Propaganda, Alternative Media, and Accountability in Fragile Democracies

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Abstract

We develop a model of electoral accountability with mainstream and alternative media. In addition to regular high- and low-competence types, the incumbent may be an aspiring autocrat who controls the mainstream media and will subvert democracy if retained in office. A truthful alternative media can help voters identify and remove these subversive types while re-electing competent leaders. A malicious alternative media, in contrast, spreads false accusations about the incumbent and demotivates policy effort. If the alternative media is very likely be malicious and hence is unreliable, voters ignore it and use only the mainstream media to hold regular incumbents accountable, leaving aspiring autocrats to win re-election via propaganda that portrays them as effective policymakers. When the alternative media’s reliability is intermediate, voters heed its warnings about subversive incumbents, but the prospect of being falsely accused demotivates effort by regular incumbents and electoral accountability breaks down.

Keywords: propaganda, alternative media, electoral accountability and selection, fragile democracy

Supplementary material for this article is available in the online appendix in the online edition.
Many countries inhabit a grey area between democracy and autocracy: their leaders are elected, but try to eliminate checks on their power and subvert the institutional foundations of democracy. One check that aspiring autocrats often remove is the mainstream media, which can be induced, by a combination of censorship, ownership, and corruption, to refrain from criticism and act as a propaganda vehicle for the regime. Recent rulers who have taken this approach include Turkey’s Erdoğan, Hungary’s Orban, and Venezuela’s Chávez.

Citizens who are unsure about their leaders and skeptical of the mainstream media may turn to alternative media. For our analysis, the alternative media has two defining characteristics. First, it is independent of the government and beyond its control. Second, citizens are unsure about its intentions, which can range from providing truthful warnings about aspiring autocrats to making malicious accusations against legitimate leaders. The first kind of intention was demonstrated by Peru’s Canal N, which played a key role in the downfall of President Fujimori. The second kind of intention was demonstrated by right-wing commentators in the United States, who accused President Obama of many things, including being a Marxist and, in the words of InfoWars’s Alex Jones, a “would-be dictator.” Other examples of alternative media that are difficult for the government to control include opposition television and newspapers; foreign news providers; and, more recently, social media platforms that contain a mixture of accurate information, conspiracy theories, and disinformation. A key characteristic of all these examples is that they can be either truthful or malicious and their intentions are uncertain from (at least) some voters’ perspectives.

We develop a model of electoral selection and accountability, in which citizens are uncertain about the incumbent’s type, the mainstream media’s independence, and the alternative media’s intentions. Voters want to incentivize and retain competent leaders while removing those who are incompetent or autocratic. When the mainstream media praises the incumbent, voters don’t know whether this is neutral praise of skillful policymaking or propaganda for an aspiring autocrat. The alternative media can be either a truthful type that provides accurate warnings about autocratic
subversion and propaganda, or it can be a malicious type that makes false accusations.

We study how the alternative media affects accountability and selection. A key parameter in our analysis is the alternative media’s reliability, defined as the probability that it is truthful. A highly-reliable alternative media is beneficial, because it helps citizens remove aspiring autocrats while holding regular non-autocratic politicians accountable for their policymaking. On the other hand, if the alternative media is highly unreliable, voters expect it to “cry wolf,” so they ignore its warnings. They use the mainstream media to hold regular incumbents accountable, leaving autocratic types to win re-election via propaganda and subsequently subvert democracy.

A more subtle effect occurs when the alternative media is too reliable to be ignored by voters, yet sufficiently unreliable that competent incumbents worry about being falsely accused. In that case, accountability breaks down and selection is based only on the alternative media’s report.

Our model has implications for two important features of contemporary politics: fake news and democratic backsliding. Our model shows that fake news doesn’t just induce voters to make mistakes. Rather, false accusations made by somewhat-reliable alternative media sources can also demotivate incumbent effort and thereby undermine electoral accountability.

In the context of fragile democracies, our theory suggests a tension between accountability for policymaking and prevention of democratic backsliding. In many circumstances, elections cannot simultaneously achieve both of these important goals, and voters who seek to re-elect effective leaders may fail to heed warning signs that the incumbent is an aspiring autocrat.

