation conditional on a low performance signal $\mu_I(l)$.

Incumbent's Running Decision. Recall that an office seeking incumbent never runs when $\mu_0 < \underline{\mu}$, always runs when $\mu_0 > \overline{\mu}$, and only runs after a high signal when μ_0 falls in between $\underline{\mu}$ and $\overline{\mu}$. By increasing both effort and the posterior gap $\mu_I(h) - \mu_I(l)$, higher transparency widens the gap between the two participation thresholds:

Proposition 2 *An increase in transparency reduces $\underline{\mu}$ and increases $\overline{\mu}$.*

By Proposition 2, sustained transparency changes the set of incumbents that choose to run for reelection. Specifically, it increases the range of situations in which performance information is pivotal for the incumbent's running decision, as illustrated in Figure 2.[11]

Figure 2 also illustrates that disregarding the moderating effect of relative party advantage can lead to substantially overstate the effect of transparency on accountability. When the incumbent party has a large organizational advantage (respectively, a disadvantage), greater sustained transparency may be insufficient to deter low-performance incumbents from running for reelection (respectively, to encourage high-performance incumbents to run for reelection). As a result, relative party advantage moderates the effect of transparency on the incumbent's running probability: when party advantage is low, transparency primarily encourages high-performers to run; when it is high, transparency primarily discourages low-performers from running.

Hypothesis 1 *(a) I's running probability weakly decreases in transparency when the signal is low ($s = l$) and weakly increases in transparency when the signal is high ($s = h$);*

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[11] μ^* is a function of μ_0, but this dependence vanishes as σ, the scale parameter of the distributions F and G, grows.
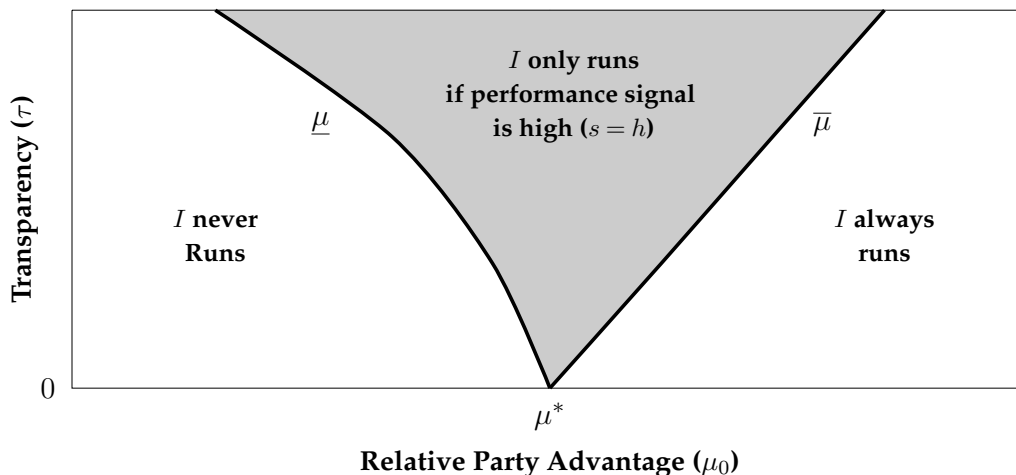
Figure 2: The running decision of incumbents with high- and low-performance public signals as a function of both sustained transparency (τ) and relative party advantage (μ_0).

(b) the drop in running probability when s $= l$ *is strict when party advantage is large ($\mu_0 > \mu^*$);*

(c) the increase in running probability when s $= h$ *is strict when party advantage is small ($\mu_0 < \mu^*$).*

Party nomination. Sustained transparency increases the accuracy of the public signal (s). Therefore, as τ increases the incumbent's likelihood of winning the nomination conditional on running becomes more sensitive to her performance. This, in turns, enhances high performers' chances to win the party nomination in two ways: first, τ lowers $\underline{\mu}$, the minimum level of party advantage above which high-performing incumbents run (Proposition 2); second, τ increases their reputation conditional on running, thereby reducing the chances that an unbiased party leader prefers to nominate the replacement candidate R.

Hypothesis 2 *I's probability of winning the nomination (conditional and unconditional on running) decreases in transparency when the signal is low (*s $= l$*) and increases when the signal is high (*s $= h$*).*

General Election. In equilibrium, an incumbent reaches the general election when she runs for reelection *and* she either wins her party nomination or runs as an independent. The likelihood of running and winning the party nomination is then increasing in τ for high performers and decreasing in τ for low performers. Due to its effect on her reputation, sustained transparency also affects the incumbent's electoral chances at the general election. Specifically, transparency

increases the likelihood that high performers win (and that low performers lose) the general election. The effect, however, is again moderated by relative party advantage.

By Lemma 1, when an incumbent reaches the general election, potential challengers run only if their reputation exceeds $\max\left\{F^{-1}\left(k^{\frac{1}{n-1}}\right),\mu_I,\mu_R\right\}$. Transparency then affects the expected number of general election candidates only when the outsider hurdle (which depends on the incumbent's reputation) exceeds the contestability hurdle (which is driven on the cost of running k)—i.e., when party advantage is large enough. For this reason, we expect that the effect of transparency on the number of challengers and the incumbent's winning probability should be stronger when party advantage is larger.[12]

Hypothesis 3 *(a) I's winning probability conditional on reaching the general election decreases in transparency when the signal is low ($\mathsf{s}=l$) and increases in transparency when the signal is high ($\mathsf{s}=h$);*
(b) both the drop (when $\mathsf{s}=l$) and the improvement (when $\mathsf{s}=h$) in winning probability are larger when party advantage is large ($\mu \geq \overline{\mu}$ and $\mu \geq \underline{\mu}$, respectively);
(c) transparency has the opposite effect on the expected number of candidates.

