# Voter Information and Political Accountability

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#### Abstract

Does a more informed electorate enhance democratic efficiency? We address this question through a political agency model integrating moral hazard and adverse selection. An incumbent with private type enacts a costly policy after observing a stochastic shock. A voter, either informed (observing both outcomes and shocks) or uninformed (observing only outcomes), decides whether to retain the incumbent. Paradoxically, informed voters impair the selection of politicians. With high office rents, voter welfare is identical under both information regimes. With low office rents, informed voters achieve higher welfare only when selection is less crucial or good politicians are rare. We analyze two information disclosures: pre-policy reporting (revealing shocks before policymaking) and post-policy auditing (revealing shocks before policymaking). For reporting, full or no disclosure is optimal. Auditing permits partial disclosure, which weakly dominates reporting in welfare improvement by balancing control and selection. These findings challenge the presumption that transparency universally strengthens democracy and emphasize the importance of timing and non-monotonicity in information provision.

JEL Codes: C72, D72, D82.

Key words: information design, electoral accountability, political agency, voter welfare.

Whenever the people are well informed, they can be trusted with their own government; that whenever things get so far wrong as to attract their notice, they may be relied on to set them to rights.

— Thomas Jefferson to Richard Price, 1789

## 1 Introduction

During the 1916 election, President Wilson lost vote share in coastal New Jersey towns after a series of shark attacks occurred nearby – events entirely beyond his control - underscoring voters' tendency to punish leaders for random, exogenous shocks rather than policy performance (documented by Achen and Bartels, 2017). This anecdote epitomizes a broader argument about voter information and democratic inefficiency: When voters lack the information or ability to distinguish between politicians' actual competence and unrelated events, elections may fail to incentivize responsive governance.

Conventional wisdom holds that enhancing voter access to information strengthens democratic accountability. Yet empirical evidence paints a more nuanced picture: studies reveal that the impact of information campaigns on political selection is often weak or inconsistent (Kosack and Fung, 2014). A critical factor underlying this paradox is strategic adaptation by politicians. Incumbents, aware of potential scrutiny, may manipulate policies to appease informed voters, thereby neutralizing the intended effects of transparency. While existing literature extensively examines electoral accountability under limited informational conditions (Fox and Van Weelden, 2012; Morelli and Van Weelden, 2013; Ashworth and De Mesquita, 2014), it largely overlooks the role of external third-party mechanisms - such as audits or media report - in shaping interactions and improving democracy.<sup>1</sup>

In this paper, we propose a two-period model of political accountability with unobservable actions and types and use it to examine how information disclosure affects the effectiveness of political accountability. In the model, an incumbent politician has a private type, good or bad. The incumbent chooses to implement a high and costly policy or a low and costless policy  $a \in \{0,1\}$  after observing a stochastic shock  $\epsilon \in \{0,1\}$ . A good politician aligns with the electorate's preferences and always implements a high policy, while a bad politician pursues reelection through strategic policymaking. The policy outcome is the sum of the policy and shock  $z = a + \epsilon$ . A voter, who can be either *informed*, meaning she observes both the shock and the outcome, or *uninformed*, meaning she only observes the outcome, decides to retain the incumbent or replace him with a challenger. Particularly, when observing a medium policy outcome z = 1, the voter does not know whether it is

<sup>&</sup>lt;sup>1</sup>Wolton (2019) considers how strategic media influences democratic performance. We instead analyze what should a benevolent media do to improve democracy.

produced by an arduous but unlucky politician (a high policy a=1 and a low shock  $\epsilon=0$ ) or a lucky and bad politician (a low policy a=0 and a high shock  $\epsilon=1$ ). It incentivizes a bad politician to mimic a good politician by implementing a high policy when facing certain shocks. This mimicking behavior boosts policy outcomes in the first period but weakens political selection, ultimately lowering the expected policy outcome in the second period.

We examine voter welfare between informed and uninformed electorates. In equilibrium with an uninformed electorate, a bad incumbent may randomize between high and low policy.<sup>2</sup> Notably, the more uncertain the shock is, the less likely the imitation is. The voter retains (replaces) the incumbent if the policy outcome is high (low) and randomizes if the policy outcome is medium. In contrast, in an informed electorate, a bad incumbent always implements a high policy to imitate the good politician, and the voter randomizes to induce a high policy. Interestingly, providing voters with information can paradoxically reduce the effectiveness of politician selection, which may, in turn, decrease voter welfare. Our results show that when the office rent is high, being informed or not yields the same voter welfare. However, when the office rent is low, an uninformed voter may achieve higher welfare by better screening out bad politicians. This is possible if good politicians are scarce or electoral selection is more valuable than control.

Beyond whether information should be provided, we examine how two information provisions - report and audit - can maximize voter welfare.

- 1. *Pre-policy report*: Consider a public signal sent to all players before policy-making, which updates the electorate's belief about the policy shock.
- 2. Post-policy audit: Consider a signal sent to the voter with some probability after policymaking but before the election, informing the stochastic shock.

For the pre-policy report, we find that the optimal reporting rule is either full (informed) or no disclosure (uninformed), with no partial disclosure ever being optimal. Besides, the parametric condition is equivalent to that in the baseline model. For the post-policy audit, partial disclosure through probabilistic audits can improve voter welfare by balancing selection and control. Moreover, we show that auditing weakly dominates reporting in enhancing electoral accountability.

This paper relates to a large literature on political agency and bureaucratic control, traced back to Barro (1973), Ferejohn (1986), and Banks and Sundaram

<sup>&</sup>lt;sup>2</sup>Duggan and Martinelli (2020) and Besley (2006) find a similar pattern in equilibrium.

(1998). As highlighted in surveys (Ashworth, 2012; Duggan and Martinelli, 2017), the political agency problem has two main features: On the one hand, the agent (politician) has different types, either competence or preference. Some types have a conflicting interest in policymaking against the principal. On the other hand, the principal (voter) aims to discipline policymaking and select a better agent without directly observing what the agent has done or what type he is. Our framework is close to the political agency models with finite states and actions (Canes-Wrone, Herron, and Shotts, 2001; Besley, 2004; Devdariani and Hirsch, 2023). However, most setups there consider policy and state as complements; we instead consider them substitutes.<sup>3</sup> This assumption better serves our interests in explaining the scenario where the electorate may be confused about the making of policy outcomes. More importantly, we look beyond the standard framework and explore equilibrium payoff under different informational environments.

