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# Red Herrings: A Model of Attention-Hijacking by Politicians\*

Margot Belguise<sup>†</sup>

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#### Abstract

Politicians often use "red herrings" to distract voters from scandals. When do such red herrings succeed? I develop a model in which an incumbent runs for re-election and potentially faces a scandal. Some incumbents enjoy telling "tales" (attention-grabbing stories) while others use tales to distract voters from the scandal. Multiple equilibria can arise: one with a norm of tale-telling in which red herrings succeed and another with a norm against tale-telling in which they fail. Increased media attention to tales has a nonmonotonic effect, facilitating red herrings at low attention levels, but serving a disciplinary function at high levels.

JEL Codes : C72, D72, D83, D91, L82.

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# **1** Introduction

"I want you to consider this kipper, this kipper which has been presented to me just now by the editor of a national newspaper who received it from a kipper smoker in the Isle of Man who is utterly furious because after decades of sending kippers like this through the post, he has had his costs massively increased by Brussels bureaucrats who have insisted that each kipper must be accompanied by this: a plastic ice pillow [which he brandishes, audience laughs]. Pointless, expensive, environmentally damaging health and safety."

— Boris Johnson, during the Conservative party leadership campaign in 2019<sup>1</sup>

Boris Johnson made headlines in 2019 with his speech on fish packaging regulations, which observers were quick to call a "*total* red herring".<sup>2</sup> The term "red herring" refers to an action meant to mislead or distract an audience from relevant information. It originated not with Boris Johnson's kipper but in 1807, when William Cobbett, an English politician and journalist, recounted how—using a strong smelling fish—he had successfully distracted hounds from a prey.<sup>3</sup>

The current media landscape, which prioritizes entertainment over substantive news, makes it relatively easy for politicians to divert voters' attention. However, the ability to fool voters may be limited by voters' distrust and recognition that politicians attempt to spin them. In other words, distracting voters with a red herring may be a negative signal about a politician's quality.

This raises the question of when red herrings are used and succeed—and how their use and, ultimately, political outcomes, changes with the media landscape.

<sup>&</sup>lt;sup>1</sup>Media Mole. 2021. "The truth about Boris Johnson's kipper." *The New Statesman*, June 7. Available at: https://www.newstatesman.com/politics/2012/06/truth-about-boris-johnson-s-kipper.

<sup>&</sup>lt;sup>2</sup>Brunsden, Jim and George Parker. 2019. "Boris Johnson's kipper claim is red herring, says EU." *The Financial Times*, July 18. Available at: https://www.ft.com/content/1ba5b9c4-a954-11e 9-b6ee-3cdf3174eb89.

<sup>&</sup>lt;sup>3</sup>Stevens, Heidi. 2011. "Catching a red herring." *Chicago Tribune*, February 2. Available at: https://www.chicagotribune.com/lifestyles/ct-tribu-words-work-herring-20110202-story.html. Tréguer, Pacal. n.d. "The authentic origin of 'red herring'." *Word Histories*. Accessed February 1, 2023. Available at: https://wordhistories.net/2017/07/06/red-herring-origin/.

This paper develops a model where an incumbent politician, running against a challenger, can spin tales to voters. If the incumbent is of a "bad" rather than a "good" type, he faces a "scandal". Good politicians may tell tales because they enjoy doing so; I refer to such politicians as "newsmakers". Bad politicians have a more instrumental reason for telling tales, however: they can use them to distract voters from a scandal. If an incumbent with a scandal tells a tale, the media may broadcast it in addition to the scandal; and voters may recall the tale instead of the scandal.

I characterize the Perfect Bayesian Equilibria (PBE) of the game. One finding is that, if newsmakers did not exist, bad politicians would not be able to use tales to mislead voters. If voters ever saw a tale, they would correctly infer that it is being used to distract them from a scandal. As a result, first-best screening of politicians would be achieved. Consequently, the presence of newsmakers is a necessary condition for red herrings to succeed.

When newsmakers are present, multiple equilibria potentially co-exist. Society may coordinate on a good equilibrium in which red herrings fail, or a bad equilibrium with a high frequency of successful red herrings. In the good equilibrium, voters are suspicious of politicians who tell tales and good politicians consequently refrain from telling them. As a result, bad politicians cannot use red herrings to distract from scandals and there is first-best screening of politicians. In the bad equilibrium, voters are less suspicious of tales because good politicians also tell them. Consequently, bad politicians have some ability to use red herrings to distract voters and screening is imperfect. The tale-telling norm—the frequency with which good politicians engage in tale-telling—is self-sustaining and key in enabling or preventing red herrings' success. This suggests that identical societies could end up in very different equilibria. Furthermore, a sudden shock to voters' expectations regarding politician behaviour could shift a society from one equilibrium to another.

In the model, the media broadcasts tales with a certain probability—hereafter referred to as the "media's attention to tales". Interestingly, red herring success may be non-monotonic in this probability. When media attention is low, an increase in media attention increases red herring success and worsens screening: intuitively, it increases bad politicians' ability to crowd out scandals with red herrings. One might expect media attention to systematically worsen screening, but this is not the

case. As media attention increases, the incentive to send red herrings rises and, with it, voters' suspicion of tales. Tales may eventually arouse sufficient suspicion that tale-tellers are voted out. Good newsmakers therefore stop telling tales, making it possible to tell good and bad incumbents apart, leaving a unique equilibrium where red herrings never succeed and first-best screening is achieved.

Modern electorates are often highly polarized. In an extension of the baseline model, I consider the implications of voter polarization. I assume that some voters are partisans and biased for or against the incumbent. The effect of polarization (measured as a shrinking share of non-partisan voters) depends on the relative sizes of the two partisan groups and the strength of their partisanship. When the incumbent support base is larger or highly partisan, polarization reduces tale-telling by good politicians and improves screening. Indeed, as partisanship rises, bad incumbents are more inclined to use red herrings, which in turn leads good politicians to tell fewer tales (so as not to be cast as bad). On the flip side, if there is a bias against the incumbent, polarization makes screening worse.

The remainder of the paper is organized as follows. In Section 2, I contrast the model's assumptions and main results with the related literature before reviewing empirical evidence on the mechanisms I model. In Section 3, I lay out the base-line model. I describe the steps followed to characterize equilibria in Section 4. I highlight the results of the baseline model in Section 5. In Section 6, I introduce partisan voters and clarify the effect of increased voter polarization. I conclude in Section 7, discussing implications of the results and avenues for future research.

## 2 Related Literature

Earlier models of elections with political scandals include Besley and Prat (2006), Gratton, Holden and Kolotilin (2018), Andreottola and De Moragas (2020) and Dziuda and Howell (2021). Like my approach, this literature models elections as adverse selection settings where scandals provide a signal about politician quality. Besley and Prat (2006) model an incumbent's efforts to conceal a scandal by bribing the media while Gratton, Holden and Kolotilin (2018), Andreottola and De Moragas (2020) and Dziuda and Howell (2021) instead focus on decisions to reveal a potentially fake scandal. Similarly to Besley and Prat (2006), I focus on politicians' efforts to conceal scandals; however, by modelling red herrings, I explore a distinct mechanism and raise the question of the role played by the media's attention to apparently irrelevant news.

Besides the literature on scandals, my model speaks to the broader literature on elections with imperfectly informed voters (Alesina and Cukierman (1990), Gul and Pesendorfer (2009), Prato and Wolton (2016), Aragonès and Xefteris (2017)) and inattentive voters (Nunnari and Zápal (2017), Hu and Li (2018), Matějka and Tabellini (2021)). The main take-away of this literature is that imperfect information should lead to inefficiencies (e.g. increased candidate polarization, mismatch between voters' policy preferences and the implemented policies). Prato and Wolton (2016) emphasize further nuances: in their model, excessive disinterest for politics causes inefficiencies, but so does excessive interest—as politicians' strategic responses prevent learning. Similarly, I emphasize that strategic interactions have non-trivial implications for the effect of inattention on politician screening: when voters anticipate their own inattention, high inattention—understood as a high crowding-out probability—may guarantee first-best politician screening through suspicion of politicians' motives.

The concept of red herrings I model echoes Hermalin (2023)'s model of charismatic leaders, where team leaders may decide to reveal soft over hard news when the state of the world is bad. The distinct settings and assumptions however ultimately give rise to very different predictions. While Hermalin (2023) assumes that a fraction of receivers are naive, I assume a Bayesian electorate, giving rise to voter suspicion of tales. In the absence of naive receivers, the ambiguity exploited by politicians to fool their electorate arises from uncertainty over politicians' preferences over the message space, echoing Mukand and Rodrik (2018), Prato and Wolton (2016) and Dewatripont and Tirole (2005)'s assumption that senders may incur a personal cost from communicating. Ultimately, while, in Hermalin (2023), more charismatic leaders are better-off, my model predicts that a preference for tale-telling can become an electoral curse and clarifies the conditions under which it will be the case.

The core idea of the red herring mechanism I model is that politicians may ex-

ploit voters' vulnerability to attention-grabbing stimuli to distract them from scandals. As such, by contrast to models with rationally inattentive voters—where voters choose a mapping from states of the worlds to signals (Matějka and Tabellini (2021) and Hu and Li (2018)), I focus on "bottom-up" inattention. A number of reasons motivate this choice. A first reason is that information is often redundant and coarse due to copy-pasting across sources, possibly preventing voters from freely choosing any mapping from states of the world to signals.<sup>4</sup> Consistent with media offer constraining voters' information sets, Prior (2005) shows that increased media choice was accompanied by a divergence in the political knowledge between entertainment-inclined and hard-news-inclined voters. The role played by bottomup inattention is highlighted by Kozyreva, Lewandowsky and Hertwig (2020): the authors review evidence suggesting that fake news have an edge over other stories in the competition for attention—consistent with psychology evidence that surprising stories have attention-grabbing power. Closer to the red herring mechanism I model here, Cohen (2010) shows that a higher number of speeches by American presidents is associated with less critical and lower media coverage of presidential activities, suggesting crowding-out. Last but not least, Eisensee and Strömberg (2007), Nyhan (2015) and Durante and Zhuravskaya (2018) bring causal evidence to this crowding-out hypothesis. Nyhan (2015) shows that exogenous news pressure decreases the onset of political scandals and the likelihood that a political scandal makes the front page, while Eisensee and Strömberg (2007) and Durante and Zhuravskaya (2018) show that politicians strategically exploit exogenous news pressure to hide unpopular information.

Besides inattention, voter suspicion is a key force which drives the results of this paper and distinguishes it from models with naive receivers. Martinez-Bravo and Stegmann (2022) show that an actual red herring—a vaccination campaign in Pakistan used as cover to capture Osama Bin Laden—led to suspicion of vaccines. This suggests, along with the widespread popularity of conspiracy theories and distrust in politicians, that the public is not fully naive about politicians' intentions—making it important to understand the consequences of voter suspicion.

Another driving force which arises in equilibrium can be interpreted as a self-

<sup>&</sup>lt;sup>4</sup>See, e.g. Angelucci and Cagé (2019)

fulfilling social norm: if voters expect good politicians to often engage in taletelling, politicians who enjoy telling tales need not fear electoral sanction against tales. This, in turn, generates a social norm under which successful red herrings are possible. Interestingly, this result echoes the self-fulfilling perceived social norms previously highlighted in different contexts by Bursztyn, Egorov and Fiorin (2020) and Bursztyn, González and Yanagizawa-Drott (2020).

# **3** The Model

A Bayesian representative voter v ("she") must choose between re-electing an incumbent i ("he") or an opponent o. Both candidates may be "good" or "bad". Independently, the incumbent may be a "newsmaker" who enjoys tale-telling or a "non-newsmaker" who dislikes tale-telling. At the start of the game, types are private information.

The voter seeks to elect a good politician, earning a payoff:

$$U_v = V \mathbb{1}\{i = good\} + (1 - V) \mathbb{1}\{o = good\}$$

where V = 1 if the voter re-elects the incumbent, and V = 0 otherwise.

The incumbent prefers to be re-elected and, depending whether he is a newsmaker, either benefits from tale-telling or finds it costly. His payoff is as follows:

$$U_{i} = \begin{cases} V + BT_{i} \text{ if } i = newsmaker (with \ B \in (0,1)) \\ V - \varepsilon T_{i} \text{ otherwise (with } \varepsilon \in (0,1)) \end{cases}$$

where  $T_i = 1$  if the incumbent tells tales and  $T_i = 0$  otherwise.

#### **Timing of the game:**

At  $\mathbf{t} = \mathbf{0}$ : The incumbent and his opponent are drawn independently from the same population of politicians, with share  $\pi$  of bad candidates and  $\mu$  of newsmak-

ers, where  $\pi \in (0,1)$  and  $\mu \in [0,1)$ .

At  $\mathbf{t} = \mathbf{1}$ : The incumbent decides whether to tell a "tale":  $T_i \in \{0, 1\}$ .

At  $\mathbf{t} = \mathbf{2}$ : The media observes a set of stories about the incumbent. It always observes a "generic story" (denoted *G*). If the incumbent is bad, it always observes a "scandal" (denoted *S*). If the incumbent tells a tale, the media observes the tale (denoted *T*), with probability  $q \in (0, 1)$ . The media covers a subset of the stories it observes:

• It covers any non-generic story it observes.