Relative party advantage μ_0	High signal	Low signal
Probability that I runs:		
small ($< \mu^*$)	+	=
large ($\geq \mu^*$)	=	-
Probability that I wins the nomination:	+	-
Probability that I wins the general election:		
small ($< \underline{\mu}$ if $\mathsf{s}=h$, $< \overline{\mu}$ if $\mathsf{s}=l$)	=	=
large ($\geq \underline{\mu}$ if $\mathsf{s}=h$, $\geq \overline{\mu}$ if $\mathsf{s}=l$)	+	-
Number of candidates:		
small ($< \underline{\mu}$ if $\mathsf{s}=h$, $< \overline{\mu}$ if $\mathsf{s}=l$)	=	=
large ($\geq \underline{\mu}$ if $\mathsf{s}=h$, $\geq \overline{\mu}$ if $\mathsf{s}=l$)	-	+

Table 1: Empirical Implications: The effect of higher sustained transparency

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[12]Hypothesis 1 implies that incumbents would only run when the outsider hurdle exceeds the contestability hurdle. However, we formulate hypothesis 3 below allowing for deviations from this behavior—e.g., owing to earlier knowledge of visibility motivation.

Research Design

We test the model's predictions using data from 20 Ugandan district governments (one level below the national level), where a local NGO (ACODE) assembled and disseminated incumbent performance information during the 2011-2016 term. We examine incumbents' choice of running for reelection, parties' nomination decisions, potential challengers' entry choices, and constituents' vote choices in the 2016 elections.

Study Context

Leading up to the 2016 elections, Uganda offers a good testing ground for our theory. First, Uganda is an authoritarian regime that holds periodic elections—the modal regime type in sub-Saharan Africa. The National Resistance Movement (NRM) has controlled the presidency since 1986. Following the 2011 elections, the NRM held 70% of national parliament seats, 77% of district chairperson seats, and 70% of district councilor seats. Though the NRM enjoys pockets of popular support, it also resorts to intimidation of opposition members and misuse of state resources to maintain its power. And while multi-party elections are not free and fair, the NRM did not engage in widespread election rigging in 2011 or 2016 (Ferree et al., 2018). During the study period, Ugandan elections, especially at the subnational level, were consequential.

Second, consistent with our model, political parties are neither programmatic nor ethnic-based; they compete over valence issues (Platas and Raffler, 2020). In 2016, Uganda's main opposition parties were the Forum for Democratic Change (FDC), Uganda People's Congress (UPC) and the Democratic Party (DP), whose power base is regional. Opposition parties can be locally competitive (e.g., DP in Acholi and Baganda areas, or UPC in some northern districts). Variation in relative party advantage therefore exists both within and across districts.

Third, the notion that citizens have limited information about incumbent performance at the district level (LC5) is supported by both interviews with the Uganda Local Government Association and public opinion data (Grossman and Michelitch, 2018; Buntaine et al., 2018).[13]

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[13]By contrast, national politics attracts media attention and citizens are relatively knowledgeable about more local subcounty (LC3) and village (LC1) politics.

Fourth, citizens in Uganda's district council elect two representatives to district council in separate but simultaneous single-member plurality elections—a subcounty politician (open gender) and a "special woman" politician (only female) whose constituency encompasses 1-3 contiguous subcounties. The Local Government Act (1997) stipulates the following job duties for councilors: *legislative* (e.g., passing motions), *lower local government participation* (e.g., attending LC3 meetings), *contact with the electorate* (e.g., constituent meetings), and *monitoring public service provision* (e.g., verifying that service delivery standards are met).

Field Experiment: Transparency Initiative

In 2011, ACODE launched the Local Government Councilor Scorecard program in 20 districts, with the goal of strengthening electoral accountability. As part of this initiative, ACODE produces an annual scorecard reporting the performance of each district councilor (on a 0–100 scale). Scorecards cover a fiscal year: the first scorecard covered July 2011-June 2012 (following the February 2011 elections), and the last scorecard before the election covered July 2014-June 2015. ACODE collects data throughout the fiscal year, vets them every summer, and disseminated them every fall (see SI, Section B).

ACODE disseminates incumbents' scores at annual district headquarters events with fellow politicians, party elites, district civil servants, and local media.[14] However, under the traditional dissemination mode the information hardly reaches voters: Grossman and Michelitch (2018) report that in 2012, only 9% of survey respondents in the study area had heard "at least something" about the scorecard initiative.

To test whether directly informing voters about their politician performance can improve electoral accountability, ACODE, in collaboration with the research team, randomly selected half of politicians to participate in the "Intense Dissemination" (ID) program.[15] First, treated politicians were informed in advance and invited to attend two rounds of parish-level community dissemination events. The first set of community meetings took place in late 2013 (354 meetings, 12,949

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[14]ACODE further posts incumbents' scores online.

[15]Randomization was at the special woman constituency level and blocked at the district level (see SI **??** showing good balance).

attendees, 2012-2013 scores) and the second in late 2014 (339 meetings, 14,520 attendees, 2013-2014 scores).[16] In those meetings, ACODE representatives shared information on councilors' scores, and their ranking within the district. Surveys the research team conducted with a sample of attendees show these events were highly effective.

Second, ACODE undertook efforts to ensure politicians' performance was widely shared and salient between meetings. Posters with politicians' scores were hung in prominent places, and calendars and fliers were given to attendees to further share with friends and neighbors. Given their visual appeal and the scarcity of signage and calendars in this context, these items were considered valuable. Further, ACODE signed up meeting attendees to receive periodic text messages about the (absolute and relative) performance of their district councilors.

Given these activities, the ID program constitutes a vast improvement in sustained transparency in this context. In ID areas, ACODE disseminated incumbent performance information to *voters* but also created *common knowledge* of incumbent's performance among elites (i.e., incumbents and party leaders) and voters. The marginal effect of the ID treatment is therefore the combined effect of informing voters and creating common knowledge around politician performance (above and beyond elite dissemination that took place throughout the study area). Grossman and Michelitch (2018) found that the ID program led to a substantial increase in politicians' performance over the term, provided that the seat was not a party stronghold. Thus, the program was sufficiently powerful to change incumbent behavior. In this study, we assess the subsequent effect of sustained transparency on electoral outcomes.