The principal's payoff may decrease as she possesses more information is a well-known result in the agency literature (see e.g. Holmström, 1999; Prat, 2005; Ashworth, Bueno de Mesquita, and Friedenberg, 2017). A trade-off between selection and control can be inevitable: Whenever bad politicians exert more policy efforts, i.e., enhanced control, the voter is less likely to distinguish between good and bad politicians, i.e., weaken selection. Nevertheless, Anesi and Buisseret (2022) argue that if the voter's strategy depends on all past performances and messages, not just the incumbent's current actions, it can achieve short-term control (punishing poor performance) with long-term selection (identifying high-ability candidates) in a dynamic framework. We offer an alternative suboptimal solution regarding information. Under certain conditions, probabilistic auditing before the election can improve both selection and control.

More broadly, our methodology applies information design to political economy (Kamenica, 2019; Bergemann and Morris, 2019; Mathevet, Perego, and Taneva, 2020). Alonso and Câmara (2016) examine how political actors (senders) strategically design information campaigns to influence voter behavior in collective decisions. Instead, we study how a third-party information disclosure impacts the strategic interaction in a stylized political agency problem.

The rest of the paper is organized as follows: Section 2 presents the model. Section 3 analyzes the equilibrium and compares the equilibrium payoffs. Section

<sup>&</sup>lt;sup>3</sup>We follow Ashworth, Bueno de Mesquita, and Friedenberg's (2017) definitions of complements and substitutes.

4 generalizes the baseline model regarding information and examines the optimal structure. Section 5 concludes.

# 2 The model

We study a political agency model of electoral accountability with two time periods, indexed by t = 1, 2. In the model, a representative voter (she) strategically interacts with two politicians (he), an incumbent and a challenger. In each period, the officeholder chooses a policy, denoted by  $a_t \in A = \{0, 1\}$ ; a = 0 and a = 1 are referred to low and high policy. The policy  $a_t$  and a stochastic shock, denoted by  $\epsilon_t \in E = \{0, 1\}$ , jointly determine the policy outcome:

$$z_t = a_t + \epsilon_t,$$

where  $\epsilon_t$  is a random variable drawn from a prior distribution:  $\Pr(\epsilon = 1) = \pi_0$ , and  $\Pr(\epsilon = 0) = 1 - \pi_0$ .  $\epsilon = 0$  and  $\epsilon = 1$  are referred to low and high shock.

Each politician has a private type that can be good or bad, denoted by  $\theta \in \Theta = \{1, 0\}$ . The prior distribution of  $\theta$  is  $\Pr(\theta = 1) = \mu_0 \in (0, 1)$ , and  $\Pr(\theta = 0) = 1 - \mu_0$ .

At the beginning of the game, nature chooses the first-period shock  $\epsilon_1$  and types of politicians. Observing the shock, the incumbent implements a policy, producing a policy outcome. The voter makes a binary electoral decision to retain or replace the incumbent after (i) observing the policy outcome or (ii) observing the stochastic shock and the policy outcome. We say that the voter is *informed* if (i) and the voter is *uninformed* if (ii).

If the incumbent is retained, he will be the policymaker in the second period; otherwise, the challenger will assume the office. In the second period, nature chooses a new shock  $\epsilon_2$ ; the officeholder implements a new policy  $a_2$ , and a new policy outcome  $z_2$  is produced. The game ends.

Bad politicians are only office-seeking, while good politicians are office-seeking and policy-seeking. The incumbent with type  $\theta$  has a payoff:

$$r + (\theta - c)a_1 + \rho(r + (\theta - c)a_2).$$

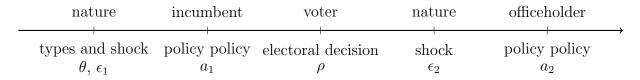


Figure 1: Timeline

The challenger with type  $\theta$  has a payoff:

$$(1-\rho)(r+(\theta-c)a_2)$$

in which r is the office rent, and  $\rho$  is the probability of retainment chosen by the voter. We assume 1 > r > c > 0, so a good politician always implements a high policy, and a bad politician may strategically implement a high policy for reelection.

The voter maximizes policy outcomes over two periods,

$$(1-\delta)z_1+\delta z_2$$

in which  $\delta$  measures the relative weights between the first and second-period outcomes. Figure 1 summarizes the timing of the game.

The solution concept is perfect Bayesian equilibrium. The uninformed (informed) voter employs an election strategy mapping policy outcomes (policy outcomes and shocks) to the probability space of retaining the incumbent:

$$\rho: Z \longrightarrow [0,1]$$
, and  $\tilde{\rho}: Z \times E \longrightarrow [0,1]$ .

Good politicians are inactive in our analysis since they only implement high policies. Bad politicians employ a policy strategy mapping shocks to the probability space of implementing a high policy:

$$\sigma: E \longrightarrow \triangle(A)$$
.

The belief system  $\mu$  is induced by the priors and the strategies employed by players according to Bayes rule. A perfect Bayesian equilibrium is an assessment  $(\alpha, \mu)$  such that the strategic profile  $\alpha = \langle \rho, (\sigma_t) \rangle$  is sequentially rational given  $\mu$ , and the belief system  $\mu$  is consistent with  $\alpha$ .

# 3 Equilibrium analysis

#### 3.1 Uninformed voter

This section analyzes the equilibrium with an uninformed voter. We find the equilibrium through backward induction. First, a good officeholder always implements a high policy, and a bad officeholder would implement a low policy in the second period. Hence, we focus on the policy strategy employed by the bad incumbent and the election strategy.

The expected policy outcome of the second period  $z_2$  is higher only if the expected type of the elected politician is higher. Thus, the retainment only occurs if the belief that the incumbent is a good politician is sufficiently high. Let  $\mu(z)$  be the updated belief that the incumbent is good after observing a policy outcome  $z \in \{0, 1, 2\}$ . The voter retains the incumbent only if  $\mu(z) \geq \mu_0$ :

$$\rho(z) = \begin{cases} 1, & \mu(z) > \mu_0 \\ 0, & \mu(z) < \mu_0. \\ [0, 1], & \mu(z) = \mu_0 \end{cases}$$

Besides, we assume that the voter weakly prefers to retain an incumbent who produces a high policy outcome than a low policy outcome, given that beliefs are the same.

**Assumption 1.** For all 
$$z > z'$$
 with  $\mu(z) = \mu(z'), \ \rho(z) \ge \rho(z')$ .

The voter's belief varies with the policy outcomes. When the policy outcome is low (z = 0), the voter infers that the incumbent must be bad,

$$\mu(0) = 0$$
,

because a good politician always implements a high policy that produces at least a medium policy outcome. When the policy outcome is medium, there are three cases: First, a good incumbent implements a high policy in a low shock. Second, the bad incumbent implements a high policy in a low shock. Third, the bad incumbent implements a low policy in a high shock. In sum, the posterior belief is

$$\mu(1) = \frac{\mu_0(1 - \pi_0)}{\mu_0(1 - \pi_0) + (1 - \mu_0)\pi_0(1 - \sigma(1)) + (1 - \mu_0)(1 - \pi_0)\sigma(0)}$$

$$= \frac{\mu_0}{\mu_0 + (1 - \mu_0)(\pi_0(1 - \sigma(1))/(1 - \pi_0) + \sigma(0))}.$$
(1)

When the policy outcome is high (z = 2), either a good or bad incumbent implements high policy in a high shock. The updated belief is

$$\mu(2) = \frac{\mu_0 \pi_0}{\mu_0 \pi_0 + (1 - \mu_0) \pi_0 \sigma(1)} = \frac{\mu_0}{\mu_0 + (1 - \mu_0) \sigma(1)}.$$
 (2)

Before we proceed, an auxiliary result will simplify the equilibrium analysis.