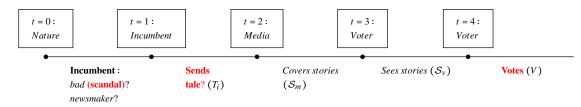
• It covers the generic story if and only if it observes no non-generic story. Let  $S_m \subseteq \{G, S, T\}$  denote the set of stories that are covered.

At  $\mathbf{t} = \mathbf{3}$ : The voter sees only one story covered by the media.<sup>5</sup> If the media covers just one story, the voter sees this story. In the event that the media covers both a scandal and a tale  $(S_m = \{S, T\})$ , the voter sees the tale with probability H and the scandal with probability 1 - H. Let  $S_v \in \{G, S, T\}$  denote the story seen by the voter.

At **t** = **4**: The voter decides whether to re-elect the incumbent:  $V \in \{0, 1\}$ .

Figure 1 summarizes the timing of the game.

#### Figure 1: Timing of the game



# 4 Analysis

I will focus on the Perfect Bayesian Equilibria (PBE) of the game, which are derived in this section. All PBEs of the game are characterized in a three-step

<sup>&</sup>lt;sup>5</sup>This is without loss of generality and only assumed for parsimony. The results would be unchanged if, with interior probability, the voter could see both a scandal and a tale.

process:

(i) I rule out strategies for the incumbent which cannot be optimal.

(ii) For each of the incumbent's remaining strategies, I determine the voter's best response.

(iii) For a given set of parameters, I check whether the incumbent's strategy is optimal given the voter's best response.

I report the PBEs obtained from this procedure in Appendix Table 2. Details of the proofs can be found in Appendix  $8.3.^6$ 

## 4.1 Incumbent and Voter Problems

The incumbent's problem is:

$$\max_{T_i \in \{0,1\}} \mathbf{E}_i(U_i(T_i|type_i)) \tag{1}$$

His strategy is a mapping from his type (his preference for tale-telling and his quality) to a probability distribution over possible actions (send a tale or remain silent).

The voter's problem is:

$$\max_{V \in \{0,1\}} \mathbf{E}_{\nu}(U_{\nu}(V|\mathcal{S}_{\nu}))$$
(2)

Her strategy is a mapping from the story she sees  $(S_v)$  to a probability distribution over possible actions (re-elect the incumbent or vote him out).

## 4.2 Ruling Out PBEs

Lemma 1 stated below rules out certain strategies for the incumbent.

#### Lemma 1: In any PBE:

<sup>&</sup>lt;sup>6</sup>PBEs which only exist for hyperplanes in the parameter space are characterized in Appendix 8.3 but omitted from the tables for clarity.

- 1. Good non-newsmakers do not engage in tale-telling:  $Pr(T_i = 1 | i = good non newsmaker) = 0$
- 2. Bad newsmakers always engage in tale-telling:  $Pr(T_i = 1 | i = bad newsmaker) = 1$
- 3. If good newsmakers do not engage in tale-telling, bad non-newsmakers do not engage in tale-telling:  $Pr(T_i = 1|i = good newsmaker) = 0 \Rightarrow Pr(T_i = 1|i = bad non - newsmaker) = 0$

<u>Proof:</u> See Appendix. ■

The intuition behind Lemma 1 is as follows. Seeing the generic story indicates to the voter that the media did not detect a scandal, implying that the incumbent is good; consequently, she re-elects the incumbent. This, in turn, implies that good non-newsmakers have no reason to engage in tale-telling since it is costly to them and remaining silent would ensure their re-election (Part 1). Part 2 follows from the fact that, upon seeing a scandal, the voter votes the incumbent out so, having nothing to lose, bad newsmakers have no reason not to engage in tale-telling. Part 3 follows from the fact that, if only bad incumbents send tales, the voter understands that a tale signals a scandal; consequently, she votes tale-tellers out. This leaves no reason for non-newsmakers to engage in costly tale-telling.

### 4.3 Voter's Best Response

Let us now turn to the voter's best response. Note that the voter always re-elects the incumbent when she sees a generic story and always votes him out when she sees a scandal. Therefore, what remains to be determined is how the voter responds to seeing a tale.

How the voter responds to a tale depends upon her posterior about the incumbent in that case. From Lemma 1, we know that bad newsmakers always tell tales and good non-newsmakers never tell tales. Consequently, the voter's posterior upon seeing a tale weighs up the tale-telling frequencies of good newsmakers and bad non-newsmakers. Using Bayes rule, we see that the voter's posterior is:  $\begin{aligned} Pr(i = good | \mathcal{S}_v = T) = \\ \frac{(1 - \pi)\mu Pr(T_i = 1 | i = good \ newsmaker)}{(1 - \pi)\mu Pr(T_i = 1 | i = good \ newsmaker) + \pi(\mu + (1 - \mu)Pr(T_i = 1 | i = bad \ non - newsmaker))H} \end{aligned}$ 

The voter re-elects the incumbent if  $Pr(i = good | S_v = T)$  exceeds  $1 - \pi$  (the expected quality of the challenger), votes him out if  $Pr(i = good | S_v = T) < 1 - \pi$ , and possibly mixes if these values are equal.

### 4.4 Incumbent's Best Response

Let us now determine the incumbent's best response to the voter. Telling a tale  $(T_i = 1)$  is optimal for an incumbent of  $type_i \in \{good newsmaker, good non - newsmaker, bad newsmaker, bad non - newsmaker\}$  if his expected payoff from tale-telling exceeds his expected payoff from remaining silent, i.e.:

 $Pr(V = 1 | type_i, T_i = 1) + B\mathbb{1}\{i = newsmaker\} - \varepsilon\mathbb{1}\{i = non - newsmaker\} > Pr(V = 1 | type_i, T_i = 0)$ 

If the left-hand side is less than the right-hand side, the incumbent remains silent ( $T_i = 0$ ); if those two quantities are equal, the incumbent may mix.

## **5** Results

It is useful to introduce the following terminology:

- I will refer to a tale told by a bad incumbent as a "red herring."
- I will say that a red herring is "successful" if the incumbent who tells it is re-elected.
- I will use  $\sigma$  to denote the frequency of successful red herrings and refer to this quantity as "red herring success".
- I will use  $\phi$  to denote the probability that the elected politician is good. I will refer to this quantity as "screening".

#### 5.1 PBE Types

**Lemma 2:** In equilibrium, bad incumbents' re-election probability is equal to the red herring success:  $Pr(V = 1|i = bad) = \sigma$ . Accordingly, the PBEs are partitioned as the following:

- 1. No red herring (NH): Either bad incumbents never tell tales ( $Pr(T_i = 1|i = bad) = 0$ ), or the voter never re-elects the incumbent upon seeing a tale ( $Pr(V = 1|S_v = T) = 0$ ). Bad incumbents are never re-elected: Pr(V = 1|i = bad) = 0.
- Red herring (RH): Bad incumbents always tell tales (Pr(T<sub>i</sub> = 1|i = bad) = 1) and the voter always re-elects the incumbent upon seeing a tale (Pr(V = 1|S<sub>v</sub> = T) = 1). Bad incumbents are re-elected if and only if the scandal is crowded-out: Pr(V = 1|i = bad) = qH.
- 3. Mixed red herring (MH): Either bad incumbents tell tales with interior probability (i.e. bad non-newsmakers remain silent or mix; 0 < Pr(T<sub>i</sub> = 1|i = bad) < 1), or the voter mixes upon seeing a tale (0 < Pr(V = 1|S<sub>v</sub> = T) < 1). Bad incumbents have an intermediate re-election probability: 0 < Pr(V = 1|i = bad) < qH.</li>

<u>Proof:</u> It follows from the fact that the voter votes the incumbent out if she sees a scandal  $(Pr(V = 1 | S_v = S) = 0)$ , implying that the only way a bad incumbent can be re-elected is through a successful red herring.

### 5.2 **Propositions**

<u>Proposition 1:</u> (No newsmaker benchmark) In the absence of newsmakers  $(\mu = 0)$ , the unique PBE of the game is a no red herring PBE which achieves firstbest screening: incumbents are re-elected if and only if they are good.

Proof: See Appendix 8.3. ■

Proposition 1 establishes that uncertainty over the incumbent's preference for tale-telling is necessary for red herrings to fool the voter. Indeed, good non-newsmakers strictly prefer to remain silent since this is costless and ensures their re-election (see Lemma 1.1). This implies that, if she knows that tale-telling is costly for the incumbent, the voter should understand, upon seeing a tale, that this tale signals an underlying scandal. In the absence of (good) newsmakers among whom red herring

senders can camouflage, an arbitrarily small cost of tale-telling is therefore sufficient to ensure that incumbents never send red herrings. This, in turn, guarantees first-best screening.

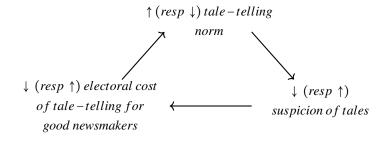
In the remainder of the paper, I therefore assume a positive fraction of newsmakers ( $\mu > 0$ ).

**<u>Proposition 2</u>**: (Multiplicity of equilibria) Suppose that either, i) the fraction of newsmakers is low relative to the crowding-out probability and the media attention to tales is intermediate ( $\mu < H$  and  $B \le q \le \frac{\varepsilon}{H} + B$ ) or ii) the fraction of newsmakers is higher than the crowding-out probability and the media attention to tales is intermediate or high ( $\mu \ge H$  and  $q \ge B$ ). Then, the game has multiple equilibria: a no red herring PBE with first-best screening co-exists with a PBE with successful red herring and worse screening.

<u>Proof:</u> Multiplicity can be verified by noticing in Appendix Tables 3-4 that multiple PBEs co-exist. Appendix Table 5 details red herring success  $\sigma$  and screening  $\phi$  across PBEs.

It is useful to define the "tale-telling norm" as the tale-telling frequency of good incumbents. Since good non-newsmakers never engage in tale-telling (Lemma 1), this norm can be decomposed as the product of the fraction of newsmakers times good newsmakers' tale-telling frequency. The intuition behind Proposition 2 is that the tale-telling norm is self-fulfilling and pins down the frequency of successful red herrings  $\sigma$ .

Good newsmakers' equilibrium behaviour is self-enabling. Indeed, if they anticipate that the voter will vote them out upon seeing a tale, good newsmakers refrain from tale-telling provided that the expected electoral cost outweighs their tale-telling benefit. This is the case if the media attention to tales is sufficiently high (q > B). However, the voter's suspicion of tales decreases in the frequency with which good newsmakers send tales: ceteris paribus, the higher the frequency with which good newsmakers send tales, the lower the probability that a tale is a red herring and therefore the lower the voter's belief that the incumbent is bad if she sees a tale. This generates a multiplicity of equilibria as good newsmakers' electoral cost of tale-telling decreases in their tale-telling frequency.



In the presence of a positive tale-telling norm, screening may be lower than in the no-newsmaker benchmark for two reasons. First, bad incumbents may be re-elected through successful red herrings, being mistaken for good newsmakers. Second, good newsmakers may be voted out when they engage in tale-telling due to suspicion of tales, being mistaken for red herring senders.

# **<u>Corollary 1:</u>** (Effect of the fraction of newsmakers on the feasible red herring)

- When the fraction of newsmakers is lower than the crowding-out probability  $(\mu < H)$ , the game only has no or mixed red herring PBEs.
- When the fraction of newsmakers is higher than the crowding-out probability  $(\mu \ge H)$ , the game has a red herring PBE provided that the media attention to tales is not too low  $(q \ge \frac{\varepsilon}{H})$ .

<u>Proof:</u> This follows from comparing the PBEs in Appendix Table 3 (where  $\mu < H$ ) and in Appendix Table 4 (where  $\mu > H$ ).

A larger fraction of newsmakers among politicians increases the feasible extent of successful red herring.

Indeed, if newsmakers are rare, a red herring PBE—where bad incumbents always send red herrings and the voter re-elects them whenever the scandal is crowded-out—is impossible: unless good newsmakers engaged in tale-telling more often than bad non-newsmakers, the voter would be too suspicious of tales and vote out tale-tellers. Thus, only no or mixed red herring PBEs are sustainable, meaning that bad incumbents do not systematically engage in tale-telling or that the voter votes tale-tellers out with positive probability.

By contrast, if newsmakers are sufficiently frequent and systematically engage in tale-telling when good, the voter will not be too suspicious of tales, independently of non-newsmakers' strategy. Provided that *newsmakers are sufficiently numerous*, the coordination of good newsmakers on tale-telling makes the tale-telling norm *sufficiently large* to enable a red herring PBE.

Besides the fraction of newsmakers, media attention to tales plays a critical role in making certain PBEs possible or impossible. Proposition 3, illustrated by Figures 2 and 3 below, highlights that its effect on red herring success and screening is nuanced.

# <u>Proposition 3:</u> (Effect of media attention to tales on red herring success and screening)

• When the fraction of newsmakers and their tale-telling payoff are both small  $(\mu < H \text{ and } B < 1 - \frac{\varepsilon}{H})$ :

Increasing the media attention to tales q from a low baseline initially increases red herring success  $\sigma$  (worsening screening  $\phi$ ) but eventually decreases it (improving screening): when the media attention to tales is high  $(q > B + \frac{\varepsilon}{H})$ , the unique PBE of the game is a no red herring PBE which achieves first-best screening.

• When the fraction of newsmakers or their tale-telling payoff is large  $(\mu \ge H)$ or  $B \ge 1 - \frac{\varepsilon}{H}$ :

Increasing the media attention to tales q from a low baseline initially increases red herring success  $\sigma$  (worsening screening  $\phi$ ). Further attention to tales may decrease red herring success (improving screening) or increase it (worsening screening) depending on equilibrium selection.