Data and Empirical Strategy

Following our study's pre-analysis plan (see SI F on deviations), we use the following data sources: (1) an original in-person politician survey fielded several months prior to the February 2016 elections ($N = 375$), (2) publicly-available data from Uganda's Electoral Commission, and (3) ACODE's yearly scorecards. We exclude politicians who were independents in 2011, given our theory pertains to those running on a party ticket. We construct the following variables.

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[16]Due to the proximity to the election, the 2014-2015 scores were not disseminated.

Electoral Outcomes. Our primary outcome of interest is **Won again**, an indicator of whether the incumbent won reelection. Secondary outcomes include: **Vote Share**, a continuous variable [0-1] measuring incumbent's share of total valid votes; **Number of Candidates**, a continuous measure of the number of challengers; **Effective N. of Candidates**, a continuous measure that augments the number of candidates outcome by weighting candidates' count measure by their relative strength;[17] **Won nomination**, an indicator of whether an incumbent won (again) her party's nomination; and **Ran again**, an indicator of whether an incumbent chose to run for reelection.[18]

Treatment. When **Intense Dissemination (ID)**, an indicator variable, equals zero, ACODE shared the incumbent's performance scores only at district-level annual events. When ID equals one, ACODE *additionally* disseminated the incumbent's scores to parish-level constituent meetings in 2013 and 2014.

Moderators. As per our model, we construct measures of two key moderating variables. The first is **Signal**, an indicator variable of whether the incumbent had above district median performance using the 2013-2014 scorecard. We demonstrate the robustness of our findings using the 2011-2012 scorecard in SI D.3. Scores are correlated at 0.39 over the term. The 2013-2014 scorecard was disseminated in October-November 2014, and was the last scorecard before mid-2015, when incumbents and potential challengers had to finalize their running decision and party leaders had to choose their nominees. Thus, the 2013-2014 scorecard is post-treatment. By contrast, the 2011-2012 scores were produced early in the term and were not disseminated at the community level. We choose to give more weight to the 2013-2014 scorecard because elites and citizens pay more attention to, and weigh more heavily, political information that is closer to elections to inform electoral behavior (Healy and Lenz, 2014; Michelitch and Utych, 2018). Bobonis, Fuertes and Schwabe (2016) similarly condition on mayors' behavior that changed in response to prior knowledge of the timing of municipal audits' release.

The second moderator is **Party advantage**, which is calculated using the median vote margins for the incumbent's party using the following 2011 elections: (i) president, (ii) members of

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[17]This outcome operationalizes how concentrated (or fragmented) support for the incumbent is. The Laakso-Taagepera measure is computed as $N = \frac{1}{\sum_{i=1}^{n} p_i^2}$, where n is the number of candidates with at least one vote and p_i^2 is the square of their vote share.

[18]While all other outcomes are derived from official electoral returns, *Ran again* is self-reported.

parliament, (iii) district chairperson, and (iv) district councilors. We further dichotomize party advantage using the district median value. See SI D.1 for descriptive statistics table.

Empirical Strategy

To test the effect of the intense dissemination (ID) treatment, conditional on the performance signal, we run the following OLS models for incumbent i in district j:

$$y_{ij} = \beta_1 ID_{ij} + \beta_2 Signal_{ij} + \beta_3 ID_{ij} \times Signal_{ij} + \alpha_j + \epsilon \tag{2}$$

where y_{ij} is an outcome of interest, α_j are district indicators, since randomization used districts as blocks, and ϵ is the error term. When the outcome is binary, the model is a linear probability model to ease interpretation.

In some models, we adjust for a set of pre-specified politician and constituency covariates.[19] Politician covariates include: **SWC mandate** (i.e., special women councilor indicator); **Education** (a three-category variable); **Age** (continuous); **Motor vehicle** (indicator—a proxy for wealth); **NRM** (indicator); **Terms in office** (continuous). Constituency-level covariates (from the 2014 census) include: **Population (log)**; **ELF** (Ethnic-linguistic fractionalization); **Literacy rate**, **Share agriculture employment** and **Poverty index**. These variables help alleviate possible concerns stemming from the fact that party advantage is not randomly assigned.

Since our theory views outcomes as nested, we report estimates using the full sample (354 incumbent) as well as restricted samples defined by previous stages (for example, winning reelection conditional on running again and winning the party nomination). While adherence to our theory is closer, restricting to these samples comes at substantial cost in terms of statistical power. For this reason, we take the view of Gerber and Green (2012, p. 63) that "a parameter falling short of the 0.05 threshold might nevertheless be important and interesting" especially if it is the "first experiment of its kind and we had no prior knowledge of the treatment effect, the estimate...would still be our best guess."

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[19]When we adjust for pre-treatment covariates, we set missing covariate values to the mean values of the covariates in one's treatment groups, and include an indicator variable that equals one for imputed values. Following our PAP, the covariates are demeaned and interacted with a treatment indicator.