**Lemma 1.** In equilibrium,  $\mu(1) = \mu_0$ , and  $\rho(z)$  is weakly monotonic.

*Proof.* We show that any belief with  $\mu(1) \neq \mu_0$  will be inconsistent with the equilibrium strategy plans induced by that belief.

Suppose  $\mu(1) > \mu_0$ . The voter retains the incumbent when the first-period outcome is medium,  $\rho(1) = 1$ . In a high shock  $\epsilon = 1$ , the bad incumbent will implement a low policy,  $\sigma(1) = 0$ . In a low shock  $\epsilon = 0$ , the bad incumbent will implement a high policy  $\sigma(0) = 1$ . But the updated belief is inconsistent with these strategies:

$$\mu(1) = \frac{\mu_0}{\mu_0 + (1 - \mu_0)(\pi_0/(1 - \pi_0) + 1)} < \mu_0.$$

Suppose  $\mu(1) < \mu_0$ . The voter does not retain the incumbent when the first-period outcome is medium,  $\rho(1) = 0$ . The bad incumbent implements a low policy in a low shock  $\sigma(0) = 0$ . However,  $\mu(1) < \mu_0$  is inconsistent with all possible  $\sigma(1)$  in equilibrium. First,  $\sigma(1) \geq 2\pi_0 - 1$  does not support the belief since

$$\mu(1) < \mu_0 \Longleftrightarrow \sigma(1) < 2\pi_0 - 1.$$

Consider then  $\sigma(1) < 2\pi_0 - 1 < 1$ . We have  $\mu(2) > \mu_0$  in equilibrium. The voter will retain the politician if the policy outcome is high  $\rho(2) = 1$ , so the bad incumbent will implement high policy in a high shock  $\sigma(1) = 1$ , which results in a contradiction,  $\mu(1) = 1 > \mu_0$ . Hence,  $\mu(1) = \mu_0$  in equilibrium.

It follows immediately that  $\rho(z)$  is weakly monotonic under Assumption 1 and  $\mu(2) \geq \mu_0$ .

Lemma 1 allows us to focus on a small subset of strategies. In the equilibrium, the following condition must hold:

$$\pi_0/(1-\pi_0)(1-\sigma(1)) + \sigma(0) = 1. \tag{3}$$

Lemma 1 also implies that  $\rho(1)$  is a mixed strategy in equilibrium. For the bad incumbent, the office rent incentivizes high policy. He will implement a high policy only if the difference in the probability of retainment is sufficiently large. Because  $\mu(0) = 0$ , the voter will not retain the incumbent who produces a low policy outcome  $\rho(0) = 0$ . In a low shock, the best policy response is

$$\sigma(0) = \begin{cases} 1, & \rho(1) > c/r \\ 0, & \rho(1) < c/r. \\ [0, 1], & \rho(1) = c/r \end{cases}$$

In a high shock, the best policy response is

$$\sigma(1) = \begin{cases} 1, & \rho(1) < \rho(2) - c/r \\ 0, & \rho(1) > \rho(2) - c/r. \\ [0, 1], & \rho(1) = \rho(2) - c/r \end{cases}$$

The best responses must reconcile each other. Unless r = 2c, it would be impossible for both  $\sigma(1)$  and  $\sigma(0)$  to be mixed. Using the best responses and Lemma 1, we characterize the equilibrium.

**Proposition 1a.** For r > 2c, the bad incumbent always implements a high policy  $\sigma(1) = \sigma(0) = 1$ . The voter's election strategy is such that  $\rho(0) = 0$ , and  $c/r \le \rho(1) \le \rho(2) - c/r$ .

**Proposition 1b.** For c < r < 2c and  $\pi_0 < 1/2$ , the bad incumbent implements a low policy in a high shock  $\sigma(1) = 0$  and mixes between low and high policy in a low shock  $\sigma(0) = (1 - 2\pi_0)/(1 - \pi_0)$ . The voter's election strategy is such that  $\rho(0) = 0$ ,  $\rho(1) = c/r$ , and  $\rho(2) = 1$ .

**Proposition 1c.** For c < r < 2c and  $\pi_0 > 1/2$ , the bad incumbent implements a low policy when the shock is low  $\sigma(0) = 0$  and mixes between low and high policy when the shock is high  $\sigma(1) = (2\pi_0 - 1)/\pi_0$ . The voter's retention strategy is such that  $\rho(0) = 0$ ,  $\rho(1) = 1 - c/r$ , and  $\rho(2) = 1$ .

*Proof.* We prove the proposition by exhaustion. Consider first  $\sigma(0) = 1$ , the condition requires  $\sigma(1) = 1$ . According to the best responses,  $c/r \le \rho(1) \le \rho(2) - c/r$ , which holds for some  $\rho(1)$  and  $\rho(2)$  only if  $c/r \le 1/2$ . We obtain Proposition 1a.

Consider  $\sigma(0) \in [0,1]$ , the condition requires that  $0 \leq \sigma(1) < 1$ . For  $\sigma(1) < 1$ ,  $\mu(2) = 1$  and  $\rho(2) = 1$ . According to the best responses,  $\rho(1) = c/r$  and  $\rho(2) - c/r = 1 - c/r \leq \rho(1)$ , which holds for some  $\rho(1)$  and  $\rho(2)$  only if  $c/r \geq 1/2$ . For c > r/2,  $\rho(2) - c/r < \rho(1) = c/r$ , the bad incumbent's strategy are  $\sigma(1) = 0$  and  $\sigma(0) = (2\pi_0 - 1)/(1 - \pi_0)$ . We obtain Proposition 1b.

Consider  $\sigma(0) = 0$ , the condition requires that  $\sigma(1) = (2\pi_0 - 1)/\pi_0$  and  $1/2 \le \pi_0 < 1$ . For  $\sigma(1) < 1$ ,  $\mu(2) = 1$  and  $\rho(2) = 1$ . According to the best responses,  $1 - c/r = \rho(1) < c/r$ , which holds for some  $\rho(1)$  and  $\rho(2)$  only if  $c/r \ge 1/2$ . We obtain Proposition 1c.