Our theory sits at the intersection of the literatures on media bias, electoral accountability, and fragile democracies. The media’s role in accountability has been examined by many scholars, including some who analyze pro- or anti-incumbent biases (Ashworth and Shotts 2010, Warren 2012, Wolton 2019). While existing models (e.g., Besley and Prat 2006) analyze capture of mainstream media, we study the effect of alternative media that is independent of government control and either truthfully reveals or falsely accuses the incumbent of being a subversive autocrat—a feature that is absent from existing models.
The literature on autocracy and fragile democracy includes many theories of propaganda and censorship (Egorov, Guriev, and Sonin 2009; Gehlbach and Sonin 2014; Lorentzen 2014; Cheah 2016; Little 2017; Horz 2018). There is a growing formal literature on democratic backsliding (e.g., Luo and Przeworski 2019, Svolik 2020), but very few scholars analyze accountability in weak democracies (though see Svolik 2013). Also, with the exception of Nalepa, Vanberg, and Chiopris (2018) most models of backsliding don’t incorporate uncertainty about whether the incumbent is a subversive autocrat. Our setting is closest to Guriev and Treisman’s (2018) model of propaganda and censorship by a regime that wishes to appear competent. However, in their model citizens are only concerned about whether the ruler is competent, and criticism of the incumbent is always accurate, whereas a key parameter in our analysis is the reliability of the alternative media.

Model Setup

Consider a model of policymaking and elections, with five actors: the incumbent, challenger, mainstream media, alternative media, and voter. There are two equally-likely states of the world, \( \omega \in \{0, 1\} \). The incumbent may learn \( \omega \) and chooses a policy \( x \in \{0, 1\} \), where the correct policy for the voter’s interest is the one that matches the state. Then the mainstream media announces a message \( m \in \{0, 1\} \) about the policy it believes is correct. The alternative media simultaneously issues a report \( r \in \{S, NS\} \) about whether the incumbent is a subversive type who uses the mainstream media for propaganda. Finally, the voter observes the policy choice \( x \) and the mainstream and alternative media messages \( m \) and \( r \), but not the true state \( \omega \), and decides between the incumbent and challenger.

The incumbent can be a high, low, or subversive type, \( \theta_I \in \{H, L, S\} \). High- and low-competence types are standard in the accountability literature. The subversive type is novel: she controls the mainstream media and if re-elected will consolidate her power and deliver a negative payoff to the voter. The incumbent is subversive with probability \( \sigma \). Conditional on not being subversive, she is a high type with probability \( \pi \). Low and subversive types only know the prior \( \Pr(\omega = 1) = \frac{1}{2} \) and
cannot acquire additional information. A high type can exert effort, at cost $k$, to learn the true state before choosing policy. The winner of the election gets an ego-rent of 1.

The mainstream media is either truthful or propagandist. If truthful, it non-strategically issues a report $m \in \{0, 1\}$ that matches the true state $\omega$ with probability $q \in (\frac{1}{2}, 1)$. The mainstream media is a propagandist if and only if the incumbent is subversive, in which case it always reports that the incumbent’s policy choice was correct, $m = x$.

The alternative media is either truthful or malicious. If truthful, it reports that the incumbent is subversive and is using the mainstream media for propaganda, $r = S$, if and only if this is indeed the case. If malicious, it always reports $r = S$. A central parameter in our analysis is the probability that it is malicious, $\phi \in [0, 1]$. Hereafter $1 - \phi$ is referred to as the alternative media’s reliability.

After observing $x$, $m$ and $r$, the voter elects the incumbent or the challenger. She gets utility 1 from re-electing a high-type incumbent, 0 from a low type, and $-s$ from a subversive type. As is standard in accountability models, we assume that the challenger is inactive until he is elected, in which case he delivers an exogenous expected utility $U_C \in [-s, 1]$ to the voter.

We characterize Perfect Bayesian equilibria that are symmetric with respect to policies 0 and 1, which means low- and subversive-type incumbents choose each policy with probability $\frac{1}{2}$. Other equilibrium components are: (1) the high-type incumbent’s effort decision and (2) the voter’s belief about the incumbent, as well as his election decision. In the paper we focus on intuition; statements of equilibria can be found in the online appendix.

Malice could be driven by either supply side factors (e.g., an owner who wants to discredit the incumbent and the mainstream media) or demand side factors (e.g., catering to a subset of the population that despises the incumbent). Our results hold regardless of the source of malice.