Results

Does sustained transparency to citizens improve the electoral prospects of high-performing in-cumbents and hurt those of low-performing incumbents? Figure 3 plots the raw data on **Won Again**, our main outcome of interest (Hypothesis H3a), and points to the potential efficacy of sus-tained transparency to strengthen electoral accountability. The winning probability of incumbents with low-performance signals is 11 pp. lower for non-independent incumbents in the ID program in the full sample (left panel). For the restricted sample of incumbents who won their party nom-ination, the winning probability is 16 pp. lower for low-performers in ID program (right panel). The winning probability of incumbents with a high-performance signal is larger for incumbent in the ID treatment program, though the magnitude of the effect is smaller: 2 pp.
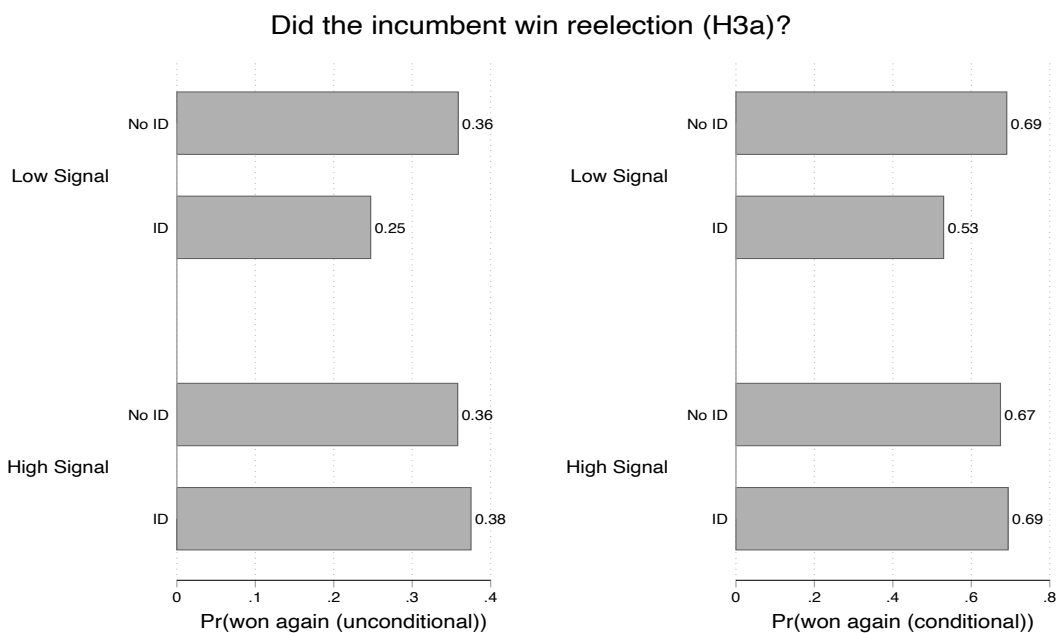
Figure 3: **Relationship between sustained transparency and incumbents' winning probability by per-formance signal**. Incumbent's performance signal s is proxied by the 2013-2014 score, dichotomized ($s \in \{l, h\}$) using within-district medians. Left panel sample includes all incumbents whether or not they stood for reelection ($n = 396$), while the sample in the right panel is restricted to incumbents who won their party nomination, excluding independents ($n = 168$).

Moving to a more formal analysis, in Table 2, we report test for both H3a (where *win again* is conditional only on incumbent's performance signal) and H3b (where we further condition by

relative party advantage). The table's panels correspond to two samples: in Panel A, the sample includes all 354 partisan incumbents, irrespective of whether they chose to run for reelection; in Panel B, the sample is restricted to incumbents who won their party nomination.

Panel A: unconditional sample

	Full				Low PA		High PA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ID	-0.049	-0.037	-0.120	-0.131	-0.200	-0.178	-0.088	-0.135
	(0.049)	(0.053)	(0.079)	(0.081)	(0.116)	(0.133)	(0.092)	(0.094)
Signal			0.010	0.005	0.083	0.063	-0.057	-0.073
			(0.079)	(0.079)	(0.145)	(0.152)	(0.088)	(0.094)
ID $\times$ Signal			0.136	0.178	0.236	0.269	0.084	0.183
			(0.124)	(0.123)	(0.164)	(0.174)	(0.143)	(0.135)
Covariates	no	yes	no	yes	no	yes	no	yes
N	354	354	354	354	166	166	188	188
R^2	0.07	0.08	0.08	0.10	0.15	0.20	0.14	0.19

Panel B: sample is conditional of winning party nomination

	Full				Low PA		High PA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ID	-0.087	-0.091	-0.250**	-0.315**	-0.339*	-0.358*	-0.112	-0.259
	(0.065)	(0.067)	(0.117)	(0.120)	(0.166)	(0.175)	(0.115)	(0.152)
Signal			-0.072	-0.086	0.070	0.074	-0.167	-0.173
			(0.115)	(0.121)	(0.203)	(0.228)	(0.126)	(0.142)
ID $\times$ Signal			0.298	0.396*	0.346	0.362	0.257	0.559**
			(0.195)	(0.196)	(0.263)	(0.265)	(0.211)	(0.254)
Covariates	no	yes	no	yes	no	yes	no	yes
N	168	168	168	168	92	92	76	76
R^2	0.16	0.19	0.18	0.23	0.37	0.39	0.26	0.34

Table 2: **DV: Won again**. Table reports a series of OLS models in which an indicator of whether the incumbent won reelection in 2016 is regressed on a treatment indicator interacted with a proxy measure of the signal of incumbent performance (s). This signal is measured with the 2013-2014 scorecard, which is further dichotomized ($s \in \{l, h\}$) using within-district median value. In columns 5-8 we split the sample by relative party advantage (PA), which is dichotomized using district median values. Models include district fixed effects; standard errors are clustered at the district level. * $p < .10$ ** $p < .05$ *** $p < .01$

Reduced-form tests of H3a indicate that in the full sample of incumbents (Panel A, column 4), sustained transparency reduced the winning probability of incumbents with a low-performance signal by 13.1 pp., and increases the winning probability of those with a high-performance signal by 4.7 pp. ($0.178 - 0.131$). These effects are rather large and in line with H3a, though they fall below standard statistical significance levels. Results are statistically and substantively stronger when we include only incumbents who won their party nomination (Panel B, column 4). Here transparency (ID) reduced the winning probability of low-performance by more than 31 pp. (significant at

the 5% level), and increases the winning probability of high-performance incumbents by 8.1 pp. (0.396 − 0.315). These are substantively large effects sizes that strongly suggest that transparency has a genuine potential to improve electoral accountability.

In Table 2 columns 5-8, we distinguish between high- and low-party advantage focusing (following our model) on incumbents who won their party nomination (Panel B). Consistent with H3b, the effect of sustained transparency on the winning probability of high-performing incumbents is close to zero (0.4 pp.) when party advantage is low and 30 pp. (0.559-0.259) when relative party advantage is high. Among low-performing incumbents, instead, the effect of sustained transparency is large and negative irrespective of the level of party advantage—which is only partially consistent with H3b.