<u>Proof:</u> This follows from inspecting the values of  $\sigma$  and  $\phi$  (see Appendix Table 5) in the sequence of equilibria formed in Appendix Tables 3 and 4 by PBEs 2, 7

and 3 as q increases.

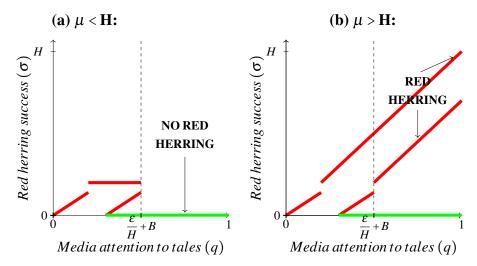
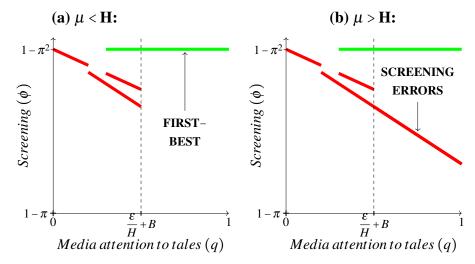


Figure 2: Successful Red Herring Response to the Media Attention to Tales

*Note:* Red herring success is plotted on the y-axis against media attention to tales on the x-axis. Panels (a) and (b) distinguish between the case where newsmakers are infrequent (a) and frequent (b) relative to the crowding-out probability. A calibration of  $\pi = 0.5$ ,  $\mu = 0.7$ , H = 0.7,  $\varepsilon = 0.14$  and B = 0.3 is used for illustration purposes.



*Note:* Screening is plotted on the y-axis against media attention to tales on the x-axis. Panels (a) and (b) distinguish between the case where newsmakers are infrequent (a) and frequent (b) relative to the crowding-out probability *H*. A calibration of  $\pi = 0.5$ ,  $\mu = 0.7$ , H = 0.7,  $\varepsilon = 0.14$  and B = 0.3 is used for illustration purposes.

Figures 2 and 3 respectively plot red herring success and screening against media attention to tales. Starting from a media attention to tales of 0, red herring success initially increases in media attention to tales while screening worsens. For intermediate media attention to tales, multiple red herring success and screening values are possible as different equilibria co-exist (see Proposition 2). After a point  $(q > \frac{\varepsilon}{H} + B)$ , however, when newsmakers are infrequent relative to the crowding-out probability (a), there remains a unique PBE. In this PBE, red herrings fail and firstbest screening is achieved: good incumbents are systematically re-elected and bad incumbents voted out. When newsmakers are frequent (b), this PBE co-exists with PBEs with successful red herrings and screening errors.

One might have expected increased media attention to tales to unambiguously increase red herring success and worsen screening. However, Proposition 3 (illustrated by Figure 2 and Figure 3) show that it may, on the contrary, eliminate red

herring success and restore first-best screening. Indeed, under certain conditions, a high media attention to tales will *discipline* good newsmakers, stopping them from engaging in tale-telling.

*Within* each equilibrium with successful red herrings, increasing media attention to tales mechanically worsens screening by increasing the probability that scandals be crowded-out. Provided that good newsmakers engage in tale-telling, it also increases bad non-newsmakers' incentives to send red herrings, further worsening screening.

However, when newsmakers are rare relative to the crowding-out probability, increasing media attention to tales lowers good newsmakers' incentives to engage in tale-telling through two mechanisms. First, by inducing bad non-newsmakers to engage in tale-telling, it increases the voter's suspicion of tales as tales become more likely to signal an underlying scandal. Second, it increases the visibility of good newsmakers' tales and therefore their expected electoral cost of tale-telling if the voter is too suspicious of tales. Good newsmakers' tale-telling incentives eventually fall below bad non-newsmakers' tale-telling incentives, making any PBE in which the former engage in tale-telling more often than the latter impossible. However, as highlighted by Corollary 1, when newsmakers are too few, the voter is too suspicious of tales and votes out tale-tellers—unless good newsmakers send tales more often than bad non-newsmakers. This leaves a unique PBE in which only bad newsmakers send tales, such that the voter can tell good and bad incumbents apart.<sup>7</sup> As illustrated by panel (a) of Figures 2 and 3, red herrings never succeed in this PBE and first-best screening is achieved.

When newsmakers are sufficiently frequent relative to the crowding-out probability, the effect of increasing media attention to tales ultimately depends on equilibrium selection: good newsmakers need not fear any electoral sanction against tale-telling if they coordinate on tale-telling. As illustrated by panel (b) of Figure 2, increasing the media attention to tales may thus increase or decrease red herring success depending on the tale-telling norm on which society coordinates.

<sup>&</sup>lt;sup>7</sup>In Appendix 8.5, I show that this result is preserved under some parametric conditions when "newsmakers" are replaced by "attention-seekers" who only derive a benefit if their tale receives media attention.

Preferences for tale-telling may constitute an electoral disadvantage if the voters views tales with suspicion in equilibrium. Proposition 4 clarifies the conditions under which this will be the case.

## <u>Proposition 4:</u> (A preference for tale-telling may constitute an electoral advantage or disadvantage)

- 1. In no red herring PBEs and red herring PBEs, newsmakers are as likely to be re-elected as non-newsmakers.
- 2. In mixed red herring PBEs:
  - When the media attention to tales is low  $(q < \frac{\varepsilon}{H})$ , newsmakers are more likely to be re-elected than non-newsmakers.
  - When the media attention to tales is intermediate  $(\frac{\varepsilon}{H} < q < \frac{\varepsilon}{H} + B)$ , newsmakers are less (resp more) likely to be re-elected than non-newsmakers if the scandal frequency is high  $(\pi > \overline{\pi})$  (resp low).
  - When the media attention to tales is high  $(q > \frac{\varepsilon}{H} + B)$ , newsmakers are less likely to be re-elected than non-newsmakers.

<u>Proof:</u> This follows from examining the re-election probabilities across PBEs in Appendix Table 5 along with the sequence of PBEs as q increases in Appendix Tables 3-4. Exact conditions on  $\pi$  can be found in Appendix 8.3.

In the no red herring PBE, a propensity to send tales is neither an electoral advantage nor disadvantage since the voter can perfectly tell good and bad incumbents apart. This is also the case in the red herring PBE since bad newsmakers and bad non-newsmakers engage in tale-telling equally often and the voter never sanctions tale-telling.

However, in mixed red herring PBEs, newsmakers may be at an electoral advantage or disadvantage depending on whether successful red herrings or suspicion of tales dominates. When media attention to tales is too low for bad non-newsmakers to find it profitable to engage in tale-telling, the voter is not suspicious of tales, implying that newsmakers have an electoral advantage. When media attention to tales is higher, the voter is suspicious of tales as bad incumbents engage in taletelling more often than good incumbents. Newsmakers therefore have an electoral disadvantage unless scandals are very frequent. Independently, they also have an electoral disadvantage if non-newsmakers send red herrings as often as them, which will occur if the media attention to tales is high enough.

## 6 Extension: Voter Polarization

Recent years have been marked by rising voter polarization across many democracies. This could have ambiguous effects on red herring incentives: it may increase both the fraction of voters ready to vote for a scandal-plagued politician, but also the fraction requiring solid evidence to vote for a politician they dislike. By altering red herring incentives, it may shape suspicion of tales and tale-telling norms, further affecting screening.

To clarify how voter polarization could affect politician behaviour and, ultimately, red herring success and screening, this section relaxes the assumption of a representative voter. I model the electorate as divided between a non-partisan group and two partisan groups, and focus on the empirically-relevant case where none of the partisan groups constitutes a majority. Increased voter polarization is assumed to take the form of a shrinking fraction of non-partisan voters.

#### Assumptions:

There is an infinite number of voters divided in three groups: a fraction  $\alpha$  are "non-partisans", while  $\gamma - \frac{\alpha}{2}$  are incumbent "supporters" and  $1 - \gamma - \frac{\alpha}{2}$  are incumbent "opponents", where  $\alpha \in (0,1)$  and  $\gamma \in (max\{\frac{\alpha}{2}, \frac{1-\alpha}{2}\}, min\{\frac{1+\alpha}{2}, 1-\frac{\alpha}{2}\})$ .

Each voter *v* can choose to vote for the incumbent or his opponent, choosing  $V_v \in \{0,1\}$  where  $V_v = 1$  denotes voting for the incumbent. While all voters prefer voting for a good candidate, incumbent supporters enjoy an additional benefit when voting for the incumbent while his opponents incur a cost. Formally, voters' payoff is:

$$U_{v} = \begin{cases} V_{v} \mathbb{1}\{i = good\} + (1 - V_{v}) \mathbb{1}\{o = good\} & if \ v = \text{non-partisan} \\ V_{v} [\mathbb{1}\{i = good\} + \beta_{s}] + (1 - V_{v}) \mathbb{1}\{o = good\} & if \ v = \text{supporter} \\ V_{v} [\mathbb{1}\{i = good\} - \beta_{o}] + (1 - V_{v}) \mathbb{1}\{o = good\} & if \ v = \text{opponent} \end{cases}$$

where  $\beta_s > 0$  and  $\beta_o > 0$  respectively capture supporters and opponents' bias for or against the incumbent.

Incumbents are re-elected if they receive a majority of votes, earning a payoff:

$$U_{i} = \begin{cases} \mathbbm{1}\left\{\int V_{v}dv > \frac{1}{2}\right\} + BT_{i} \ if \ i = newsmaker \ (with \ B \in (0,1))\\ \mathbbm{1}\left\{\int V_{v}dv > \frac{1}{2}\right\} - \varepsilon T_{i} \ if \ i = non - newsmaker \ (with \ \varepsilon \in (0,1)) \end{cases}$$

The timing of the game is identical to the baseline model in Section 3. In t = 3, each voter v comes across a story  $S_v \in S_m$  and votes in t = 4.  $S_v$  is defined analogously to the representative voter case: when the media covers a scandal and a tale, each voter has a probability H of seeing the tale instead of the scandal, independently of partisanship.

#### Analysis:

A voter's decision depends on her information set  $S_v$  and her preference (nonpartisan, supporter, opponent). Non-partisans behave like the representative voter of Section 3, voting for the incumbent if and only if their posterior that he is good increases above their prior  $(1 - \pi)$ . By contrast, supporters vote for the incumbent if and only if their posterior is higher than their prior minus their bias  $(1 - \pi - \beta_s)$ , and opponents if and only if it is higher than their prior plus their bias  $(1 - \pi + \beta_o)$ . When indifferent, voters are assumed to randomize in a coordinated rather than independent fashion.

The assumption that none of the two partisan groups constitutes a majority  $(\gamma - \frac{\alpha}{2} < \frac{1}{2} \text{ and } 1 - \gamma - \frac{\alpha}{2} < \frac{1}{2})$  implies that incumbents are re-elected if they receive the votes of all their supporters and all non-partisans, but not if they only receive the votes of their supporters.

Lemma 1 still holds (proof in Appendix 8.4) and can be used to rule out sub-

optimal incumbent strategies following the procedure detailed in Section 4. I then calculate voters' best responses to the remaining strategies before eliciting the conditions for which the incumbent's strategy is optimal.<sup>8</sup>

#### **Results:**

#### **Proposition 5: (Polarization may affect politician discipline)**

In the game with a polarized electorate, there exists a threshold  $\bar{H}(\alpha, \gamma, \beta_s)$  such that:

- 1. If the crowding-out probability is above this threshold  $(H > \overline{H}(\alpha, \gamma, \beta_s))$ , the conclusions of the representative voter model are qualitatively preserved.
- 2. Otherwise, the PBE with a norm of no tale-telling and first-best screening systematically co-exists with PBEs with higher tale-telling norms and lower screening.

As voter polarization increases, this threshold increases if supporters are moderate or fewer than opponents ( $\beta_s < 1 - \pi$  or  $\gamma - \frac{\alpha}{2} < 1 - \gamma - \frac{\alpha}{2}$ ); otherwise, it decreases.

<u>Proof:</u> Parts 1 and 2 follows from comparing the PBEs in Appendix Tables 6-7 (where  $H > \overline{H}(\alpha, \gamma, \beta_s)$ ) and Appendix Tables 8-10 (where  $H < \overline{H}(\alpha, \gamma, \beta_s)$ ) to those in Appendix Tables 3-4. The last statement follows from noticing in the equilibrium characterization in Appendix 8.4 that  $\overline{H}(\alpha, \gamma, \beta_s) = \frac{1}{2\gamma + \alpha}$  if  $\beta_s < 1 - \pi$ ,  $\overline{H}(\alpha, \gamma, \beta_s) = \frac{1 + \alpha - 2\gamma}{2\alpha}$  otherwise.  $\frac{1}{2\gamma + \alpha}$  decreases in  $\alpha$  while  $\frac{1 + \alpha - 2\gamma}{2\alpha}$  decreases in  $\alpha$  if  $\gamma < \frac{1}{2}$  but otherwise increases in  $\alpha$ .