A possible objection is that some autocrats turn out to be effective policymakers who are well-liked by their subjects. In our model, $-s$ represents voters’ expected payoff from retaining a subversive type. This can include autocrats who turn out to be “good” along with those who turn out to be disastrous, as long as the expected payoff is negative. We also note that even if the autocratic type could exert high effort at a cost, she would have no incentive to do so, because she can induce the mainstream media to praise her policy decisions.

In the online appendix, we also show that our main results hold qualitatively in an extended model, in which the subversive type decides whether to capture the mainstream media and also has some ability to influence the alternative media. Possible topics for future extensions include allowing voters to sometimes directly learn $\omega$, incorporating politicians with biased policy preferences, and making the model dynamic, but a comprehensive analysis of such model variants is beyond the scope of the current paper.
Baseline

To establish a baseline, suppose there is no alternative media. We say there is accountability if two conditions hold: (1) high-type incumbents exert effort to choose policy in the voter’s interest and (2) the incumbent is removed from office if \( m \neq x \). These conditions are mutually reinforcing: a high type exerts effort to choose good policies and earn praise from the mainstream media, and the fact that she exerts effort means the media message \( m \) is informative about the incumbent’s type.

We analyze whether it is possible to have accountability in equilibrium, focusing on the incumbent’s incentives to exert effort and the voter’s use of information provided by the media.

The voter’s inferences about the incumbent are complicated by the possibility of propaganda. If propaganda is very likely, the mainstream media message is essentially meaningless. If propaganda isn’t very likely, a message that the incumbent chose the correct policy (\( m = x \)) conveys positive information about the incumbent’s desirability. Assuming accountability, high-type incumbents choose \( x = \omega \) and low and subversive types choose each policy with probability \( \frac{1}{2} \), so the voter’s expected utility from re-electing the incumbent is:

\[
U := 1 \cdot \Pr (\theta_I = H|m = x) - s \cdot \Pr (\theta_I = S|m = x) = \frac{\pi q - sl}{\pi q + (1 - \pi) \frac{1}{2} + l},
\]

where \( l := \frac{\sigma}{1 - \sigma} \) is the likelihood that the incumbent is subversive. Meanwhile, when \( m \neq x \), the voter knows the incumbent isn’t subversive, and his utility from re-electing her is:

\[
\bar{U} := 1 \cdot \Pr (\theta_I = H|m \neq x) = \frac{\pi (1 - q)}{\pi (1 - q) + (1 - \pi) \frac{1}{2}}.
\]

Accountability thus requires two conditions. First, the incumbent and challenger must be similarly appealing ex ante, \( U_C \in [\bar{U}, U] \), so the voter re-elects the incumbent if and only if the mainstream media reports \( m = x \). A presumption of this is \( \bar{U} < U \), which, for any given \( s > 0 \), holds when \( l \) is sufficiently low, i.e., subversive types aren’t too likely. Second, the effort cost must be sufficiently low, \( k \leq q - \frac{1}{2} \), so a high-type incumbent is willing to exert effort to increase her probability of
winning re-election from $\frac{1}{2}$ to $q$. Proposition 1 in the online appendix summarizes equilibria for the baseline model.

**Alternative Media**

We now analyze the full model, in which the alternative media reports on whether the incumbent is subversive. To assess the effects of the alternative media, we ask two questions. First, how does it affect the incumbent’s policymaking effort? Second, how does it affect electoral selection, both in the sense of re-electing high-type incumbents and in the sense of removing subversive ones?

**Accountability**  

The alternative media’s reliability plays a key role in determining whether accountability is possible. To see this, we begin with situations in which accountability is possible in the baseline model, $U_C \in [U, \bar{U})$ and $k \leq q - \frac{1}{2}$.

We first consider extreme cases, in which the alternative media is either perfectly reliable ($\phi = 0$) or completely unreliable ($\phi = 1$). If $\phi = 0$, there is an equilibrium with accountability, in which re-election requires not only $m = x$ but also $r = NS$, i.e., the alternative media doesn’t allege that the incumbent is subversive. If $\phi = 1$, there is an equilibrium in which the alternative media is ignored and re-election is based solely on the mainstream media message, as in the baseline model.