The comparison between Table 2 Panels A and B helps shed light on the relative role of party leaders and voters in the nexus of transparency and accountability. For example, for low-performing incumbents who nonetheless won their party nomination, the decrease in reelection probability due to greater transparency is estimated to be 31.5 pp. (Panel B, column 4), but it is 13.1 pp. in the unconditional sample (Panel A, column 4). This suggests that voters punish low-performing incumbents above and beyond the potential weeding out of the party nomination process. We further explore these mechanisms and assess H1 and H2 below.

Robustness

We test the robustness of our results by using alternative measures of both signal and party advantage. First, we test robustness to conditioning the effect of the ID program on the pre-treatment (2011-2012) scorecard. Results reported in SI, Table 2 are consistent with our model predictions, though understandably they are weaker (the signal dates back to several years prior to the election, and as mentioned, was not disseminated down to the communities as were the 2013-2014 scores). Second, our theory is agnostic about how to operationalize high or low relative party advantage. We thus test the robustness of our results to an alternative cutoff (defining low party advantage as the bottom 60 percentile of our continuous measure, and high party advantage as the top 40 percentile). Results reported in SI, Table 3, are in fact stronger than those reported in

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Table 2. Finally, Figures 5-6 report results in which the party advantage moderator is continuous. These results are also consistent with H3.

Mechanisms

Thus far we have seen that even in the context of a dominant-party regime, sustained transparency can strengthen accountability by increasing the reelection of high-performing incumbents and reducing the reelection of low performers. We now explore the extent to which the strengthening of electoral accountability is due to incumbents (via their running choices), party elites (via nomination choices), potential challengers (via entry choices), or citizens (via their vote choice).

A key advantage of the current study is the ability to track the effect of an exogenous shock to transparency throughout the accountability chain. Such analysis, however, does not come without challenges. While the reduced-form effect of greater transparency on incumbent 2016 win probability is causally identified, assessing the relative contribution of other actors—party elites, potential challengers and voters—requires additional assumptions. Readers can consider results in this section as informative, but suggestive.

Incumbents' Running Decision

Our theory (H1) predicts that sustained transparency should decrease low-performing incumbents' propensity to run again, especially when party advantage is high (H1b), and increase high-performing incumbents' propensity to run again, especially when party advantage is low (H1c). Table 3 offers evidence that broadly consistent with H1a: as reported in column 4, sustained transparency reduces the running choice of a low-performing incumbent by 7.7 pp., while leaving the running probability of high performers virtually unchanged. Disaggregating by party advantage, we do not see much difference in running choice of low performers in low-party and high-party advantage constituencies. This is not consistent with H1b. Estimates for high-party advantage (Table 3, column 8) suggest that transparency encourages running by high performers (an increase of 5 pp.) and discourages running by low performers (a drop of 6.2 pp.), though the effects are quite noisy. In the SI, we show that adopting a more agnostic approach about what constitute high and

low-party advantage brings the estimates closer to our theory's predictions.

	Full sample				Low PA		High PA	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ID	-0.035*	-0.036	-0.060	-0.077*	-0.101**	-0.093**	-0.014	-0.062
	(0.020)	(0.023)	(0.037)	(0.041)	(0.048)	(0.044)	(0.080)	(0.086)
Signal			0.001	-0.002	-0.011	-0.012	0.008	-0.009
			(0.035)	(0.035)	(0.030)	(0.030)	(0.077)	(0.087)
ID $\times$ Signal			0.049	0.079	0.085	0.082	0.014	0.112
			(0.052)	(0.050)	(0.066)	(0.060)	(0.093)	(0.106)
Covariates	no	yes	no	yes	no	yes	no	yes
N	335	335	335	335	159	159	176	176
R^2	0.09	0.11	0.09	0.12	0.13	0.19	0.12	0.17

Table 3: **DV: Ran again**. Table reports a series of OLS models in which an indicator of whether the incumbent reported running for reelection in 2016 is regressed on a binary proxy measure of the signal of incumbent performance (s), as defined in Table 2. In columns 5-8 we split the sample by relative party advantage (PA), which is dichotomized using district median values. All models include district fixed effects; standard errors are clustered at the district level. * $p < .10$ ** $p < .05$ *** $p < .01$

These estimates suggest that incumbents' running decisions are at best a secondary pathway of accountability and cannot account of the large effects on win probability reported in Table 2. The main reason is that low-performing incumbents still run (often as independents after losing their party nomination), highlighting the role of non-electoral motivations (e.g., visibility and status) in incumbent decision-making.

Party Elites' Behavior

Did party elites (via the nomination process) play a role in improving accountability? Our theory implies that that transparency should encourage parties to replace poor performers and renominate high performers, irrespective of relative party advantage (H2). In Table 4, we show results both for the full sample (columns 1–4), and for the restricted sample of only those who run for reelection (columns 5–8). Since **Ran again** is self-reported and given that running for reelection can be endogenous to signals by party elites, results from the restricted sample should be taken cautiously.

It is important to recall that ACODE disseminates the scorecard in district level events. Party elites thus have access to incumbents' scores in both treatment and control conditions. To the

	Unconditional sample				Conditional on running for reelection			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ID	-0.027	-0.031	-0.051	-0.083	-0.021	-0.032	-0.060	-0.106
	(0.060)	(0.058)	(0.076)	(0.079)	(0.072)	(0.069)	(0.099)	(0.101)
Signal			0.088	0.082			0.076	0.059
			(0.068)	(0.068)			(0.083)	(0.086)
ID × Signal			0.040	0.091			0.070	0.133
			(0.117)	(0.125)			(0.135)	(0.151)
Covariates	no	yes	no	yes	no	yes	no	yes
N	352	352	352	352	305	305	305	305
R^2	0.08	0.11	0.09	0.13	0.07	0.10	0.08	0.11

Table 4: **DV: Won nomination**. Table reports a series of OLS models in which an indicator of whether the incumbent won her party nomination in 2015 is regressed on a treatment indicator interacted with a binary proxy measure of incumbent performance signal (s), as defined in Table 2. Models include district fixed effects; standard errors are clustered at the district level. * $p < .10$ ** $p < .05$ *** $p < .01$

extent that party elites use an NGO generated performance scorecard (signal) as a metric for effectiveness in advancing the party's agenda, this should not vary by treatment status in our setting. Instead, the ID treatment could change party elites' expectations of voters' behavior due to the widespread dissemination of the same performance signal that elites have already had access to.