Proposition 1 reveals how uninformed voters shape political accountability through their limited ability to disentangle effort (a) from exogenous shocks  $(\epsilon)$ . When voters observe only policy outcomes  $(z=a+\epsilon)$ , bad incumbents exploit this ambiguity by strategically adjusting their effort based on office rents (r), policy costs (c), and the likelihood of shocks  $(\pi_0)$ . For instance, under high office rents (r>2c), bad incumbents universally mimic good types by exerting high effort  $(\sigma(1)=\sigma(0)=1)$ , creating a pooling equilibrium where voters cannot distinguish competence (Proposition 1a). Conversely, when rents are moderate (c< r<2c), bad incumbents tailor their strategies to the shock's likelihood: they shirk effort in less probable shocks (e.g., low effort in high shocks if  $\pi_0 < 1/2$ ) and randomize effort otherwise (Propositions 1b, 1c). This partial mimicry allows voters to imperfectly screen politicians—retaining incumbents after high outcomes (z=2) and replacing them after low outcomes (z=0) - but leaves voters vulnerable to rewarding luck over competence in medium outcomes (z=1).

The uninformed voter equilibrium underscores a critical trade-off: While limited information enables some accountability (e.g., disciplining blatant shirking), it perpetuates a signal-jamming problem. For example, incumbents in volatile economies might receive undue credit for growth driven by favorable external shocks ( $\epsilon = 1$ ), even if their actual effort (a = 0) is minimal. This dynamic mirrors real-world scenarios where voters reelect leaders during economic booms unrelated to policy competence. The model suggests that electoral accountability under incomplete information hinges on institutional design - such as structuring office rents or shock

transparency - to mitigate the risks of rewarding luck.

#### 3.2 Informed voter

This section analyzes the equilibrium with an informed voter. Before the election, the voter knows about  $\epsilon_1$  and  $z_1$ , so she is perfectly informed of the policy implemented. The officeholder has no informational advantage over the voter. The game degenerates into a simple signaling game. The voter has the same benefit-cost calculus: The incumbent is retained only if the posterior  $\mu(z, \epsilon)$  is larger than the prior  $\mu_0$ . The voter's election strategy is

$$\tilde{\rho}(z,\epsilon) = \begin{cases} 1, & \mu(z,\epsilon) > \mu_0 \\ 0, & \mu(z,\epsilon) < \mu_0. \\ [0,1], & \mu(z,\epsilon) = \mu_0 \end{cases}$$

The posterior belief observing a low policy is

$$\mu(z=\epsilon,\epsilon)=0.$$

The voter will not retain the incumbent in a low policy,  $\tilde{\rho}(z=\epsilon,\epsilon)=0$ . The posterior belief observing a high policy is

$$\mu(z = \epsilon + 1, \epsilon) = \frac{\mu_0}{\mu_0 + (1 - \mu_0)\sigma(\epsilon)}.$$

To implement a high policy, the bad incumbent faces a trade-off between an increased probability of retainment and the cost of policymaking. The best policy response is

$$\sigma = \begin{cases} 1, & \tilde{\rho}(\epsilon+1,\epsilon) > c/r \\ 0, & \tilde{\rho}(\epsilon+1,\epsilon) < c/r. \\ [0,1], & \tilde{\rho}(\epsilon+1,\epsilon) = c/r \end{cases}$$

An auxiliary result follows

Lemma 2.  $\sigma = 1$  in equilibrium.

*Proof.* Suppose that  $\sigma < 1$  is in equilibrium. The updated belief in a high policy is  $\mu(a=1) > \mu_0$ . The voter will retain the incumbent who implements a high policy  $\rho(a=1) = 1 > c/r$ ;  $\sigma < 1$  is not the best response.

The game has only one pooling equilibrium equivalent to Proposition 1a.

**Proposition 2.** The bad incumbent implements a high policy regardless of policy shocks. Observing a high policy, the voter retains the incumbent with a probability  $\tilde{\rho}(\epsilon+1,\epsilon) \geq c/r$ ; observing a low policy, the voter replaces the incumbent with probability one  $\tilde{\rho}(\epsilon,\epsilon) = 0$ .

Proposition 2 demonstrates a counterintuitive outcome: informed voters, who observe policy outcomes and shocks  $(\epsilon)$ , inadvertently weaken political selection. With full information, bad incumbents face heightened incentives to always mimic good types  $(\sigma(1) = \sigma(0) = 1)$ , as voters can directly punish low policy (a = 0). This results in a pooling equilibrium where bad and good incumbents are indistinguishable, which maximizes short-term discipline but eliminates informative policy signals for an effective election. While informed voters achieve perfect control - ensuring high first-period outcome - they sacrifice the long-term selection, as reelection choices become uninformative about competence.

The paradox of informed voters highlights a fundamental tension in democratic accountability. For instance, during crises like pandemics, leaders may adopt visible but ineffective policies (e.g., unconditional lockdown) to signal policy effort, knowing voters can attribute outcomes to exogenous shocks. This erodes the electorate's ability to identify competent leaders, perpetuating cycles of poor governance. The model implies that transparency reforms alone may backfire unless paired with other information mechanisms, which will be discussed later. By balancing revelation and uncertainty, institutions can mitigate the trade-off, ensuring accountability without sacrificing the electorate's capacity to distinguish luck from skill.

#### 3.3 Informed or uninformed?

This section compares the voter's ex-ante expected payoffs as being informed and uninformed. Let  $v_I$  be the expected payoff of the informed voter, and  $v_U$  be that of the uninformed voter. The informed voter's payoff is

$$v_{I} = (1 - \delta) \underbrace{(2\pi_{0} + 1 - \pi_{0})}_{\mathbb{E}(z_{1})} + \delta \underbrace{(\mu_{0}(2\pi_{0} + 1 - \pi_{0}) + (1 - \mu_{0})(\pi_{0}))}_{\mathbb{E}(z_{2})}$$
$$= (1 - \delta)(1 + \pi_{0}) + \delta(\mu_{0} + \pi_{0}).$$

From Proposition 1(a), we know that the uninformed voter's payoff is the same as the informed voter's payoff for c < r/2. For c/r > 1/2 and  $\pi_0 < 1/2$ ,

$$v_{U} = \underbrace{\pi_{0}\mu_{0}\Big((1-\delta)2 + \delta(\pi_{0}+1)\Big)}_{\text{good incumbent, high shock}} + \underbrace{(1-\pi_{0})\mu_{0}\Big(1-\delta + c/r\delta(\pi_{0}+1) + (1-c/r)\delta(\mu_{0}+\pi_{0})\Big)}_{\text{good incumbent, high shock}} + \underbrace{\pi_{0}(1-\mu_{0})\Big(1-\delta + c/r\delta\pi_{0} + (1-c/r)\delta(\mu_{0}+\pi_{0})\Big)}_{\text{bad incumbent, high shock}} + \underbrace{(1-\pi_{0})(1-\mu_{0})\Big(\frac{1-2\pi_{0}}{1-\pi_{0}}(1-\delta + c/r\delta\pi_{0} + (1-c/r)\delta(\mu_{0}+\pi_{0})) + \frac{\pi_{0}}{1-\pi_{0}}\delta(\mu_{0}+\pi_{0})\Big)}_{\text{bad incumbent, low shock}} = 1 + (-1+\mu_{0})\delta - \pi_{0}(1+\mu_{0}(-2+\delta) - 2\delta + \mu_{0}^{2}\delta)$$