The intuition behind Proposition 5 is that voter partisanship may lessen good newsmakers' need to distinguish themselves from red herring senders—therefore making room for screening errors. This will be the case when the crowding-out probability is sufficiently low ( $H < \overline{H}(\alpha, \gamma, \beta_s)$ ). Indeed, to be re-elected, red herring senders then need votes from opponents who miss the scandal: since most voters see the scandal, votes from non-partisans who miss the scandal and from

<sup>&</sup>lt;sup>8</sup>See Appendix 8.4.

supporters (who miss the scandal or are so biased they vote for the incumbent regardless) are not enough to obtain a majority of votes. By contrast, tale-telling good newsmakers are re-elected provided that supporters and non-partisans vote for them when seeing the tale. Thus, for tale-telling good newsmakers to be re-elected, it is enough that voters *weakly* increase their belief that the incumbent is good when they see a tale. By contrast, for red herring senders to be re-elected, it must be that voters increase their belief by at least  $\beta_o$  when they see a tale. Thus, suspicion of tales is less dangerous electorally for good newsmakers, creating a wedge between red herring senders and good newsmakers. In equilibrium, this weakens good newsmakers' need to refrain from tale-telling to be re-elected, leaving positive tale-telling norms—despite a high media attention to tales and small newsmaker fraction. The resulting positive tale-telling norms may give rise to screening errors. Those errors may be false negatives, as red herring senders are re-elected with the support of some opponent voters who mistake them for good newsmakers (PBE 7P2 in Appendix Table 9). Alternatively, errors may be false positives, as good newsmakers are voted out with positive probability when non-partisan voters mistake them for red herring senders (PBE 4P2 in Appendix Table 10).

Increased voter polarization can expand or shrink the range of crowding-out probabilities for which this will happen—the direction of the effect ultimately depends on the fraction and bias of incumbent supporters. When incumbent supporters are both more numerous than opponents and so biased that they vote for the incumbent no matter what ( $\beta_s > 1 - \pi$ ), voter polarization indeed reduces red herring senders' need for opponent votes. This decreases the wedge between good newsmakers and red herring senders, preserving the conclusions of the representative voter model. Otherwise, voter polarization will however increase red herring senders' need for opponent votes—in turn lessening good newsmakers' need to distinguish themselves from red herring senders and making room for screening errors.

# 7 Conclusion

I propose a model of red herring with a non-naive electorate. Bad incumbents spinning distracting tales may be re-elected if they pool with politicians who enjoy telling such tales ("newsmakers"). To date, existing models of election with inattentive voters have predicted that inattention generates inefficiencies. By contrast, I elicit conditions under which first-best politician screening will be achieved despite high inattention. Being non-naive, voters can indeed be suspicious of politicians' tales—giving rise to two non-trivial implications.

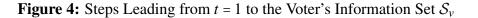
First, PBEs with varying social norms of tale-telling and red herring success may co-exist (Proposition 2). Indeed, a lower tale-telling norm increases suspicion of tales. Two otherwise identical societies could thus end up in drastically different equilibria due to different expectations over politicians' behaviour. Importantly, this suggests that social norm shocks may durably affect politician screening. Salient exposure to a tale-telling newsmaker could for instance shift a society's expectations of politicians' normal behaviour, increasing tolerance of tales and making room for red herrings. Exposure to restrained role models could however have the opposite effect, making successful red herrings impossible.

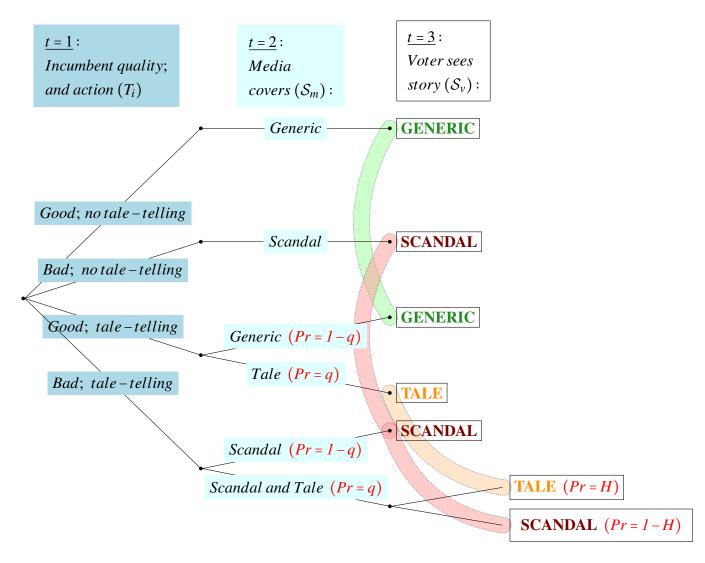
Second, I highlight a key ambiguity in the effect of increased media attention to irrelevant stories. As one could have a priori expected, initial increases worsen screening by making red herrings more successful. However, increasing media attention to tales has an additional strategic effect: under certain conditions, it disciplines good politicians, leaving a unique social norm in which good newsmakers refrain from tale-telling. This, in turn, prevents successful red herrings and guarantees first-best screening (Proposition 3). Thus, the assumption that voters are non-naive implies that a high media attention to politician tales may improve screening due to suspicion of tales. Importantly, this result does not require the media to fact-check politicians' claims: "media attention" here only refers to media spotlight and could equivalently be partisan or non-partisan. Interestingly—as suspicion increases in inattention—the higher voters' inattention, the larger the range of parameters for which politicians are disciplined. Thus, high voter inattention may paradoxically be required to achieve first-best screening. Voter polarization may affect the disciplining effect of media attention. When incumbent supporters are sufficiently numerous and biased, greater polarization makes it easier for red herring senders to be re-elected. This increases suspicion of tales, stopping good newsmakers from engaging in tale-telling. Otherwise, by making it harder for red herring senders to be re-elected, voter polarization on the contrary weakens good newsmakers' incentives to distinguish themselves from red herring senders. In the latter case, the PBE with a norm of no tale-telling systematically co-exists with PBEs with positive tale-telling norms and worse screening. In one of those PBEs, red herrings never succeed, however screening mistakes occur as some good newsmakers are voted out due to suspicion of tales. This highlights that suspicion of tales is a double-edged sword: although it is essential to prevent red herrings' success, it can also result in screening inefficiencies as good newsmakers are voted out.

While this is beyond the scope of this paper, a natural avenue for future work would be to endogenize parameters I fixed for parsimony. Future research could for instance endogenize the fraction of newsmakers. Indeed, depending on whether successful red herrings or suspicion of tales dominates, newsmakers may have an electoral advantage or disadvantage compared to non-newsmakers. Since the newsmaker fraction is instrumental in enabling or preventing red herring success, changes in this fraction could lead to endogenous equilibrium shifts: suspicion of tales could for instance lead a society starting from a positive tale-telling norm to settle on a norm of no tale-telling with first-best screening. The resulting changes in tale-telling could further affect the media's return to covering tales, potentially triggering further equilibrium shifts if the media adjusts its attention to tales. Voter inattention could similarly be endogenized. Although I show that inattention is not a sufficient condition for inefficient screening, it indeed plays a non-trivial role by increasing suspicion of tales. Sophisticated voters could therefore be expected to adjust their attention accordingly, bridging the gap between bottom-up and top-down inattention. The resulting feedbacks between voter inattention, media attention to tales and the pool of politicians could offer a rich avenue for future research.

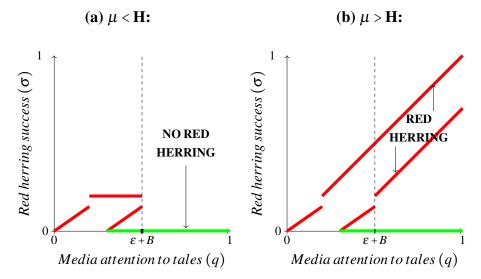
# 8 Appendix

## 8.1 Figures



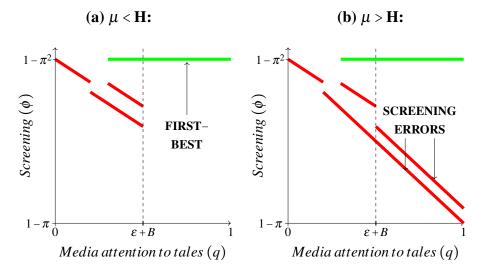


## **Figure 5: Polarization:** Red Herring Response to the Media Attention to Tales when $\mathbf{H} > \mathbf{\bar{H}}(\alpha, \gamma, \beta_s)$



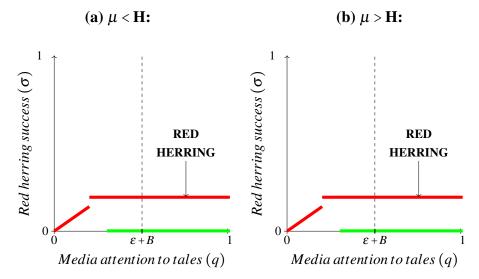
*Note:* Red herring success is plotted on the y-axis against media attention to tales on the x-axis. Panels (a) and (b) distinguish between the case when newsmakers are infrequent (a) or frequent (b) relative to the crowding-out probability. A calibration of  $\pi = 0.5$ ,  $\mu = 0.7$ , H = 0.7,  $\varepsilon = 0.2$ , B = 0.3 and  $\beta_o = 0.01$  is used for illustration purposes. For parsimony, the figure assumes that  $\beta_o \in (\underline{\beta}_o, \overline{\beta}_o)$  and  $H > \underline{H}$  where  $\underline{\beta}_o = \frac{(1-\pi)\pi(\mu-H)}{\mu-\pi(\mu-H)}$ ,  $\overline{\beta}_o = \frac{(1-\pi)\pi(1-H)}{1-\pi(1-H)}$ ,  $\underline{H} = \frac{1}{2}$  if  $\beta_s < 1 - \pi$  and  $\frac{1+\alpha-2\gamma}{2+\alpha-2\gamma}$  otherwise. This is without of loss of generality: when  $\beta_o < \underline{\beta}_o$ ,  $\beta_o > \overline{\beta}_o$  or  $H < \underline{H}$ , the conclusions of Proposition 5 are preserved.

**Figure 6: Polarization:** Screening Response to the Media Attention to Tales when  $\mathbf{H} > \overline{\mathbf{H}}(\alpha, \gamma, \beta_s)$ 



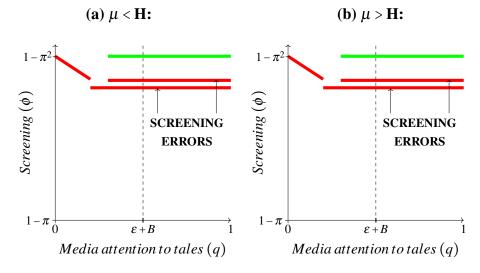
*Note:* Screening is plotted on the y-axis against media attention to tales on the x-axis. Panels (a) and (b) distinguish between the case when newsmakers are infrequent (a) or frequent (b) relative to the crowding-out probability. A calibration of  $\pi = 0.5$ ,  $\mu = 0.7$ , H = 0.7,  $\varepsilon = 0.2$ , B = 0.3 and  $\beta_o = 0.01$  is used for illustration purposes. For parsimony, the figure assumes that  $\beta_o \in (\underline{\beta}_o, \overline{\beta}_o)$  and  $H > \underline{H}$  where  $\underline{\beta}_o = \frac{(1-\pi)\pi(\mu-H)}{\mu-\pi(\mu-H)}$ ,  $\overline{\beta}_o = \frac{(1-\pi)\pi(1-H)}{1-\pi(1-H)}$ ,  $\underline{H} = \frac{1}{2}$  if  $\beta_s < 1 - \pi$  and  $\frac{1+\alpha-2\gamma}{2+\alpha-2\gamma}$  otherwise. This is without of loss of generality: when  $\beta_o < \underline{\beta}_o$ ,  $\beta_o > \overline{\beta}_o$  or  $H < \underline{H}$ , the conclusions of Proposition 5 are preserved.

## **Figure 7: Polarization:** Red Herring Response to the Media Attention to Tales when $\mathbf{H} < \mathbf{\bar{H}}(\alpha, \gamma, \beta_s)$



*Note:* Red herring success is plotted on the y-axis against media attention to tales on the x-axis. Panels (a) and (b) distinguish between the case when newsmakers are infrequent (a) or frequent (b) relative to the crowding-out probability. A calibration of  $\pi = 0.5$ ,  $\mu = 0.7$ , H = 0.7,  $\varepsilon = 0.2$ , B = 0.3 and  $\beta_o = 0.01$  is used for illustration purposes. For parsimony, the figure assumes that  $\beta_o \in (\underline{\beta}_o, \overline{\beta}_o)$  and  $H > \underline{H}$  where  $\underline{\beta}_o = \frac{(1-\pi)\pi(\mu-H)}{\mu-\pi(\mu-H)}$ ,  $\overline{\beta}_o = \frac{(1-\pi)\pi(1-H)}{1-\pi(1-H)}$ ,  $\underline{H} = \frac{1}{2}$  if  $\beta_s < 1 - \pi$  and  $\frac{1+\alpha-2\gamma}{2+\alpha-2\gamma}$  otherwise. This is without of loss of generality: when  $\beta_o < \underline{\beta}_o$ ,  $\beta_o > \overline{\beta}_o$  or  $H < \underline{H}$ , the conclusions of Proposition 5 are preserved.