If the alternative media’s reliability is internal, $\phi \in (0, 1)$, the alternative media’s effect is twofold. The first effect concerns the high-type incumbent’s effort. If re-election requires $m = x$ and $r = NS$, then increases in $\phi$ demotivate the incumbent, because effort is only rewarded if the alternative media is truthful. To induce effort requires $k \leq \left(q - \frac{1}{2}\right) \left(1 - \phi\right)$ or, equivalently,

$$\phi \leq \phi_e := 1 - \frac{k}{q - \frac{1}{2}}.$$  

The second effect concerns whether the voter listens to the alternative media. Assuming account-
ability, the voter removes the incumbent when $m = x$ and $r = S$ if

$$U_C \geq U_v := 1 \cdot \Pr (\theta_I = H|m = x, r = S) - s \cdot \Pr (\theta_I = S|m = x, r = S) = \frac{\pi q \phi - sl}{\pi q \phi + (1 - \pi) \frac{1}{2} \phi + l}.$$ 

Thus the voter only listens to the alternative media if it is sufficiently reliable:

$$\phi \leq \phi_v := \frac{(s + U_C) l}{\pi q (1 - U_C) - (1 - \pi) \frac{1}{2} U_C}.$$ 

Combining these effects, we see how $\phi$ affects accountability when $U_C \in [U, \bar{U})$. As shown in Figure 1, if $\phi_v \leq \phi_e$, then if there is accountability in the baseline, there is also accountability with an alternative media. The voter listens to the alternative media if $\phi \leq \phi_v$ and ignores it otherwise.

![Figure 1: Equilibrium as a function of probability that alternative media is malicious ($\phi$) when effort cost is low ($k < (q - 1/2)(1 - \phi_v)$) and hence $\phi_v < \phi_e$.](image)

If $\phi_v > \phi_e$, the effect on accountability is more nuanced, as shown in Figure 2. If $\phi \leq \phi_e$ or $\phi > \phi_v$, there is accountability and the voter listens to the alternative media in the first case and ignores it in the second. But for intermediate reliability $\phi \in (\phi_e, \phi_v]$, accountability is impossible. This is because the alternative media is sufficiently reliable that the voter listens to it ($\phi \leq \phi_v$), but is sufficiently unreliable that the incumbent’s fear of being falsely criticized makes her unwilling to exert effort ($\phi > \phi_e$). A necessary condition for the alternative media to disrupt accountability is $\phi_v > \phi_e$ or, equivalently $k > (q - \frac{1}{2})(1 - \phi_v)$, i.e., that policymaking is difficult, in the sense that it is costly for the incumbent to learn the correct policy that serves the voter’s interest.
In other situations, the alternative media can have positive effects on accountability. If the challenger is highly appealing \((U_C \geq \overline{U})\), accountability is impossible in the baseline model and the voter removes the incumbent even when \(m = x\). The alternative media reveals additional information, because \(r = NS\) means the incumbent is not subversive. Assuming accountability, the voter’s expected utility from re-electing the incumbent after observing \(m = x\) and \(r = NS\) is:

\[
\bar{U} := \Pr (\theta_I = H|m = x \text{ and } r = NS) = \frac{\pi q}{\pi q + (1 - \pi)} \frac{1}{2} > \overline{U}.
\]

Thus the alternative media makes accountability possible when the challenger isn’t too highly-appealing and false criticism is not so likely as to demotivate effort, \(U_C \in [\overline{U}, \overline{U})\) and \(\phi \leq \phi_e\).

**Selection** We next analyze how effectively the voter selects competent types and weeds out subversive ones, starting with cases where the challenger is moderately appealing, \(U_C \in [\overline{U}, \overline{U})\).

The case \(\phi_v \leq \phi_e\) (Figure 1) is most straightforward. For \(\phi \leq \phi_v\), there is accountability: the voter listens to both media outlets and weeds out the subversive type. Local increases in \(\phi\) worsen selection of the competent type, who is more frequently falsely accused and removed from office. For \(\phi > \phi_v\), there is accountability, but the alternative media is ignored, and the subversive type, who induces the mainstream media to report \(m = x\), is never weeded out. In this parameter region, local changes in \(\phi\) don’t affect the selection of either type.
The case $\phi_v > \phi_e$ (Figure 2) is more dramatic, because $\phi$ affects incumbent effort. At $\phi = \phi_e$, the equilibrium transitions from one with accountability to one without accountability, so the voter loses the benefit of selecting based on the mainstream media message as $\phi$ crosses this threshold. Then, as $\phi$ increases above $\phi_v$, accountability is restored, but the alternative media is ignored, so selection is based solely on the mainstream media message and the subversive type is never weeded out.