For c/r > 1/2 and  $\pi_0 > 1/2$ ,

$$v_{U} = \underbrace{\pi_{0}\mu_{0}\Big((1-\delta)2 + \delta(\pi_{0}+1)\Big)}_{\text{good incumbent, high shock}} + \underbrace{(1-\pi_{0})\mu_{0}\Big(1-\delta + (1-c/r)\delta(\pi_{0}+1) + c/r\delta(\mu_{0}+\pi_{0})\Big)}_{\text{good incumbent, low shock}}$$

$$+ \underbrace{\pi_{0}(1-\mu_{0})\Big(\frac{2\pi_{0}-1}{\pi_{0}}((1-\delta)2 + \delta\pi_{0}) + \frac{1-\pi_{0}}{\pi_{0}}(1-\delta + (1-c/r)\delta\pi_{0} + c/r\delta(\mu_{0}+\pi_{0}))\Big)}_{\text{bad incumbent, high shock}}$$

$$+ \underbrace{(1-\pi_{0})(1-\mu_{0})\Big(\delta(\mu_{0}+\pi_{0})\Big)}_{\text{bad incumbent, low shock}}.$$

$$= -1 + 2\mu_{0} + \delta - \mu_{0}^{2}\delta + \pi_{0}(3 - 2\mu_{0} - 2\delta + \mu_{0}\delta + \mu_{0}^{2}\delta)$$

These equations allow us to compare payoffs directly, summarized by Theorem 1.

**Theorem 1.** For 
$$2c < r$$
,  $v_I = v_U$ . For  $c < r < 2c$ ,  $v_I \ge v_U$  only if  $2/(2 + \mu_0) \ge \delta$ .

Corollary 1.  $v_I - v_U$  weakly decreases on  $\mu_0$  and  $\delta$ , and it is independent of  $\pi_0$ .

Theorem 1 formalizes the welfare trade-off between informed and uninformed voters by linking voter welfare  $v_I$  and  $v_U$  to the relative importance of selection  $\delta$  and the prevalence of good politicians  $\mu_0$ . When office rents are high (2c < r), welfare equivalence arises because bad incumbents universally mimic good types regardless of voter information (Propositions 1a and 2). However, for low office rents (2c > r > c), welfare diverges: uninformed voters achieve higher welfare when selection is critical ( $\delta$  is high) and good politicians are common ( $\mu_0$  is high). This

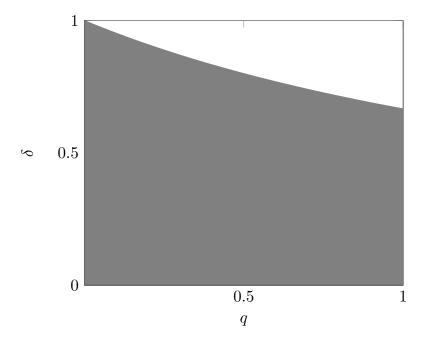


Figure 2: Informed electorate is superior in gray area only

occurs because uninformed voters retain partial screening power—medium outcomes (z=1) trigger mixed election strategies, enabling voters to weed out bad incumbents exploiting shocks probabilistically. On the contrary, informed voters sacrifice selection efficiency for control, as full transparency forces bad incumbents into a pooling equilibrium, eliminating all informative signals. The theorem thus challenges conventional "more information is better" wisdom, showing that voter welfare depends on whether voters prioritize discipline or selection.

The theorem underscores how the political environment shapes optimal voter information regimes. In contexts where long-term competence matters, e.g., legislatures with multi-term agendas, limiting pre-election transparency (an uninformed electorate) improves selection by preserving uncertainty. Conversely, in short-term crises, e.g., disaster response, full transparency (an informed electorate) maximizes immediate accountability, even at the cost of perpetuating incompetent leaders.

# 4 Optimal information

In the previous sections, our results resonate with Ashworth and De Mesquita (2014) in the spirit that being informed is not always better than being uninformed. In the

model, either informed or uninformed is the extreme case of releasing (reserving) information. A general discussion on information structures has not been done so far. Here, we take a step forward and answer a normative question regarding information: What would be the optimal information disclosure that maximizes voter welfare?

### 4.1 Report

This section generalizes the baseline model by introducing a public signal. In each period, after the shock is realized and before the policy is made, a public signal s (without loss of generality) is randomly drawn from a countable set of signals  $S = \{s_0, s_1, s_2, ...\}$  and revealed to all players. The signal function is  $\tau : E \longrightarrow \Delta(S)$ . We write  $\tau_s(\epsilon) = \Pr(s|\epsilon,\tau)$ . The officeholder observes the shock and the signal before making policy. The policy strategy becomes  $\sigma : E \times S \longrightarrow \Delta(A)$ . The voter observes the policy outcome and the signal before the election. The electoral strategy becomes  $\rho : S \times Z \longrightarrow [0,1]$ .

Under the extension, being informed (or uninformed) is a special form of  $\tau$ . For instance, being uninformed can be represented by a signal function that some signal  $s_1$  is drawn with probability one for all  $\epsilon$ . Being informed can be represented by a signal function that some signal  $s_0$  is drawn with probability one when  $\epsilon_t = 0$ , and another signal  $s_1$  is drawn with probability one when  $\epsilon_t = 1$ . The signal functions induce the same incentives and actions as those in the previous section.

The extension preserves politicians' information advantage over voters. What citizens know is also known by politicians, but not vice versa. The officeholder receives the signal before making a policy, which is consistent with our position that politicians can strategically utilize public information in policymaking.