## **Figure 8: Polarization:** Screening Response to the Media Attention to Tales when $\mathbf{H} < \bar{\mathbf{H}}(\alpha, \gamma, \beta_s)$



*Note:* Screening is plotted on the y-axis against media attention to tales on the x-axis. Panels (a) and (b) distinguish between the case when newsmakers are infrequent (a) or frequent (b) relative to the crowding-out probability. A calibration of  $\pi = 0.5$ ,  $\mu = 0.7$ , H = 0.7,  $\varepsilon = 0.2$ , B = 0.3 and  $\beta_o = 0.01$  is used for illustration purposes. For parsimony, the figure assumes that  $\beta_o \in (\underline{\beta}_o, \overline{\beta}_o)$  and  $H > \underline{H}$  where  $\underline{\beta}_o = \frac{(1-\pi)\pi(\mu-H)}{\mu-\pi(\mu-H)}$ ,  $\overline{\beta}_o = \frac{(1-\pi)\pi(1-H)}{1-\pi(1-H)}$ ,  $\underline{H} = \frac{1}{2}$  if  $\beta_s < 1 - \pi$  and  $\frac{1+\alpha-2\gamma}{2+\alpha-2\gamma}$  otherwise. This is without of loss of generality: when  $\beta_o < \underline{\beta}_o$ ,  $\beta_o > \overline{\beta}_o$  or  $H < \underline{H}$ , the conclusions of Proposition 5 are preserved.

## 8.2 Tables

				New	smaker's stra	ategy			
Non- newsmaker's strategy	Never engages in tale-telling	Always engages in tale-telling	Engages in tale-telling iff scandal	Engages in tale-telling iff no scan- dal	Always mixes	Mixes (tale/silent) if scandal, silent oth- erwise	Mixes (tale/silent) if scandal, engages in tale-telling otherwise	Mixes (tale/silent) if no scan- dal, silent otherwise	Mixes (tale/si- lent) if no scandal, engages in tale-telling otherwise
Never engages in tale- telling	PBE N°1	PBE N°2	PBE N°3	L1.2	L1.2	L1.2	L1.2	L1.2	PBE N°4
Always engages in tale-telling	L1.2,1.1	L1.1	L1.2,1.1,1.3	L1.2,1.1	L1.2,1.1	L1.2,1.1,1.3	L1.2,1.1	L1.2,1.1	L1.1
Engages in tale-telling iff scandal	L1.2	PBE N°5	L1.3	L1.2	L1.2	L1.2,1.3	L1.2	L1.2	PBE N°6
Engages in tale-telling iff no scandal	L1.2,1.1	L1.1	L1.1,1.3	L1.2,1.1	L1.2,1.1	L1.2,1.1,1.3	L1.2,1.1	L1.2,1.1	L1.1
Always mixes (tale/si- lent)	L1.2,1.1	L1.1	L1.1,1.3	L1.2,1.1	L1.2,1.1	L1.2,1.1,1.3	L1.2,1.1	L1.2,1.1	L1.1
Mixes (tale/silent) if scandal, silent other- wise	L1.2	PBE N°7	L1.3	L1.2	L1.2	L1.2,1.3	L1.2	L1.2	PBE N°8 (hyper- plane)
Mixes (tale/silent) if scandal, engages in tale-telling otherwise	L1.2,1.1	L1.1	L1.1,1.3	L1.2,1.1	L1.2,1.1	L1.2,1.1,1.3	L1.2,1.1	L1.2,1.1	L1.1
Mixes (tale/silent) if no scandal, silent oth- erwise	L1.2,1.1	L1.1	L1.1,1.3	L1.2,1.1	L1.2,1.1	L1.2,1.1,1.3	L1.2,1.1	L1.2,1.1	L1.1
Mixes (tale/silent) if no scandal, engages in tale-telling otherwise	L1.2,1.1	L1.1	L1.1,1.3	L1.2,1.1	L1.2,1.1	L1.2,1.1,1.3	L1.2,1.1	L1.2,1.1	L1.1

#### Table 1: Baseline Model: Partition of Potential Incumbent's Strategies

*Note:* Each cell is a candidate incumbent strategy. Rows correspond to the incumbent's strategy if non-newsmaker, while columns correspond to his strategy if newsmaker. When the incumbent "mixes" for some information set, he mixes over engaging in tale-telling or remaining silent. "PBE" indicates that there exists, for certain parameter values, a PBE in which the corresponding incumbent strategy is optimal, and is followed by the PBE number used to keep track of the equilibria. For clarity, all PBEs are in bold. L1. indicates that candidate PBEs with the corresponding incumbent strategy can be ruled out using a statement in Lemma 1 and is followed by the applicable statement number(s). "Hyperplane" indicates that the corresponding incumbent strategy can only be optimal for a hyperplane in the parameter space.

P	'BE	Incumber	nt strategy	Voter strategy	Necessary con	ditions
N°	Class	$Pr(T_i = 1 i = good newsmaker)$	$Pr(T_i = 1 i = good non - newsmaker)$	$Pr(V=1 \mathcal{S}_{v}=T)$	q	μ
1	NH	_	0	0	(0,1)	{0}
2	MH	1	0	1	$(0, \frac{\varepsilon}{H}]$	(0,1)
3	NH	0	0	0	[ <i>B</i> ,1)	(0,1)
4	MH	н	0	$1-\frac{B}{q}$	$\left[B, \frac{\varepsilon}{H} + B\right]$	(0,1)
5	RH	1	1	1	$\left[\frac{\varepsilon}{H},1\right)$	[ <i>H</i> ,1)
6	MH	$\frac{\mathbf{H}}{\mu}$	1	$1-\frac{B}{q}$	$\left[\frac{\varepsilon}{H}+B,1\right)$	[ <i>H</i> ,1)
7	MH	1	$\frac{\mu(1-\mathbf{H})}{(1-\mu)\mathbf{H}}$	$\frac{\varepsilon}{\mathbf{q}\mathbf{H}}$	$\left[\frac{\varepsilon}{H}, \frac{\varepsilon}{H} + B\right]$	(0,H]

#### Table 2: Baseline Model: Set of PBEs

*Note:* Each row corresponds to a PBE. Column 1 numbers are used to keep track of the PBEs. Column 2 indicates whether the PBE is a no red herring (NH), mixed red herring (MH) or red herring (RH) equilibrium as defined in Lemma 2. Columns 3-5 detail the action frequencies of good newsmakers, bad non-newsmakers and the voter when she sees a tale. Other action frequencies are omitted because identical across all PBEs: bad newsmakers always engage in tale-telling  $(Pr(T_i = 1|i = bad newsmaker) = 1)$  while good non-newsmakers never engage in tale-telling  $(Pr(T_i = 1|i = bad newsmaker) = 1)$  while good non-newsmakers never engage in tale-telling  $(Pr(T_i = 1|i = bad newsmaker) = 1)$  while good non-newsmakers never engage in tale-telling  $(Pr(V = 1|S_v = G) = 1)$  and never re-elects him when she sees a scandal  $(Pr(V = 1|S_v = S) = 0)$ . Columns 6-7 detail the necessary parameter conditions for the corresponding strategy to be an equilibrium. PBEs which only exist for hyperplanes in the parameter space are omitted for brevity but characterized in the proofs.

]	PBE	Media Attention to Tales q in:			
N°	Class	ass $(0, \frac{\varepsilon}{H})$ $(\frac{\varepsilon}{H}, B)$ $(B, \frac{\varepsilon}{H} + B)$		$\left(\frac{\varepsilon}{H}+B,1\right)$	
2	МН	$\checkmark$			
7	МН		$\checkmark$	$\checkmark$	
4	МН			$\checkmark$	
3	NH			$\checkmark$	$\checkmark$

# **Table 3: Baseline Model:** Equilibrium Path as *q* Increases, for $B > \frac{\varepsilon}{H}$ , and $\mu < H$

## **Table 4: Baseline Model:** Equilibrium Path as *q* Increases, for $B > \frac{\varepsilon}{H}$ and $\mu > H$

]	PBE		Media Attentic	on to Tales q in:	
N°	Class	$(0, \frac{\varepsilon}{H})$	$\left(\frac{\varepsilon}{H},B\right)$	$\left(B,\frac{\varepsilon}{H}+B\right)$	$\left(\frac{\varepsilon}{H}+B,1\right)$
2	МН	$\checkmark$			
5	RH		$\checkmark$	$\checkmark$	$\checkmark$
4	МН			$\checkmark$	
3	NH			$\checkmark$	$\checkmark$
6	MH				$\checkmark$

*Note:* Each row corresponds to a PBE. A checkmark  $\checkmark$  indicates that the corresponding PBE is an equilibrium for the range of values of *q* in the corresponding column. Column 1 numbers are used to keep track of the PBEs. Column 2 indicates whether the PBE is a no red herring (NH), mixed red herring (MH) or red herring (RH) equilibrium as defined in Lemma 2. PBEs' incumbent and voter strategy can be found in Appendix Table 2. PBEs which only exist for hyperplanes in the parameter space are omitted for brevity but included in the proofs. For parsimony,  $\frac{E}{H} < B$  is assumed. However, this is without loss of generality: the results in Section 5 do not hinge upon this assumption.

PBE		Re-ele	ction probability	if incumbent's t	type is:	Welfare	criteria:
N°	Class	Good Non- newsmaker	Good Newsmaker	Bad Non- newsmaker	Bad Newsmaker	Red Herring Success $(\sigma)$	Screening $(\phi)$
1	NH	1	_	0	_	0	$(1-\pi)(1+\pi)$
2	МН	1	1	0	Н	$\mu q H$	$(1-\pi)(1+\pi(1-\mu qH))$
3	NH	1	1	0	0	0	$(1-\pi)(1+\pi)$
4	МН	1	1 – <i>BH</i>	0	H(q-B)	$\mu H(q-B)$	$(1-\pi)(1+\pi(1-\mu qH))$
5	RH	1	1	qH	qH	qH	$(1-\pi)(1+\pi(1-qH))$
6	МН	1	$1 - B \frac{H}{\mu}$	H(q-B)	H(q-B)	H(q-B)	$(1-\pi)(1+\pi(1-qH))$
7	МН	1	$1 - (q - \frac{\varepsilon}{H})$	$arepsilon rac{\mu(1-H)}{(1-\mu)H}$	ε	$\frac{\varepsilon\mu}{H}$	$(1-\pi)(1+\pi(1-\mu q))$

Table 5: Baseline Model: Re-election Probabilities and Welfare Criteria

*Note:* Each row corresponds to a PBE. Column 1 numbers are used to keep track of the PBEs. Column 2 indicates whether the PBE is a no red herring (NH), mixed red herring (MH) or red herring (RH) equilibrium as defined in Lemma 2. Columns 3-6 indicate the incumbent's re-election probability in the corresponding PBE for each incumbent type. Columns 7-8 indicate red herring success and screening. PBEs' incumbent and voter strategies can be found in Appendix Table 2.

#### **Tables 6-7:**

# **Polarization:** Equilibrium Path as *q* Increases, for: either i) $\beta_s < 1 - \pi$ and $H > \overline{H}_2$ , or ii) $\beta_s > 1 - \pi$ and $H > \overline{H}_4$ (additional parameter conditions detailed below)

PBE		Incumber	Media Attention to Tales q in:			1:	
N°	Class	$Pr(T_i = 1 i = good newsmaker)$	$Pr(T_i = 1 i = good non - newsmaker)$	$(0, \varepsilon)$	$(\varepsilon,B)$	$(B, \varepsilon + B)$	$(\varepsilon + B, 1)$
2P1	МН	1	0	$\checkmark$			
7P1	MH	1	$\frac{\mu(1-H)}{(1-\mu)H}$		$\checkmark$	$\checkmark$	
4P1	MH	Н	0			$\checkmark$	
3P	NH	0	0			$\checkmark$	$\checkmark$

### **Table 6:** If $B > \varepsilon$ and $\mu < H$

#### **Table 7:** If $B > \varepsilon$ and $\mu > H$

PBE		Incumber	t Strategy	Media Attention to Tales $q$ in:			
N°	Class	$Pr(T_i = 1 i = good newsmaker)$	$Pr(T_i = 1 i = good non - newsmaker)$	$(0, \varepsilon)$	$(\varepsilon,B)$	$(B, \varepsilon + B)$	$(\varepsilon + B, 1)$
2P1	MH	1	0	$\checkmark$			
5P	RH	1	1		$\checkmark$	$\checkmark$	$\checkmark$
4P1	МН	Н	0			$\checkmark$	
3P	NH	0	0			$\checkmark$	$\checkmark$
6P	MH	$\frac{H}{\mu}$	1				$\checkmark$

*Note:* Each row corresponds to a PBE. A checkmark  $\checkmark$  indicates that the corresponding PBE is an equilibrium for the range of values of q in the corresponding column. Column 1 numbers are used to keep track of the PBEs. Column 2 indicates whether the PBE is a no red herring (NH), mixed red herring (MH) or red herring (RH) equilibrium as defined in Lemma 2. Columns 3 and 4 specify the action frequencies of good newsmakers and bad non-newsmakers. The action frequencies of bad newsmakers and good non-newsmakers are omitted because identical across all PBEs: bad newsmakers always engage in tale-telling ( $Pr(T_i = 1|i = bad newsmaker) = 1$ ) while good non-newsmakers never engage in tale-telling ( $Pr(T_i = 1|i = good non - newsmaker) = 0$ ). Voters' action frequencies can be found in the proofs. PBEs which only exist for hyperplanes in the parameter space are omitted for brevity but included in the proofs. For parsimony,  $\varepsilon < B$  is assumed. However, this is without loss of generality: the results in Section 6 do not hinge upon this assumption.  $\tilde{H}_2 = \frac{1}{2\gamma + \alpha}, \tilde{H}_4 = \frac{1+\alpha-2\gamma}{2\alpha}$ 