We find some evidence that sustained transparency encourages party elites to remove low-performing incumbents, but it is less consequential for high-performing incumbents. The ID treatment reduces party renomination by 10.6 pp. for low-performing incumbents, and increases it by 2.7 pp. for high-performing incumbents (Table 4, column 8). While the signs of the coefficients are consistent with our theory, their magnitudes are small relative to the estimated overall effect of transparency on incumbent winning probability. Considering that most constituencies in Uganda (and in sub-Saharan Africa more generally) are safe seats, our results suggests that party elites' nomination decisions are only partially responsive to incumbent performance information.

Potential Challengers

We now turn to explore how sustained transparency affects entry decisions by *potential* challengers. We assume that due to random assignment, the underlying number of *potential* challengers (an unobserved population) would be equal across treatment (ID=1) and control constituencies (ID=0). As summarized in Table 1, we expect that transparency will have little effect on

candidates' entry choices when incumbents' party advantage is relatively low. Conversely, when incumbents' party advantage is sufficiently high, we expect sustained transparency to encourage the entry of potential challengers when the signal of incumbent's performance is low, and discourage their entry when the signal of incumbent's performance is high. Our findings are broadly consistent with those expectations.

Panel A: unconditional sample

	Number of candidates		Incumbent vote share		Effective N. candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
ID	-0.068	0.390	0.011	-0.071	-0.168	0.117
	(0.356)	(0.281)	(0.068)	(0.054)	(0.238)	(0.142)
Signal	-0.281	0.182	0.063	-0.085	0.026	0.068
	(0.292)	(0.350)	(0.056)	(0.071)	(0.080)	(0.195)
ID × Signal	-0.302	-0.638	0.114	0.125	-0.402*	-0.320
	(0.439)	(0.515)	(0.080)	(0.103)	(0.211)	(0.307)
Party advantage	Low	High	Low	High	Low	High
Covariates	yes	yes	yes	yes	yes	yes
N	114	112	114	112	114	112
R^2	0.48	0.44	0.36	0.44	0.48	0.50

Panel B: sample is conditional of winning party nomination

	Number of candidates		Incumbent vote share		Effective N. candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
ID	-0.136	1.080**	-0.029	-0.126	-0.220	0.563**
	(0.427)	(0.441)	(0.086)	(0.084)	(0.338)	(0.234)
Signal	-0.393	0.539	0.077	-0.071	-0.094	0.224
	(0.415)	(0.344)	(0.045)	(0.058)	(0.147)	(0.172)
ID × Signal	-0.074	-1.204	0.102	0.157	-0.220	-0.605
	(0.598)	(0.745)	(0.072)	(0.095)	(0.336)	(0.379)
Party advantage	Low	High	Low	High	Low	High
Covariates	yes	yes	yes	yes	yes	yes
N	92	76	92	76	92	76
R^2	0.54	0.52	0.48	0.53	0.46	0.58

Table 5: DV: three general election outcomes: number of candidates (columns 1-2); incumbent vote share (columns 3-4); and effective number of candidates (columns 5-6). Outcomes are regressed on a treatment indicator interacted with a binary proxy measure of incumbent performance (s), as described above. All models include district fixed effects; standard errors are clustered at the district level. In odd (even) columns, we subset the sample such that relative party advantage is low (high). All models adjust for a pre-specified set of politician and constituency-level covariates as discussed above. * $p < .10$ ** $p < .05$ *** $p < .01$

Table 5 reports results for both the number of candidates and the effective number of candidates. First, as hypothesized, when party advantage is low, transparency does not encourage the entry of potential challengers, irrespective of performance signal (Table 5, Panel B, column 1). Second, when party advantage is high, sustained transparency increases the number of can-

didates challenging a low-performing incumbent by 1.08 (p-value = 0.014, Panel B, Column 2), a 0.901 standard deviations increase compared to the control group mean. Conversely, the number of candidates challenging a high-performing incumbent drops by only 0.12 (p-value = 0.823), or 0.103 standard deviations. In sum, we have strong evidence that when relative party advantage is sufficiently high, some of the negative effect of sustained transparency on the winning probability of incumbents with a low performance signal, operates through the strategic entry response of potential challengers.

Voter Behavior

As a final step, we explore the relationship between greater transparency and citizen's vote choice. Consistent with our model, we find suggestive evidence that sustained transparency reduces the vote share of low-performing incumbents when party advantage is sufficiently high (Table 5, Panel B, column 2)—when voters are faced with a larger choice of candidates. The estimated drop in vote share is rather large (12.6 pp. or 0.58 standard deviations), though falling slightly below significance level (p-value=0.129). The increase in vote share for high-performing incumbents is smaller, but not meaningless (3.1 pp. or 0.141 standard deviations).

When party advantage is relatively low (Panel B, column 3), the effect of greater transparency on the vote share of low-performing incumbents is again modest (2.9 points), while the effect on high-performing incumbents is larger (7.3 pp. or 0.33 standard deviations), though again, not statistically significant (p-value=0.238). While suggestive, the evidence seems to indicate that voters have been responsive to the information they received regrading the performance of their elected representative in the district government.