The voter's welfare varies across public signal functions. For any signal function  $\tau$ , each signal s in its range induces a posterior belief  $\pi_s \in \Delta(E)$ . The posterior belief that the policy shock is high after observing signal s is

$$\pi_s = \frac{\tau_s(\epsilon = 1)\pi_0}{\tau_s(\epsilon = 1)\pi_0 + \tau_s(\epsilon = 0)(1 - \pi_0)},$$

which determines the equilibrium payoff. A public signal s is sent to players before any action, which updates the voter's posterior belief about the shock  $\epsilon$ . Meanwhile, the officeholder perceives this update. Note that two signals s and s' may induce the

same posterior  $\pi_s = \pi_{s'}$ . Without loss of generality, we focus on the set of posteriors instead of signals. A signal function  $\tau$  corresponds to a distribution of posteriors, denoted by  $\lambda \in \Delta(\Delta(E))$ . Denote by  $\lambda(\pi)$  the probability of a posterior  $\pi$  obtained by summing up the mass of signals that induce  $\pi$ :

$$\lambda(\pi) = \sum_{s:\pi_s = \pi} \sum_{\epsilon} \tau(s|\epsilon)\pi_s \text{ for all } s \in S.$$

 $\pi$  is induced by  $\tau$  if and only if  $\pi_s = \pi$  is induced by  $\tau$  and  $\lambda(\pi) > 0$ . A distribution of posteriors is *Bayesian plausible* if the expected value equals the prior:

$$\sum_{\pi} \pi \lambda(\pi) = \pi_0.$$

The proper subgame under  $\pi$  is (almost) the same game analyzed in the previous section. <sup>4</sup> The equilibrium strategies are given by Proposition 1 and 2; the associated payoff is a piece-wise function of  $\pi$ . For  $\pi \in [1/2, 1]$ , the voter's payoff is

$$v(\pi) = \pi \mu_0 \Big( (1 - \delta)2 + \delta(\pi_0 + 1) \Big) + (1 - \pi) \mu_0 \Big( (1 - \delta) + (1 - c/r)\delta(\pi_0 + 1) + c/r\delta(\mu_0 + \pi_0) \Big)$$

$$+ \pi (1 - \mu_0) \Big( \frac{2\pi - 1}{\pi} ((1 - \delta)2 + \delta\pi_0) + \frac{1 - \pi}{\pi} ((1 - c/r)\delta\pi_0 + c/r\delta(\mu_0 + \pi_0)) \Big)$$

$$+ (1 - \pi)(1 - \mu_0) \Big( \delta(\mu_0 + \pi_0) \Big).$$

$$= -1 + 2\mu_0 + \delta - \mu_0^2 \delta + \pi_0 \delta + \pi (3 - 2\mu_0 - 3\delta + \mu_0 \delta + \mu_0^2 \delta).$$

For  $\pi \in [0, 1/2]$ , the voter's payoff is

$$v(\pi) = \pi \mu_0 \Big( (1 - \delta)2 + \delta(\pi_0 + 1) \Big) + (1 - \pi) \mu_0 \Big( 1 - \delta + c/r \delta(\pi_0 + 1) + (1 - c/r) \delta(\mu_0 + \pi_0) \Big)$$

$$+ \pi (1 - \mu_0) \Big( 1 - \delta + c/r (\delta \pi_0) + (1 - c/r) \delta(\mu_0 + \pi_0) \Big)$$

$$+ (1 - \pi) (1 - \mu_0) \Big( \frac{1 - 2\pi}{1 - \pi} (1 - \delta + c/r (\delta \pi_0) + (1 - c/r) \delta(\mu_0 + \pi_0)) + \frac{\pi}{1 - \pi} \delta(\mu_0 + \pi_0) \Big).$$

$$= 1 - \delta + (\mu_0 + \pi_0) \delta + \pi (2\mu_0 - 1 - \delta \mu_0 + \delta - \delta \mu_0^2).$$

 $v(\pi)$  is a non-differentiable but continuous function. The optimal report is the set

<sup>&</sup>lt;sup>4</sup>A slight difference is that a new policy shock is drawn according to the prior in the second period, while policymaking is independent of the shock.

of posteriors maximizing the ex-ante expected payoff of the voter,

$$\max_{\pi,\lambda(\pi)} \lambda(\pi) v(\pi),$$

subject to the Bayesian plausible constraint characterized above.

To find the optimal  $\tau$ , we use *concavification* in Bayesian persuasion and information design. Let

$$\overline{\beta} := 3 - 2\mu_0 - 3\delta + \mu_0\delta + \mu_0^2\delta$$
 and  $\underline{\beta} := 2\mu_0 - 1 - \delta\mu_0 + \delta - \delta\mu_0^2$ 

be the slopes for  $\pi \in [1/2, 1]$ , and  $\pi \in [0, 1/2]$  respectively. We classify the linear programming problem regarding the sign of  $\overline{\beta} - \underline{\beta}$ . Note that  $v(\pi)$  is strictly concave (convex) for  $\overline{\beta} - \underline{\beta} > (<)0$ . The optimal report is either full disclosure or no disclosure with the same criterion as that in Theorem 1.

**Theorem 2.** If 2c < r, the pre-policy report has no effect on voter welfare. If, instead, c < r < 2c, full disclosure (informed) is optimal for  $\delta < 2/(2 + \mu_0)$ ; no disclosure (uninformed) is optimal for  $\delta > 2/(2 + \mu_0)$ .

Theorem 2 summarizes the optimal design of pre-policy information disclosure (reporting), demonstrating that partial disclosure is never optimal. When selection dominates  $(\delta > 2/(2+\mu_0))$ , no disclosure (uninformed electorate) maximizes welfare by preserving screening types. When control dominates  $(\delta < 2/(2+\mu_0))$ , full disclosure (informed electorate) is optimal, as it deters shirking despite eroding selection. This binary result stems from the *concavification* of voter welfare in Bayesian persuasion (Kamenica and Gentzkow, 2011): the linearity and continuity of  $v(\pi)$  in posterior beliefs  $(\pi)$  preclude interior solutions, forcing corner outcomes (full or no disclosure).

#### **4.2** Audit

This section generalizes the baseline model by introducing post-policy audit. The audit reveals the policy shock after the outcome and before the election. We study an auditing rule that maps policy outcomes to probabilities of auditing,  $g: Z \longrightarrow [0, 1]$ . g(z) is the probability that an audit occurs in policy outcome z. The voter employs two electoral strategies. Without audit, the electoral strategy is  $\rho(z)$ . Otherwise, the electoral strategy is  $\tilde{\rho}(z, \epsilon)$ .

The voter retains the incumbent if the posterior exceeds the prior  $\mu \geq \mu_0$ . There are two types of information sets: the one with audit is  $\mu(z, \epsilon)$ , and the other without audit is  $\mu(z)$ . The posteriors and the electoral strategy share the same formula as those in section 3.1 and 3.2.

Let  $\phi(\epsilon)$  be the difference of retainment probability such that

$$\phi(\epsilon) := \Pr(\text{retain}|a=1,\epsilon) - \Pr(\text{retain}|a=0,\epsilon).$$

The bad incumbent implements high policy only if  $\phi(\epsilon) > c/r$ . Unlike reporting, auditing may change the equilibrium behavior as the incumbent considers the chance of audit when making policy. Nevertheless, auditing only matters at medium outcome g(1). For z = 2 (or z = 0), the voter knows that the incumbent did (or did not) implement high policy, and the audit makes no difference in voter information. Thus, we mainly focus on g(1) and replace it with g in the subsequent analysis.