#### **Tables 8-10:**

**Polarization:** Equilibrium Path as q Increases, for: either i)  $\beta_s < 1 - \pi$  and  $H < \overline{H}_2$ , or ii)  $\beta_s > 1 - \pi$  and  $H < \overline{H}_4$  (additional parameter conditions detailed below)

**Table 8:** If  $\beta_o < \underline{\beta}_o$  (implies  $\mu > H$ ) and, either i)  $\beta_s < 1 - \pi$  and  $H > \overline{H}_1$ , or ii)  $\beta_s > 1 - \pi$  and  $H > \overline{H}_3$ 

PBE		Incumb	bent Strategy	Media Attention to Tales q in:			1:
N°	Class	$Pr(T_i = 1 i = good newsmaker)$	$Pr(T_i = 1 i = good non - newsmaker)$	$(0, \varepsilon)$	$(\varepsilon,B)$	$(B, \varepsilon + B)$	$(\varepsilon + B, 1)$
2P1	MH	1	0	$\checkmark$			
5P	RH	1	1		$\checkmark$	$\checkmark$	$\checkmark$
4P2	NH	Н	0			$\checkmark$	$\checkmark$
3P	NH	0	0			$\checkmark$	$\checkmark$

PBE		Incumb	Media Attention to Tales q in:			1:	
N°	Class	$Pr(T_i = 1 i = good newsmaker)$	$Pr(T_i = 1 i = good non - newsmaker)$	$(0, \varepsilon)$	$(\varepsilon,B)$	$(B, \varepsilon + B)$	$(\varepsilon + B, 1)$
2P1	MH	1	0	$\checkmark$			
7P2	MH	1	$rac{\mu}{(1-\mu)\pi H}(\pi(1-H)-rac{eta_o}{1-\pi+eta_o})$		$\checkmark$	$\checkmark$	$\checkmark$
4P2	NH	Н	0			$\checkmark$	$\checkmark$
3P	NH	0	0			$\checkmark$	$\checkmark$

**Table 9:** If  $\beta_o \in [\underline{\beta}_o; \overline{\beta}_o]$  and, either i)  $\beta_s < 1 - \pi$  and  $H > \overline{H}_1$ , or ii)  $\beta_s > 1 - \pi$  and  $H > \overline{H}_3$ 

Table 10: If, either: i)	$\beta_o > \beta_o$ , ii) $\beta_s < 1$ -	$\pi$ and $H < \overline{H}_1$ , or iii) $\beta_s > \beta_s$	$1 - \pi$ and $H < \overline{H}_3$
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PBE		Incumb	Media Attention to Tales q in:			1:	
N°	Class	$Pr(T_i = 1 i = good newsmaker)$	$Pr(T_i = 1 i = good non - newsmaker)$	$(0, \varepsilon)$	$(0,\varepsilon)$ $(\varepsilon,B)$		$(\varepsilon + B, 1)$
2P2	NH	1	0	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
4P2	NH	Н	0			$\checkmark$	$\checkmark$
3P	NH	0	0			$\checkmark$	$\checkmark$

Note: Each row corresponds to a PBE. A checkmark 🗸 indicates that the corresponding PBE is an equilibrium for the range of values of q in the corresponding column. Column 1 numbers are used to keep track of the PBEs. Column 2 indicates whether the PBE is a no red herring (NH), mixed red herring (MH) or red herring (RH) equilibrium as defined in Lemma 2. Columns 3 and 4 specify the action frequencies of good newsmakers and bad non-newsmakers. The action frequencies of bad newsmakers and good non-newsmakers are omitted because identical across all PBEs: bad newsmakers always engage in tale-telling  $(Pr(T_i = 1 | i = bad newsmaker) = 1)$  while good non-newsmakers never engage in tale-telling ( $Pr(T_i = 1 | i = good non - newsmaker) = 0$ ). Voters' action frequencies can be found in the proofs. PBEs which only exist for hyperplanes in the parameter space are omitted for brevity but included in the proofs. For parsimony,  $\vec{e} < B$  is assumed. However, this is without loss of generality: the results in Section 6 do not hinge upon this assumption.  $\vec{H}_1 = \frac{1}{2}, \vec{H}_2 = \frac{1}{2\gamma + \alpha}, \vec{H}_3 = \frac{1 + \alpha - 2\gamma}{2 + \alpha - 2\gamma}, \vec{H}_4 = \frac{1 + \alpha - 2\gamma}{2\alpha}, \vec{\underline{\beta}}_o = \frac{(1 - \pi)\pi(\mu - H)}{\mu - \pi(\mu - H)} < \vec{\beta}_o = \frac{(1 - \pi)\pi(1 - H)}{1 - \pi(1 - H)}.$ 

PBE		Re-o	election probability	if incumbent's typ	e is:	Welfare	e criteria:
N°	Class	Good Non- newsmaker	Good Newsmaker	Bad Non- newsmaker	Bad Newsmaker	Red Herring Success (σ)	Screening ( $\phi$ )
2P1	МН	1	1	0	q	$\mu q$	$(1-\pi)(1+\pi(1-\mu q))$
2P2	NH	1	1	0	0	0	$(1-\pi)(1+\pi)$
3P	NH	1	1	0	0	0	$(1-\pi)(1+\pi)$
4P1	МН	1	1 – <i>BH</i>	0	<i>q</i> – <i>B</i>	$\mu(q-B)$	$(1 - \pi)(1 + \pi(1 - \mu(q - (1 - H)B)))$
4P2	NH	1	1 – <i>BH</i>	0	0	0	$(1-\pi)(1+\pi(1-\mu BH))$
5P	RH	1	1	q	q	q	$(1-\pi)(1+\pi(1-q))$
6P	MH	1	$1 - B\frac{H}{\mu}$	q - B	q-B	q - B	$(1-\pi)(1+\pi(1-(q-(1-H)B)))$
7P1	МН	1	$1-(q-\varepsilon)$	$arepsilon rac{\mu(1-H)}{(1-\mu)H}$	ε	$\frac{\epsilon\mu}{H}$	$(1-\pi)(1+\pi(1-\mu(q+\frac{\varepsilon(1-H)}{H})))$
7P2	МН	1	1	$\frac{\varepsilon \frac{\mu}{(1-\mu)\pi H}(\pi(1-\mu))}{H(1-\mu)}$	ε	$rac{arepsilon\mu}{H} rac{1-\pi}{\pi} rac{\pi-eta_o}{1-\pi+eta_o}$	$\frac{(1-\pi)(1+\pi(1-\frac{\varepsilon_{\mu}}{H}\frac{1-\pi}{\pi}\frac{\pi-\beta_{o}}{1-\pi+\beta_{o}}))$

## Table 11: Polarization: Re-election Probabilities and Welfare Criteria

*Note:* Each row corresponds to a PBE. Column 1 numbers are used to keep track of the PBEs. Column 2 indicates whether the PBE is a no red herring (NH), mixed red herring (MH) or red herring (RH) equilibrium as defined in Lemma 2. Columns 3-6 indicate the incumbent's re-election probability in the corresponding PBE for each incumbent type. Columns 7-8 indicate red herring success and screening. PBEs' incumbent strategies can be found in Appendix Tables 6-10 while voters' strategies can be found in the proofs.

	Attention-seeker's strategy									
Non attention-seeker's strategy	Never engages in tale-telling	Always engages in tale-telling	Engages in tale-telling iff scandal	Engages in tale-telling iff no scan- dal	Always mixes	Mixes (tale/silent) if scandal, silent oth- erwise	Mixes (tale/silent) if scandal, engages in tale-telling otherwise	Mixes (tale/silent) if no scan- dal, silent otherwise	Mixes (tale/si- lent) if no scandal, engages in tale-telling otherwise	
Never engages in tale- telling	PBE N°1A	PBE N°2A	PBE N°3A	L.A.8.5.2.b)	L.A.8.5.2.b)	PBE N°4A	L.A.8.5.2.b)	L.A.8.5.2.b)	PBE N°5A	
Always engages in tale-telling	L.A.8.5.2.c),	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1	
Engages in tale-telling iff scandal	L.A.8.5.2.c)	PBE N°6A	L.A.8.5.3	L.A.8.5.2.b)	L.A.8.5.2.b)	L.A.8.5.3	L.A.8.5.2.b)	L.A.8.5.2.b)	PBE N°7A	
Engages in tale-telling iff no scandal	L.A.8.5.2.c), ,1	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1	
Always mixes (tale/si- lent)	L.A.8.5.2.c),	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1	
Mixes (tale/silent) if scandal, silent other- wise	L.A.8.5.2.c)	PBE N°8A	L.A.8.5.3	L.A.8.5.2.b)	L.A.8.5.2.b)	L.A.8.5.3	L.A.8.5.2.b)	L.A.8.5.2.b)	PBE N°9A (hyper- plane)	
Mixes (tale/silent) if scandal, engages in tale-telling otherwise	L.A.8.5.2.c),	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1	
Mixes (tale/silent) if no scandal, silent oth- erwise	L.A.8.5.2.c),	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1	
Mixes (tale/silent) if no scandal, engages in tale-telling otherwise	L.A.8.5.2.c),	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1,3	L.A.8.5.1	L.A.8.5.1	L.A.8.5.1	

#### Table 12: Attention-Seeker: Partition of Potential Incumbent's Strategies

*Note:* Each cell is a candidate incumbent strategy. Rows correspond to the incumbent's strategy if non-attention-seeker, while columns correspond to his strategy if attention-seeker. When the incumbent "mixes" for some information set, he mixes over engaging in tale-telling or remaining silent. "PBE" indicates that there exists, for certain parameter values, a PBE in which the corresponding incumbent strategy is optimal, and is followed by the PBE number used to keep track of the equilibria. For clarity, all PBEs are in bold. L.A.8.5. indicates that candidate PBEs with the corresponding incumbent strategy can be ruled out using a statement in Lemma A.8.5 and is followed by the applicable statement number(s). "Hyperplane" indicates that the corresponding incumbent strategy can only be optimal for a hyperplane in the parameter space.

PBE		Incumbent	Media Attention to Tales q in:				
N°	Class	$Pr(T_i = 1 i = good attention - seeker)$	$Pr(T_i = 1   i = bad non - attention - seeker)$	$(0, \frac{\varepsilon}{B})$	$\left(\frac{\varepsilon}{B}, \frac{\varepsilon}{H}\right)$	$\left(\frac{\varepsilon}{H}, \frac{\varepsilon}{H}, \frac{1-H}{1-B}\right)$	$\left(\frac{\varepsilon}{H}\frac{1-H}{1-B},1\right)$
1A	NH	0	0	$\checkmark$			
2A	МН	1	0		$\checkmark$		
5A	МН	Н	0		$\checkmark$	$\checkmark$	
3A	NH	0	0		$\checkmark$	$\checkmark$	$\checkmark$
8A	МН	1	$\frac{\mu(1-H)}{(1-\mu)H}$			$\checkmark$	

**Table 13: Attention-Seeker:** Equilibrium Path as *q* Increases, for  $B \in (H, 1)$  and  $\mu < H$ 

*Note:* Each row corresponds to a PBE. A checkmark  $\checkmark$  indicates that the corresponding PBE is an equilibrium for the range of values of q in the corresponding column. Column 1 numbers are used to keep track of the PBEs. Column 2 indicates whether the PBE is a no red herring (NH), mixed red herring (MH) or red herring (RH) equilibrium as defined in Lemma 2. Columns 3 and 4 specify the action frequencies of good attention-seekers and bad non-attention-seekers. The action frequencies of good non attention-seekers and bad attention-seekers are omitted because (almost) identical across all PBEs: good non-attention-seekers never engage in tale-telling ( $Pr(T_i = 1|i = good non - attention - seeker) = 0$ ) while bad attention-seekers always engage in tale-telling ( $Pr(T_i = 1|i = bad attention - seekers) = 1$ ) except in PBE 1A in which they never engage in tale-telling. The voter's action frequencies can be found in the proofs. PBEs which only exist for hyperplanes in the parameter space are omitted for brevity but included in the proofs.

#### 8.3 Baseline Model: Proofs

#### **Proof of Lemma 1:**

First, one must show that the voter re-elects the incumbent if she sees the generic story. Denote  $t = Pr(T_i = 1 | i = good newsmaker)$  and  $s = Pr(T_i = 1 | i = good non - newsmaker)$  the tale-telling probabilities of good newsmakers and good non-newsmakers. Since the voter can only see the generic story in the absence of a scandal, her posterior that the incumbent is good when she sees the generic story is:  $Pr(i = good | S_v = G) = \frac{(1-\pi)(\mu(1-t+t(1-q))+(1-\mu)(1-s+s(1-q)))}{(1-\pi)(\mu(1-t+t(1-q))+(1-\mu)(1-s+s(1-q)))} = 1$ . Note that q < 1 ensures that seeing the generic story is on-path, independently of the incumbent's strategy. Upon seeing the generic story, she learns that the incumbent is good, making it strictly optimal for her to re-elect the incumbent.

#### <u>Part 1:</u>

We know that the voter will re-elect the incumbent if she sees the generic story  $(Pr(V = 1 | S_v = G) = 1)$ . This makes it strictly suboptimal for good non-newsmakers to engage in tale-telling. Indeed, remaining silent guarantees them a payoff of  $Pr(V = 1 | S_v = G) = 1$ . By engaging in tale-telling, their expected payoff would be  $\mathbf{E}(U_i(T_i = 1 | i = good non - newsmaker)) \le 1 - \varepsilon < 1$ .