Discussion

We provide a novel theory of how sustained transparency of incumbent performance information improves political accountability through a chain of decisions by incumbents, party leaders, potential challengers, and citizens. We test the theory's prediction using a field experiment in Uganda. We find that greater sustained transparency improves electoral accountability and that

its effect is conditioned by both (relative) party advantage and (the signal of) incumbent performance. Sustained transparency reduced the re-election of low-performing incumbents in both high- and low-party advantage constituencies. The transparency program significantly increased the reelection of high-performing incumbents, but only incumbents in constituencies with relatively high party advantage.

The strength of the mechanisms at play are different across high- and low-party advantage constituencies. Consistent with our model, the effect of transparency on accountability via general election pressures from challenger entry is stronger when party advantage is relatively high. Here, the "outsider hurdle" of a challenger beating the incumbent exceeds the "contestability hurdle" of beating other potential challengers. By triggering a reaction from both voters and potential challengers, transparency decrease the electoral security of a low-performing incumbent. We also show that transparency improves accountability through party nominations (in line with the theory) and, to lesser extent, via incumbents' running decisions.

Combined, our study's model and suggestive empirical findings offer important lessons for both theory and research design considerations. Existing theoretical models of electoral accountability both overstate and oversimplify the ability of transparency to discipline incumbents, leading to empirical work that may thus omit key factors. Below, we discuss four key implications of this study for future work.

First, too often researchers overlook the key role of party advantage, especially in new democracies where it takes time for opposition parties to build organizational capacity. Our theory highlights the important role that party advantage plays in moderating the effects of transparency. Without transparency, relative party advantage largely determines electoral outcomes. Transparency expands the range of situations in which performance becomes pivotal for an incumbent's electoral fortunes. Specifically, increasing transparency should weed out poor performers at increasingly higher levels of party advantage. In line with our model, we find that potential challengers enter at significantly higher rates against poor-performing incumbents under increased transparency (versus the control). This result suggests that sustained transparency can weaken local political monopolies. However, our results point to a limited role for party leaders in this context currently—internal party nominations are no substitute for voter response.

Second, our study expands existing models of transparency and accountability that focus on incumbent-voter relations, to include pre-election decisions by incumbents, party leaders, and potential challengers. In a standard accountability model, prospective voters compare their posterior about the incumbent with an exogenous retention cutoff, and credible challengers are assumed present. In our model, transparency affects not only voters' posteriors about the incumbent, but also the (endogenously determined) cutoff against which they compare it —such cutoffs are determined by endogenous challenger entry and party nomination decisions. The moderating effect of party advantage comes from this second, and under-theorized channel.

Third, our study underscores the importance of going beyond "putting out politically relevant information in the public domain," to ensure common knowledge of the information dissemination efforts among citizens and political elites, well in advance of elections. Recall, in our study, the control condition is the dissemination of incumbents' performance information to district elites. Since ACODE invited incumbents and party elites to its ID activities, the transparency treatment represents the marginal effect of informing not only voters, but also elites, who were made aware that voters are informed about incumbent performance. Common knowledge allows voters to indirectly shape the slate of candidates on the ballot through anticipatory behavior by potential challengers, parties, and incumbents.

Fourth, we should take note that incumbents respond to sustained transparency in two ways that strengthen accountability. Transparency forces some (office seeking) low-performing incumbents to increase effort (Grossman and Michelitch, 2018). In addition, low-performing incumbents that are reluctant to increase effort are less likely to run again for reelection. We note however, that transparency does not deter all low-performers from seeking reelection: some were further weeded out by party elites, and others (but not all) were voted out by their constituents. Our study thus points to the role of non-office motivations in candidacy: for many incumbents, visibility and status from candidacy may be as important as retaining office despite anticipation that they will very likely lose (Weghorst, 2021). In our setting, the share of visibility-motivated incumbents was larger than our priors—and an important omission from existing theories.

Future research should further clarify the relationship between party advantage, transparency and accountability. For example, our model does not consider the availability of outside op-

tions (Grossman and Hanlon, 2014). Elections do not occur in isolation, but incumbents may drop out to pursue other positions. While these are rare in our data, their prominence may increase over time as elections become more institutionalized. In addition, our study does not test the conditions under which a transparency initiative is accepted by politicians, parties, and other local stakeholders. However, Davis (2020) suggests that field experimental research is likely to be more successful when local stakeholders are engaged throughout the research process. Our endeavor may have been successful, in part, due to the high-quality reputation of our local NGO partner, as well as ongoing long-term engagement between the research team, NGO partner, and local stakeholders. We suspect that a similar initiative led by a foreign NGO with weak local ties, or a research team without a long-term engagement, may not have worked as well. Further, similar initiatives at the higher-stakes national level may backfire, if dominant parties feel threatened by greater transparency (Humphreys and Weinstein, 2012). The incentive compatibility of transparency initiatives to political elites remains an important avenue for future research.

References

Adida, Claire, Jessica Gottlieb, Eric Kramon, Gwyneth McClendon et al. 2017. "Reducing or reinforcing in-group preferences? An experiment on information and ethnic voting." Quarterly Journal of Political Science 12(4):437–477.

Alexander, Daniel. 2018. "Uncontested Incumbents and Incumbent Upsets." working paper .

Arias, Eric, Pablo Balán, Horacio Larreguy, John Marshall and Pablo Querubín. 2019. "Information provision, voter coordination, and electoral accountability: Evidence from Mexican social networks." American Political Science Review 113(2):475–498.

Banerjee, Abhijit, Nils T Enevoldsen, Rohini Pande and Michael Walton. 2020. "Public Information is an Incentive for Politicians: Experimental Evidence from Delhi Elections." NBER working paper series no. w26925 .

Bhandari, Abhit, Horacio Larraguy and John Marshall. 2021. "Able and Mostly Willing: An Empirical Anatomy of Information's Effect on Voter-Driven Accountability in Senegal." American Journal of Political Science forthcoming.

Bidwell, Kelly, Katherine Casey and Rachel Glennerster. 2020. "Debates: Voting and Expenditure Responses to Political Communication." Journal of Political Economy 128(8):2880–2924.