Under a high policy shock, the bad incumbent implements high policy only if

$$\phi(1) = g\tilde{\rho}(2,1) + (1-g)\rho(2) - g\tilde{\rho}(1,1) - (1-g)\rho(1)$$
  
=  $\rho(2) - (1-g)\rho(1) \ge c/r$ ,

so the best response to  $\epsilon = 1$  is

$$\sigma(1) = \begin{cases} 1, & \phi(1) > c/r \\ [0,1], & \phi(1) = c/r. \\ 0, & \phi(1) < c/r \end{cases}$$

Under a low policy shock, the bad incumbent implements high policy only if

$$\phi(0) = g\tilde{\rho}(1,0) + (1-g)\rho(1) - g\tilde{\rho}(0,0) - (1-g)\rho(0)$$
  
=  $g\tilde{\rho}(1,0) + (1-g)\rho(1) \ge c/r$ ,

so the best response to  $\epsilon = 0$  is

$$\sigma(0) = \begin{cases} 1, & \phi(0) > c/r \\ [0,1], & \phi(0) = c/r. \\ 0, & \phi(0) < c/r \end{cases}$$

We establish the auditing equilibrium as in Proposition 1.

**Proposition 3d.** For  $g \geq 2c/r - 1$ , the bad incumbent always implements high policy  $\sigma(1) = \sigma(0) = 1$ . The voter replaces the incumbent in a low outcome  $\rho(0) = 0$ , randomizes in all other outcomes such that  $\rho(2) - c/r \geq (1-g)\rho(1) \geq c/r - g\tilde{\rho}(1,0)$ .

**Proposition 3e.** For  $\pi_0 \leq 1/2$  and  $g \leq 2c/r - 1$ , the bad incumbent implements low policy when the shock is high  $\sigma(1) = 0$  and randomizes between low and high policy when the shock is low  $\sigma(0) = (1 - 2\pi_0)/(1 - \pi_0)$ . The voter randomizes in a medium outcome  $\rho(1) = (c/r - g)/(1 - g)$ ; the voter retains the incumbent knowing that a high policy was implemented,  $\tilde{\rho}(1,0) = \rho(2) = 1$ ; otherwise, the voter replaces the incumbent,  $\tilde{\rho}(1,0) = \rho(0) = 0$ .

**Proposition 3f.** For  $\pi_0 \geq 1/2$  and  $g \leq 2c/r-1$ , the bad incumbent implements low policy when the shock is low  $\sigma(0) = 0$  and randomizes between low and high policy when the shock is high  $\sigma(1) = (2\pi_0 - 1)/\pi_0$ . The voter randomizes in a medium outcome  $\rho(1) = (1 - c/r)/(1 - g)$ ; the voter retains the incumbent knowing that a high policy was implemented,  $\tilde{\rho}(1,0) = \rho(2) = 1$ ; otherwise, the voter replaces the incumbent,  $\tilde{\rho}(1,1) = \rho(0) = 0$ .

*Proof.* We prove the proposition by exhaustion using the best responses and the updated beliefs.

Step one: The pooling equilibrium,  $\sigma(1) = \sigma(0) = 1$ , exists only if  $g \ge 2c/r - 1$ . Consider  $\sigma(1) = \sigma(0) = 1$ . According to  $\phi(1)$  and  $\phi(0)$ , the equilibrium exists only if

$$\rho(2) - c/r \ge (1 - g)\rho(1) \ge c/r - g\tilde{\rho}(1, 0).$$

The electoral strategy is flexible under the policy strategy such that  $\rho(1)$ ,  $\tilde{\rho}(1,0)$ ,  $\rho(2) \in [0,1]$ . Hence, the condition holds only if

$$\rho(2) - c/r \ge c/r - g\tilde{\rho}(1,0) \Longleftrightarrow g \ge \frac{2c/r - \rho(2)}{\tilde{\rho}(1,0)} \ge 2c/r - 1.$$

Step two: There is no other equilibrium with  $\sigma(1) = 1$  or  $\sigma(0) = 1$ . Consider  $\sigma(1) = 1 > \sigma(0)$ . Under the policy strategy, the updated beliefs satisfy  $\mu(1,0) = \mu(1) > \mu_0$ , and the electoral strategy satisfies  $\rho(1) = \tilde{\rho}(1,0) = 1$ . We have  $\phi(0) = 1 > c/r \Longrightarrow \sigma(0) = 1$ , which is a contradiction. Consider  $\sigma(0) = 1 > \sigma(1)$ . Under the policy strategy, the updated beliefs satisfy  $\mu(1) < \mu_0 = \mu(1,0) < \mu(2) = 1$ , and

the electoral strategy is  $\rho(1) = 0$  and  $\rho(2) = 1$ . We have  $\phi(1) = 1 > c/r \Longrightarrow \sigma(1) = 1$ , which is a contradiction.

Step three: For an equilibrium with  $\sigma(1) < 1$  and  $\sigma(0) < 1$ , it must be that  $\mu(1) = \mu_0$ . The beliefs are  $\mu(2) = \mu(1,0) = 1$ . Suppose that  $\mu(1) > \mu_0 \Longrightarrow \rho(1) = 1$ . We have

$$\phi(0) = g\tilde{\rho}(1,0) + 1 - g = 1 > c/r \Longrightarrow \sigma(0) = 1,$$

contradicting to  $\sigma(0) < 1$ . Suppose that  $\mu(1) < \mu_0 \Longrightarrow \rho(1) = 0$ . We have

$$\phi(1) = \rho(2) = 1 > c/r \Longrightarrow \sigma(0) = 1,$$

contradicting to  $\sigma(1) < 1$ .

Step four: a hybrid equilibrium exists only if  $g \leq 2c/r - 1$ . Since step three is analogous to Lemma 1, the equilibrium policy strategy is the same as Proposition 1 - either (i)  $\sigma(1) = 0$  and  $\sigma(0) = (1 - 2\pi_0)/(1 - \pi_0)$  or (ii)  $\sigma(1) = (2\pi_0 - 1)/\pi_0$  and  $\sigma(0) = 0$ . The electoral strategy is slightly different. The first case (i) holds only if

$$\phi(1) = 1 - (1 - g)\rho(1) = c/r \iff \rho(1) = (1 - c/r)/(1 - g)$$

and

$$\phi(0) = g + (1-g)\rho(1) = g + 1 - c/r \le c/r \Longleftrightarrow g \le 2c/r - 1.$$

The second case (ii) holds only if

$$\phi(0) = g + (1 - g)\rho(1) = c/r \iff \rho(1) = (c/r - g)/(1 - g)$$

and

$$\phi(1) = 1 - (1 - g)\rho(1) = 1 - (c/r - g) \le c/r \iff g \le 2c/r - 1.$$

Auditing makes the informed voter equilibrium (g = 1) and uninformed voter equilibrium (g = 0) as two limiting cases of auditing equilibrium. In the last section, we show that full coverage or no coverage is indeed the optimal rule of information revelation for the voter. Now we ask if partial auditing can be superior to the extreme cases.