#### Part 2:

Any bad incumbent who remains silent gets a payoff  $\mathbf{E}(U_i(T_i = 0|i = bad)) = 0$ . Indeed, the voter sees the scandal and learns that the incumbent is bad, voting him out  $(i = bad \land T_i = 0 \Rightarrow S_v = S \Rightarrow V = 0$  since  $S_v = S \Rightarrow i = bad$ ). Denote  $r = Pr(V = 1|S_v = T) \in [0,1]$  the probability with which the voter re-elects the incumbent when she sees a tale. A bad newsmaker who engages in tale-telling gets an expected payoff of  $\mathbf{E}(U_i(T_i = 1|i = bad newsmaker)) = B + rqH > 0$ . Bad newsmakers therefore strictly prefer engaging in tale-telling to remaining silent.

#### <u>Part 3:</u>

Assume that good newsmakers never engage in tale-telling. We know from Part 1 that good non-newsmakers will never engage in tale-telling. Thus, it must be that

only bad incumbents engage in tale-telling, i.e.  $(Pr(T_i = 1|i = good newsmaker) = 0) \land (Pr(T_i = 1|i = bad newsmaker) = 1) \land (Pr(T_i = 1|i = good non - newsmaker) = 0) \Rightarrow Pr(i = bad|T_i = 1) = 1$  by Bayes rule. Thus, if she sees a tale, the voter learns that the incumbent is bad and votes him out  $(Pr(V = 1|S_v = T) = 0)$ . This leaves no incentives for bad non-newsmakers to engage in tale-telling since doing so would yield a payoff of  $\mathbf{E}(U_i(T_i = 1|i = bad non - newsmaker)) = (1 - qH)Pr(V = 1|S_v = S) + qHPr(V = 1|S_v = T) - \varepsilon = 0 - \varepsilon < 0$ , while remaining silent would yield a payoff of  $\mathbf{E}(U_i(T_i = 0|i = bad non - newsmaker)) = Pr(V = 1|S_v = S) = 0$ .

#### **Proof of Proposition 1:**

**Sufficient:** When  $\mu = 0$ , there is a PBE in which the incumbent never engages in tale-telling  $(Pr(T_i = 1|i) = 0 \forall i \in \{good \ newsmaker, good \ non - newsmaker, bad$ *newsmaker, bad non - newsmaker* $\})$  and the voter re-elects him iff she sees the generic story  $(V = 1 \Leftrightarrow S_v = G)$ . It can be supported by the off-path belief that the incumbent is bad if the voter sees a tale  $(Pr(i = good | S_v = T) = 0))$ .

i) One can first show that the voter's strategy is optimal given her beliefs. From the proof of Lemma 1, we know that  $S_v = G \Rightarrow V = 1$  (note that proving this did not require assuming equilibrium existence). Similarly,  $S_v = S \Rightarrow i = bad \Rightarrow V = 0$ . Given the voter's off-path belief,  $S_v = T \Rightarrow i = bad \Rightarrow V = 0$ .

ii) Second, one can show that the incumbent's strategy is optimal given the voter's strategy. From Lemma 1.1, we know that good incumbents strictly prefer not to engage in tale-telling (note that proving Lemma 1.1 does not require assuming equilibrium existence). Bad incumbents similarly strictly prefer not to engage in tale-telling given the voter's strategy. Indeed, given the voter's strategy, bad incumbents are voted out whether they remain silent or engage in tale-telling. However, engaging in tale-telling is costly to them: if they remain silent, they get  $\mathbf{E}(U_i(T_i = 0|i = bad)) = Pr(V = 1|S_v = S) = 0$ ; if they engage in tale-telling, they get  $\mathbf{E}(U_i(T_i = 1|i = bad non - newsmaker)) = (1 - qH)Pr(V = 1|S_v = S) + qHPr(V = 1|S_v = S)$   $1|\mathcal{S}_{v}=T)-\varepsilon=-\varepsilon<0.$ 

<u>Necessary:</u> When  $\mu = 0$ , the PBE in which the incumbent never engages in taletelling is the unique PBE. To show that there is no PBE in which the incumbent engages in tale-telling, the proof first shows that there is no PBE in which good incumbents engage in tale-telling, before showing that there is no PBE in which incumbents engage in tale-telling iff they are bad.

i) The first part follows from Lemma 1.1.

ii) The second part can be proven by contradiction: Assume there is a PBE in which incumbents engage in tale-telling with positive probability iff they are bad. Upon seeing a tale, the voter would learn that this incumbent is bad and vote him out  $(S_v = T \Rightarrow i = bad \Rightarrow V = 0)$ . Thus, bad incumbents would have a strictly lower payoff from engaging in tale-telling than from remaining silent  $(\mathbf{E}(U_i(T_i = 1|i = bad non - newsmaker)) = (1 - qH)Pr(V = 1|S_v = S) + qHPr(V = 1|S_v = T) - \varepsilon = -\varepsilon < 0$ , while  $\mathbf{E}(U_i(T_i = 0|i = bad non - newsmaker)) = Pr(V = 1|S_v = S) = 0)$ . This implies that bad incumbents strictly prefer deviating and not engaging in tale-telling.

#### **Equilibrium characterization:**

As explained in Section 4, the characterization of the PBEs is simplified by using Lemma 1 to: 1) rule out incumbent strategies which cannot be optimal in any PBE, 2) notice that only three incentive compatibility conditions need to be verified.

#### 1) Ruling-out unfeasible PBEs:

Candidate PBEs in which good non-newsmakers engage in tale-telling with positive probability (rows 3-5-6-8-9-10 in Appendix Table 1) can be ruled out using Lemma 1.1. Candidate PBEs in which bad newsmakers do not always engage in tale-telling (columns 5 to 9 in Appendix Table 1) can be ruled out using Lemma 1.2. Candidate PBEs in which newsmakers engage in tale-telling iff bad while nonnewsmakers engage in tale-telling with positive probability (the intersection of rows 3 to 10 with either column 4 or column 7 in Appendix Table 1) can be ruled out using Lemma 1.3.

2) Restricting the set of IC which need to be verified As explained in Section 4, when characterizing PBEs, incentive compatibility only needs to be verified in three cases: i) when the voter sees a tale ( $S_v = T$ ), ii) when the incumbent is a good newsmaker, iii) when the incumbent is a bad non-newsmaker. Other cases are covered by Lemma 1 and observing that the voter will vote the incumbent out whenever she sees a scandal ( $S_v = S \Rightarrow i = bad \Rightarrow V = 0$ ).

In the following, equilibrium characterization proceeds by considering each incumbent strategy remaining in Appendix Table 1, eliciting the voter's best response and then the parameter values for which the incumbent's strategy is optimal given the voter's best response. For transparency, the PBE (strategies, beliefs and necessary parameter conditions) is first described before proceeding to the proof.

#### <u>PBE 2:</u>

- Incumbent's strategy: engages in tale-telling iff is a newsmaker  $(T_i = 1 \Leftrightarrow newsmaker)$
- Voter's posterior that the incumbent is good:
  - $Pr(i = good | S_v = G) = 1 > 1 \pi$  if she sees the generic story
  - $Pr(i = good | S_v = T) = \frac{1-\pi}{1-\pi(1-H)} > 1 \pi$  if she sees a tale
  - $Pr(i = good | S_v = S) = 0$  if she sees a scandal
- Voter's strategy: re-elects the incumbent unless sees a scandal ( $V = 1 \Leftrightarrow S_v \neq \frac{S}{S}$ )
- Necessary conditions:  $q \leq \frac{\varepsilon}{H}$

#### i) Voter IC:

Given the incumbent's strategy, the voter's posterior that the incumbent is good if she sees a tale is:  $Pr(i = good | S_v = T) = \frac{1-\pi}{(1-\pi)+\pi H} > 1 - \pi$ . It is therefore strictly

optimal for her to re-elect the incumbent when she sees a tale.

#### ii) Incumbent IC

Given the voter's strategy, it is strictly optimal for good newsmakers to engage in tale-telling. Indeed,  $\mathbf{E}(U_i(T_i = 1|i = good newsmaker)) = (1 - q)Pr(V = 1|S_v = G) + qPr(V = 1|S_v = T) + B = 1 + B$  while  $\mathbf{E}(U_i(T_i = 0|i = good newsmaker)) = Pr(V = 1|S_v = G) = 1$ . Given the voter's strategy, by remaining silent, bad non-newsmakers would earn an expected payoff  $\mathbf{E}(U_i(T_i = 0|i = bad non - newsmaker)) = Pr(V = 1|S_v = S) = 0$ . By engaging in tale-telling, they would earn  $\mathbf{E}(U_i(T_i = 1|i = bad non - newsmaker)) = qHPr(V = 1|S_v = T) - \varepsilon = qH - \varepsilon$ . It is therefore optimal for them not to engage in tale-telling iff  $q \leq \frac{\varepsilon}{H}$ .

#### <u>PBE 3:</u>

- Incumbent's strategy: engages in tale-telling iff is a bad newsmaker ( $T_i = 1 \Leftrightarrow i = bad newsmaker$ )
- Voter's posterior that the incumbent is good:
  - $Pr(i = good | S_v = G) = 1 > 1 \pi$  if she sees the generic story
  - $Pr(i = good | S_v = T) = 0$  if she sees a tale
  - $Pr(i = good | S_v = S) = 0$  if she sees a scandal
- <u>Voter's strategy:</u> re-elects the incumbent iff she sees the generic story ( $V = 1 \Leftrightarrow S_v = G$ )
- Necessary conditions:  $q \ge B$

#### i) Voter IC:

Given the incumbent's strategy, whenever she sees a tale, the voter learns that the incumbent is bad and votes him out (since  $Pr(i = bad | T_i = 1) = 1$ , it follows that  $S_v = T \Rightarrow T_i = 1 \Rightarrow i = bad \Rightarrow V = 0$ ).

#### ii) Incumbent IC:

Given the voter's strategy, it is optimal for good newsmakers not to engage in

tale-telling iff:  $\mathbf{E}(U_i(T_i = 1 | i = good newsmaker)) \le \mathbf{E}(U_i(T_i = 0 | i = good newsmaker)) \Leftrightarrow$   $qPr(V = 1 | S_v = T) + (1 - q)Pr(V = 1 | S_v = G) + B \le Pr(V = 1 | S_v = G) \Leftrightarrow 1 - q + B \le 1 \Leftrightarrow$  $q \ge B$ . Incentive compatibility for bad non-newsmakers follows from Lemma 1.3.

#### PBEs 4-6-8: (joint proof)

#### <u>PBE 4:</u>

- Incumbent's strategy: mixes if is a good newsmaker (engages in tale-telling with probability  $Pr(T_i = 1 | i = good newsmaker) = H)$ , engages in tale-telling if is a bad newsmaker ( $Pr(T_i = 1 | i = bad newsmaker) = 1$ ), remains silent if is a non-newsmaker ( $Pr(T_i = 1 | i = non newsmaker) = 0$ )
- Voter's posterior that the incumbent is good:
  - $Pr(i = good | S_v = G) = 1 > 1 \pi$  if she sees the generic story
  - $Pr(i = good | S_v = T) = 1 \pi$  if she sees a tale
  - $Pr(i = good | S_v = S) = 0$  if she sees a scandal
- Voter's strategy: re-elects the incumbent if she sees the generic story  $(Pr(V = 1|S_v = G) = 1)$ , re-elects him with probability  $Pr(V = 1|S_v = T) = 1 \frac{B}{q}$  if she sees a tale, votes him out if she sees a scandal  $(Pr(V = 1|S_v = S) = 0)$
- Necessary conditions:  $q \in \left[B, \frac{\varepsilon}{H} + B\right]$

#### <u>PBE 6:</u>

- Incumbent's strategy: mixes if is a good newsmaker (engages in tale-telling with probability  $Pr(T_i = 1 | i = good newsmaker) = \frac{H}{\mu}$ ), engages in tale-telling if is bad  $(Pr(T_i = 1 | i = bad) = 1)$ , remains silent if is a good non-newsmaker  $(Pr(T_i = 1 | i = good non - newsmaker) = 0)$
- Voter's posterior that the incumbent is good:

-  $Pr(i = good | S_v = G) = 1 > 1 - \pi$  if she sees the generic story

- $Pr(i = good | S_v = T) = 1 \pi$  if she sees a tale
- $Pr(i = good | S_v = S) = 0$  if she sees a scandal
- Voter's strategy: re-elects the incumbent if she sees the generic story  $(Pr(V = 1|S_v = G) = 1)$ , re-elects him with probability  $Pr(V = 1|S_v = T) = 1 \frac{B}{q}$  if she sees a tale, votes him out if she sees a scandal  $(Pr(V = 1|S_v = S) = 0)$
- Necessary conditions:  $(q \ge \frac{\varepsilon}{H} + B) \land (\mu > H)$

#### <u>PBE 8:</u>

- Incumbent's strategy: mixes if is a bad non-newsmaker or a good newsmaker (respectively engages in tale-telling with probability  $Pr(T_i = 1|i = bad non - newsmaker) = s \in [0, min\{1, \frac{\mu(1-H)}{(1-\mu)H}\}]$  and with probability  $Pr(T_i = 1|i = good newsmaker) = H \frac{(\mu + (1-\mu)s)}{\mu}$ , engages in tale-telling if is a bad newsmaker  $(Pr(T_i = 1|i = bad newsmaker) = 1)$ , remains silent if is a good non-newsmaker  $(Pr(T_i = 1|i = good non - newsmaker) = 0)$
- Voter's posterior that the incumbent is good:
  - $Pr(i = good | S_v = G) = 1 > 1 \pi$  if she sees the generic story
  - $Pr(i = good | S_v = T) = 1 \pi$  if she sees a tale
  - $Pr(i = good | S_v = S) = 0$  if she sees a scandal
- <u>Voter's strategy:</u> re-elects the incumbent if she sees the generic story  $(Pr(V = 1|S_v = G) = 1)$ , re-elects him with probability  $Pr(V = 1|S_v = T) = 1 \frac{B}{q}$  if she sees a tale, votes him out if she sees a scandal  $(Pr(V = 1|S_v = S) = 0)$
- Necessary conditions:  $q = \frac{\varepsilon}{H} + B$

#### i) Voter IC:

Denote  $t = Pr(T_i = 1 | i = good newsmaker)$  the tale-telling probability of good newsmakers and  $s = Pr(T_i = 1 | i = bad non - newsmaker)$  the tale-telling probability of bad non-newsmakers. Upon seeing a tale, the voter's posterior that the incumbent is good is:  $\frac{(1-\pi)\mu t}{(1-\pi)\mu t + \pi H(\mu + (1-\mu)s)}$ . It will be equal to  $1 - \pi$ , ensuring that the

voter is indifferent, iff  $t = H \frac{(\mu + (1-\mu)s)}{\mu}$ .