Bleck, Jaimie and Nicolas Van de Walle. 2018. Electoral politics in Africa since 1990: Continuity in change. Cambridge University Press.

Bobonis, Gustavo J, Luis Cámara R Fuertes and Rainer Schwabe. 2016. "Monitoring Corruptible Politicians." The American Economic Review 106(8):2371–2405.

Brierley, Sarah, Eric Kramon and George Kwaku Ofosu. 2020. "The Moderating Effect of Debates on Political Attitudes." American Journal of Political Science 64(1):19–37.

Buntaine, Mark T, Ryan Jablonski, Daniel L Nielson and Paula M Pickering. 2018. "SMS texts on corruption help Ugandan voters hold elected councillors accountable at the polls." Proceedings of the National Academy of Sciences 115(26):6668–6673.

Caselli, Francesco and Massimo Morelli. 2004. "Bad Politicians." Journal of Public Economics 88(3-4):759–782.

Chong, Alberto, Ana L. De La O, Dean Karlan and Leonard Wantchekon. 2015. "Does Corruption Information Inspire the Fight or Quash the Hope? A Field Experiment in Mexico on Voter Turnout, Choice, and Party Identification." The Journal of Politics 77(1):55–71.

Cruz, Cesi, Julien Labonne and Pablo Querubin. 2017. "Politician family networks and electoral outcomes: Evidence from the Philippines." American Economic Review 107(10):3006–37.

Cruz, Cesi, Philip Keefer and Julien Labonne. 2020. "Buying informed voters: New effects of information on voters and candidates." The Economic Journal .

Davis, Justine M. 2020. "Manipulating Africa? Perspectives on the experimental method in the study of African politics." African Affairs .

Duggan, John and Cesar Martinelli. 2020. "Electoral accountability and responsive democracy." The Economic Journal 130(627):675–715.

Dunning, Thad, Guy Grossman, Macartan Humphreys, Susan D Hyde, Craig McIntosh and Gareth Nellis. 2019. Information and Political Accountability: A New Method for Cumulative Learning. Cambridge University Press.

Ferree, Karen E, Danielle F Jung, Robert A Dowd and Clark C Gibson. 2018. "Election Ink and Turnout in a Partial Democracy." British Journal of Political Science 50(3):1175–1191.

Fox, Jonathan. 2007. "The uncertain relationship between transparency and accountability." Development in practice 17(4-5):663–671.

Gerber, Alan S. and Donald P. Green. 2012. Field Experiments: Design, Analysis and Interpretation. W. W. Norton & Company, Inc.

Gordon, Sanford C and Dimitri Landa. 2009. "Do the Advantages of Incumbency Advantage Incumbents?" Journal of Politics 71(4):1481–1498.

Grossman, Guy and Kristin Michelitch. 2018. "Information Dissemination, Competitive Pressure, and Politician Performance between Elections: A Field Experiment in Uganda." American Political Science Review 112(2):280–301.

Grossman, Guy and W Walker Hanlon. 2014. "Do Better Monitoring Institutions Increase Leadership Quality in Community Organizations? Evidence from Uganda." American Journal of Political Science 58(3):669–686.

Gulzar, Saad. 2021. "Political Entry." Annual Review of Political Science .

Gulzar, Saad, Zuhad Hai and Binod K Paudel. 2020. "Information, Candidate Selection, and the Quality of Representation: Evidence from Nepal." Journal of Politics .

Healy, Andrew and Gabriel S Lenz. 2014. "Substituting the End for the Whole: Why Voters Respond Primarily to the Election-Year Economy." American Journal of Political Science 58(1):31–47.

Hughes, Melanie M, Pamela Paxton, Amanda B Clayton and Pär Zetterberg. 2019. "Global gender quota adoption, implementation, and reform." Comparative Politics 51(2):219–238.

Humphreys, Macartan and Jeremy M. Weinstein. 2012. "Policing Politicians: Citizen Empowerment and Political Accountability in Uganda." Unpublished manuscript .

Ichino, Nahomi and Noah L Nathan. 2013. "Do Primaries Improve Electoral Performance? Clientelism and Intra-Party Conflict in Ghana." American Journal of Political Science 57(2):428–441.

Izzo, Federica, Torun Dewan and Stephane Wolton. 2020. "Cumulative knowledge in the social sciences: The case of improving voters' information." Available at SSRN 3239047 .

Malik, Rabia. 2020. "Transparency, Elections, and Pakistani Politicians' Tax Compliance." Comparative Political Studies 53(7):1060–1091.

Martin, Lucy and Pia J Raffler. 2020. "Fault Lines: The Effects of Bureaucratic Power on Electoral Accountability." American Journal of Political Science .

Michelitch, Kristin and Stephen Utych. 2018. "Electoral Cycle Fluctuations in Partisanship: Global Evidence from Eighty-Six Countries." The Journal of Politics 80(2):412–427.

Morse, Yonatan L. 2018. <u>How autocrats compete: Parties, patrons, and unfair elections in Africa</u>. Cambridge University Press.

Ofosu, George Kwaku. 2019. "Do fairer elections increase the responsiveness of politicians?" <u>American Political Science Review</u> 113(4):963–979.

Platas, Melina and Pia Raffler. 2020. "Closing the Gap: Information and Mass Support in a Dominant Party Regime." <u>Journal of Politics</u> forthcoming.

Prato, Carlo and Stephane Wolton. 2016. "The voters' curses: why we need Goldilocks voters." <u>American Journal of Political Science</u> 60(3):726–737.

Prato, Carlo and Stephane Wolton. 2018. "Electoral Imbalances and Their Consequences." <u>The Journal of Politics</u> 80(4):1168–1182.

Svolik, Milan W. 2013. "Learning to Love Democracy: Electoral Accountability and the Success of Democracy." <u>American Journal of Political Science</u> 57(3):685–702.

Weghorst, Keith. 2021. <u>Losing the Battle, Winning the War: Legislative Candidacy in Electoral Authoritarian Regimes</u>. Cambridge University Press.