We also note how $\phi$ affects selection based on the mainstream media message when $U_C \notin \overline{U}$. With an unappealing or extremely appealing challenger, $U_C < U$ or $U_C > \overline{U}$, there is no accountability and the voter never selects based on the mainstream media message. With a reasonably highly-appealing challenger, $U_C \in \overline{U}$, there is accountability if the alternative media is not demotivating, $\phi \leq \phi_e$, in which case the voter uses information from both media outlets.

Finally, we note that absent accountability, the voter benefits from selecting based on the alternative media message if two conditions hold. First, the incumbent must be sufficiently likely to be a high type to win re-election when the voter learns that she is non-subversive ($r = NS$) but learns nothing about her competence. This requires $\pi > U_C$. Moreover, the alternative media must be sufficiently reliable for the voter to remove the incumbent when $r = S$:

$$U_C \geq U_a := 1 \cdot \Pr (\theta_I = H | r = S) - s \cdot \Pr (\theta_I = S | r = S) = \frac{\pi \phi - sl}{\phi + l},$$

equivalently $\phi \leq \phi_a := \frac{(s + U_C)l}{\pi - U_C}$.

Proposition 2 in the online appendix summarizes equilibria for the model with alternative media.

Implications

We conclude by discussing several implications of our model.

Failure to heed warnings about democratic backsliding Autocratization is a major global trend, in countries such as Brazil, Hungary, India, Poland, and Turkey. It takes many forms, as incumbents subvert elections, the bureaucracy, judiciary, and other institutions. Scholars have
identified behind-the-scenes control of the media as one of the most common forms of backsliding (Bermeo 2016), and evidence on bribes by President Fujimori of Peru shows that he placed an especially high value on the media (McMillan and Zoido 2004). Alternative media sometimes serve as independent information sources and undermine support for autocrats (Knight and Tribin 2019). But, as noted by Bermeo, they often face a credibility problem, when rulers accuse them of being special interests, representatives of a discredited old order, or tools of foreign powers.

In our model, unless the alternative media is seen as being highly reliable ($\phi < \min \{\phi_e, \phi_v\}$), elections can achieve at most one of two important goals: ensuring accountability for regular incumbents and removing aspiring autocrats (see Figures 1 and 2). When the alternative media is seen as being sufficiently unreliable ($\phi > \phi_v$), voters make electoral decisions based solely on the mainstream media announcement. This means a subversive incumbent can win re-election by inducing the mainstream media to praise her policy choices. Although voters are aware that such praise might just be propaganda, they think the alternative media is probably “crying wolf,” so they fail to act on its warnings about the incumbent’s subversion, and thus forgo the opportunity to prevent democratic backsliding.

**Diminished trust in mainstream media**  In our model, the voter’s belief about the mainstream media’s truthfulness decreases, from $1 - \sigma$ to $\frac{(1-\sigma)(1-\phi)}{(1-\sigma)(1-\phi)+\sigma}$, when the alternative media alleges that it is acting as an incumbent-controlled propagandist rather than an independent information provider. This is broadly consistent with the recent decline in trust in traditional media outlets at a time when alternative media disparage the mainstream media.

**Fake news and accountability**  Another application of our model is to fake news that alleges that an incumbent is an aspiring autocrat who is in cahoots with the mainstream media. Theories of fake news include Allcott and Gentzkow (2017), Yea (2018), and Taylor (2019). While these models analyze the generation of false claims as well as effects on voter behavior, our model speaks to the accountability effects of fake news. Specifically, the alternative media is most beneficial when it is
genuine and known to be genuine. In the opposite extreme, an alternative media that is known to be fake is ignored and does not disrupt accountability. What is most problematic for accountability is an alternative media that is too genuine to be ignored yet too fake to motivate good policymaking.

Our theory may shed light on possible effects of tech giants’ recent measures to battle fake news. In particular, it recommends strong measures adopted by Youtube and Twitter, such as labeling or removing bogus material, rather than Facebook’s more lenient approach of only removing material that has been edited via artificial intelligence (Alba and Cogner 2020). In fact, lenient measures can be worse than doing nothing, if they wind up disrupting accountability by inadvertently increasing the credibility of fake news that is not removed from a site. In contrast, strong measures restore voters’ confidence in the materials being posted on the platform and reactivate their roles in upholding electoral accountability and selection. A consequence of this is expedited reputation building for truthful alternative media sources, whose intentions could long remain uncertain and indistinguishable from those of a myriad of other sources without the intervention of platform owners.

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