To answer this question, we first construct the expected payoff. For g > 2c/r - 1, the equilibrium payoff equals that of an informed voter. For  $g \le 2c/r - 1$  and

 $\pi_0 < 1/2$ , the expected payoff is

$$v(g) = \pi_0 \mu_0 \Big( (1 - \delta)2 + \delta(\pi_0 + 1) \Big)$$

$$+ (1 - \pi_0) \mu_0 \Big( 1 - \delta + \delta \Big( g(1 + \pi_0) + (c/r - g)(1 + \pi_0) + (1 - c/r)(\mu_0 + \pi_0) \Big) \Big)$$

$$+ \pi_0 (1 - \mu_0) \Big( 1 - \delta + \delta \Big( g(\pi_0 + \mu_0) + (c/r - g)\pi_0 + (1 - c/r)(\mu_0 + \pi_0) \Big) \Big)$$

$$+ (1 - \pi_0) (1 - \mu_0) \Big( \frac{1 - 2\pi_0}{1 - \pi_0} \Big( 1 - \delta + \delta \Big( g\pi_0 + (c/r - g)\pi_0 + (1 - c/r)(\mu_0 + \pi_0) \Big) \Big)$$

$$+ \frac{\pi_0}{1 - \pi_0} \delta(\mu_0 + \pi_0) \Big).$$

$$= 1 - \delta + \mu_0 \delta - \pi_0 (1 - 2\mu_0 + \delta(-1 + \mu_0)(2 + \mu_0 + g\mu_0))$$

For  $g \le 2c/r - 1$  and  $\pi_0 > 1/2$ ,

$$v(g) = \pi_0 \mu_0 \Big( (1 - \delta)2 + \delta(\pi_0 + 1) \Big) + (1 - \pi_0)(1 - \mu_0) \Big( \delta(\mu_0 + \pi_0) \Big)$$

$$+ (1 - \pi_0) \mu_0 \Big( 1 - \delta + \delta \Big( g(\pi_0 + 1) + (1 - c/r)(\pi_0 + 1) + (c/r - g)(\mu_0 + \pi_0) \Big) \Big)$$

$$+ \pi_0 (1 - \mu_0) \Big( \frac{1 - \pi_0}{\pi_0} \Big( 1 - \delta + \delta(g(\pi_0 + \mu_0) + (1 - c/r)\pi_0 + (c/r - g)(\mu_0 + \pi_0)) \Big)$$

$$+ \frac{2\pi_0 - 1}{\pi_0} ((1 - \delta)2 + \delta\pi_0) \Big)$$

$$= -1 + 2\mu_0 - \delta(-1 + \mu_0)(1 + \mu_0 + g\mu_0) + \pi_0 (3 - 2\mu_0 + \delta(-1 + \mu_0)(2 + \mu_0 + g\mu_0))$$

Using the equilibrium payoff, we obtain the optimal auditing.

**Theorem 3.** If 2c < r, post-policy audit has no effect on voter welfare. If c < r < 2c,  $g^* = 2c/r - 1$  is optimal for  $\delta > r/(r + c\mu_0)$ ;  $g^* = 1$  is optimal for  $\delta < r/(r + c\mu_0)$ .

When the office rent is low, probabilistic auditing g = 2c/r - 1 is potentially superior to auditing (g = 1) and is certainly superior to no auditing (g = 0). In the auditing equilibrium, the voter tends to be more tolerant in the medium outcome, which does not affect the payoff ex ante.

Corollary 2. Auditing weakly dominates reporting in improving voter welfare.

Theorem 3 establishes that post-policy auditing - probabilistic disclosure of shocks after policymaking - can achieve superior voter welfare compared to prepolicy reporting. Unlike the binary "all-or-nothing" disclosure rule in Theorem 2, auditing permits partial disclosure  $(g^* = 2c/r - 1)$  that strategically balances control and selection. When the value of selection is high  $(\delta > r/(r + c\mu_0))$ , auditing with probability  $g^* = 2c/r - 1$  deters bad incumbents from universal mimicry (unlike informed voters in Theorem 2) while preserving effectiveness for screening. This contrasts sharply with pre-policy reporting, where partial disclosure is strictly inferior. The advantage stems from its timing: by revealing information after policymaking, it introduces uncertainty for bad incumbents, who cannot perfectly anticipate voter responses. For example, a bounded audit rate in a low-rent environment forces bad politicians to randomize effort, enabling the voter to infer competence from audited outcomes and being more tolerant about retainment when she is indifferent, observing only a medium outcome.

Post-policy auditing dominates pre-policy reporting in welfare improvement. While reporting forces a rigid choice between full information (control) and no information (selection), auditing allows institutions to optimize along the margin. For instance, randomized audits in public procurement (e.g., Brazil's Controladoria-Geral da União) deter corruption without eliminating all informational noise, preserving voters' ability to screen competent leaders. This contrasts with pre-policy reports, e.g., economic forecasts, which either fully anchor expectations or leave voters ignorant. Theorems 2 and 3 thus jointly emphasize that optimal information design depends not just on what is disclosed, but when: pre-policy interventions prioritize discipline, while post-policy audit harmonizes discipline and selection.

# 5 Conclusion

This paper examines how voter information shapes electoral accountability through a political agency model integrating moral hazard and adverse selection. By analyzing equilibria under informed and uninformed electorate, we demonstrate a critical trade-off: informed voters improve short-term discipline by curbing bad incumbents' shirking but erode long-term selection by eliminating informative signals, while uninformed voters preserve screening at the cost of weaker control. The model further identifies optimal information structures: pre-policy reporting should be binary (full or no disclosure), whereas post-policy auditing benefits from partial disclosure. Notably, auditing weakly dominates reporting by balancing control and selection, as probabilistic audits introduce strategic uncertainty that deters mimicry without fully sacrificing screening. These results challenge the presumption that transparency universally enhances democracy, emphasizing instead the need for context-dependent information design.

Future work could extend this framework in several directions. First, dynamic models with multi-term incumbents could explore how repeated interactions affect the control-selection trade-off. Second, empirical tests using real-world audits or transparency reforms could validate the theoretical predictions. Third, incorporating multi-dimensional policies or heterogeneous voter preferences might reveal how issue complexity moderates information's role. Finally, integrating institutional factors—such as term limits or media independence—could refine prescriptions for designing accountability mechanisms. Addressing these questions would deepen our understanding of how information structures interact with political incentives to shape democratic performance.

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