#### ii) Incumbent IC:

 $t \in (0,1)$  requires that good newsmakers be indifferent between engaging in taletelling and remaining silent. Denoting  $r = Pr(V = 1|S_v = T)$  the probability with which the voter will re-elect the incumbent if she sees a tale, this indifference condition will therefore be satisfied iff:  $\mathbf{E}(U_i(T_i = 1|i = good newsmaker)) = \mathbf{E}(U_i(T_i = 0|i = good newsmaker)) = Pr(V = 1|S_v = G) = 1 \Leftrightarrow 1 = (1 - q) + qr + B \Leftrightarrow r = 1 - \frac{B}{q}$ .  $r \ge 0$  requires  $q \ge B$ .

If they engage in tale-telling, bad non-newsmakers get an expected payoff of  $\mathbf{E}(U_i(T_i = 1|i = bad non - newsmaker)) = rqH - \varepsilon$ . By remaining silent, they get an expected payoff of  $\mathbf{E}(U_i(T_i = 0|i = bad non - newsmaker)) = Pr(V = 1|S_v = S) = 0$ . Given *r*, bad non-newsmakers will therefore prefer engaging in tale-telling if  $\varepsilon \le q(1 - \frac{B}{q})H$ . They will prefer remaining silent if  $\varepsilon \ge q(1 - \frac{B}{q})H$ .

Hence, if  $\varepsilon \le q(1 - \frac{B}{q})H$ , since bad non-newsmakers strictly prefer engaging in tale-telling, s = 1 and  $t = \frac{H}{\mu}$  (PBE 6). t < 1 requires  $\mu > H$ . If  $\varepsilon \ge q(1 - \frac{B}{q})H$ , since bad non-newsmakers prefer to remain silent, s = 0 and t = H (PBE 4). If  $\varepsilon = q(1 - \frac{B}{q})H$ , since bad non-newsmakers are indifferent, there exist a continuum of PBEs with  $t = H \frac{(\mu + (1 - \mu)s)}{\mu}$  (PBE 8), where  $s \in (0, \min\{1, \frac{\mu(1 - H)}{(1 - \mu)H}\})$  is required to ensure that  $t \in (0, 1)$  and  $s \in (0, 1)$ .

## Since I abstract from PBEs which only exist for hyperplanes in the parameter space, PBE 8 is omitted in subsequent analysis.

#### <u>PBE 5:</u>

- Incumbent's strategy: engages in tale-telling unless is a good non-newsmaker (i.e.  $T_i = 0 \Leftrightarrow i = good non - newsmaker$ )
- Voter's posterior that the incumbent is good:

-  $Pr(i = good | S_v = G) = 1 > 1 - \pi$  if she sees the generic story

- $Pr(i = good | S_v = T) = \frac{(1-\pi)\mu}{(1-\pi)\mu + \pi H}$  if she sees a tale
- $Pr(i = good | S_v = S) = 0$  if she sees a scandal
- Voter's strategy: re-elects the incumbent unless she sees a scandal ( $V = 1 \Leftrightarrow \overline{S_v \neq S}$ )
- Necessary conditions:  $(q \ge \frac{\varepsilon}{H}) \land (\mu \ge H)$

#### i) Voter IC:

Given the incumbent's strategy, the voter's posterior that the incumbent is good is she sees a tale is:  $Pr(i = good | S_v = T) = \frac{(1-\pi)\mu q}{(1-\pi)\mu q + \pi q H}$ . It is superior to  $1 - \pi$  iff  $\mu \ge H$ . Hence, it is optimal for the voter to re-elect the incumbent upon seeing a tale  $(S_v = T \Rightarrow V = 1)$  iff  $\mu \ge H$ .

#### ii) Incumbent IC:

Denote  $r = Pr(V = 1 | S_v = T)$  the probability with which the voter re-elects the incumbent when seeing a tale. It is optimal for bad non-newsmakers to engage in tale-telling iff:  $\mathbf{E}(U_i(T_i = 1 | i = bad non - newsmaker)) \ge \mathbf{E}(U_i(T_i = 0 | i = bad non - newsmaker)) \Leftrightarrow (1 - qH)Pr(V = 1 | S_v = S) + rqH - \varepsilon > Pr(V = 1 | S_v = S) \Leftrightarrow rqH - \varepsilon \ge 0$ . This requires  $q \ge \frac{\varepsilon}{H}$  and  $\mu \ge H$  (since  $\mu < H \Rightarrow r = 0$ ). Since I abstract from PBEs which only exist for hyperplanes in the parameter space, one can abstract from the case in which  $\mu = H$ , making the voter indifferent. When  $\mu > H \Rightarrow r = 1$ , it is strictly optimal for good newsmakers to engage in tale-telling since  $\mathbf{E}(U_i(T_i = 1 | i = good newsmaker)) = (1 - q)Pr(V = 1 | S_v = G) + qr + B = 1 + B > 1$  while  $\mathbf{E}(U_i(T_i = 0 | i = good newsmaker)) = Pr(V = 1 | S_v = G) = 1$ .

#### <u>PBE 7:</u>

- Incumbent's strategy: engages in tale-telling if is a newsmaker  $(Pr(T_i = 1|i = newsmaker) = 1)$ , mixes if is a bad non-newsmaker (engages in tale-telling with probability  $Pr(T_i = 1|i = bad non newsmaker) = \frac{\mu(1-H)}{(1-\mu)H}$ ), remains silent otherwise
- Voter's posterior that the incumbent is good:

- $Pr(i = good | S_v = G) = 1 > 1 \pi$  if she sees the generic story
- $Pr(i = good | S_v = T) = 1 \pi$  if she sees a tale
- $Pr(i = good | S_v = S) = 0$  if she sees a scandal
- <u>Voter's strategy:</u> re-elects the incumbent when she sees the generic story ( $S_v = G \Rightarrow V = 1$ ), re-elects him with probability  $Pr(V = 1 | S_v = T) = \frac{\varepsilon}{qH}$  when she sees a tale, votes him out otherwise
- Necessary conditions:  $(q \in [\frac{\varepsilon}{H}, \frac{\varepsilon}{H} + B]) \land (\mu < H)$

#### i) Voter IC:

Denote  $s = Pr(T_i = 1 | i = bad non - newsmaker)$  the tale-telling probability of bad non-newsmakers. Given the incumbent's strategy, the voter's posterior that the incumbent is good if she sees a tale is:  $Pr(i = good | S_v = T) = \frac{(1-\pi)\mu q}{(1-\pi)\mu q + \pi(\mu + (1-\mu)s)qH}$ . For  $s = \frac{\mu(1-H)}{(1-\mu)H}$ , this is equal to  $1 - \pi$ , making the voter indifferent between reelecting the incumbent or voting him out.  $s = \frac{\mu(1-H)}{(1-\mu)H} < 1$  iff  $\mu < H$ .

#### ii) Incumbent IC:

For bad non-newsmakers to mix, it must be that they are indifferent between engaging in tale-telling or not, i.e.  $\mathbf{E}(U_i(T_i = 1|i = bad non - newsmaker)) = \mathbf{E}(U_i(T_i = 0|i = bad non - newsmaker))$ . Denoting  $r = Pr(V = 1|S_v = T)$ , this is the case iff  $(1 - qH)Pr(V = 1|S_v = S) + rqH - \varepsilon = Pr(V = 1|S_v = S) \Leftrightarrow r = \frac{\varepsilon}{qH}$ .  $r \le 1 \Leftrightarrow q \ge \frac{\varepsilon}{H}$ . Given the voter's strategy, it is therefore optimal for good newsmakers to engage in tale-telling iff:  $\mathbf{E}(U_i(T_i = 1|i = good newsmaker)) > \mathbf{E}(U_i(T_i = 0|i = good newsmaker)) \Leftrightarrow (1 - q)Pr(V = 1|S_v = G) + qr + B > Pr(V = 1|S_v = G) \Leftrightarrow 1 - q + qr + B \ge 1 \Leftrightarrow q \le \frac{\varepsilon}{H} + B$ .

**Proof of Proposition 4:** (*Conditions on*  $\pi$ )

 $\begin{array}{l} \underline{PBE \ 4:} \\ \pi > \frac{B}{q} \Leftrightarrow Pr(V=1|i=newsmaker) > Pr(V=1|i=non-newsmaker) \\ \underline{PBE \ 6:} \\ Pr(V=1|i=newsmaker) < Pr(V=1|i=non-newsmaker) \ \forall \pi \in (0,1) \end{array}$ 

$$\frac{\text{PBE 7:}}{\pi > \frac{q - \frac{\varepsilon}{H}}{q - \frac{\varepsilon}{H} \frac{1 - H}{1 - \mu}}} \Leftrightarrow \Pr(V = 1 | i = newsmaker) > \Pr(V = 1 | i = non - newsmaker)$$

#### 8.4 Voter Polarization: Proofs

#### Proof of Lemma 1 with polarized electorate:

The logic of the proof is similar to the proof of Lemma 1 for the baseline model. Since seeing the generic story implies that the incumbent is good, non-partisan voters and incumbent supporters will vote for the incumbent if they see the generic piece. Part 1 (good non-newsmakers do not engage in tale-telling) further relies on the fact that the assumption that  $\gamma + \frac{\alpha}{2} > \frac{1}{2}$  implies that a good incumbent who remains silent will systematically be re-elected. Part 2 (bad newsmakers always engage in tale-telling) relies on the fact that the assumption that  $\gamma - \frac{\alpha}{2} < \frac{1}{2}$  implies that a bad incumbent who remains silent will systematically be re-elected. Part 2 (bad newsmakers always engage in tale-telling) relies on the fact that the assumption that  $\gamma - \frac{\alpha}{2} < \frac{1}{2}$  implies that a bad incumbent who remains silent will systematically be voted out. Part 3 (if good newsmakers do not engage in tale-telling, bad non-newsmakers do not engage in tale-telling) relies on the fact that  $\gamma - \frac{\alpha}{2} < \frac{1}{2}$  implies that, if neither incumbent opponents nor non-partisans vote for the incumbent, the incumbent is voted out.

#### **Equilibrium Characterization:**

Notice:

- Lemma 1 implies that the incumbent's incentive compatibility only needs to be verified for good newsmakers and bad non-newsmakers.
- The assumption that  $\gamma + \frac{\alpha}{2} > \frac{1}{2}$  implies that what opponents do has no effects on whether good incumbents are re-elected. The assumption that H < 1 implies that this may make a difference for whether red herring senders are re-elected.
- There exist thresholds  $\overline{H}$  such that red herring senders cannot be re-elected if  $H < \overline{H}$  as they cannot obtain a majority of the votes:
  - 1. If supporters, non-partisans and opponents vote for the incumbent when seeing a tale but not when seeing a scandal:  $\bar{H}_1 = \frac{1}{2}$
  - 2. If supporters and non-partisans vote for the incumbent when seeing a

tale but not a scandal while opponents do not vote for the incumbent when seeing a tale:  $\bar{H}_2 = \frac{1}{2\gamma + \alpha}$ 

- 3. If non-partisans and opponents vote for the incumbent when seeing a tale but not a scandal, while supporters vote for the incumbent when seeing a tale or a scandal:  $\bar{H}_3 = \frac{1+\alpha-2\gamma}{2+\alpha-2\gamma}$
- 4. If non-partisans vote for the incumbent when seeing a tale but not a scandal, supporters when seeing a tale or a scandal, while opponents do not vote for the incumbent when seeing a tale or a scandal:  $\bar{H}_4 = \frac{1+\alpha-2\gamma}{2\alpha}$
- The assumption that  $-\beta_o < 0 < \beta_s$  implies that it is sufficient to calculate the best response of one type of voter (supporter, non-partisan or opponent) per information set to infer the best response of the other types of voters for this information set.

Using the above observations, the parameter conditions for which different incumbent strategies are possible in equilibrium are elicited below. I abstract from PBEs which only exist for hyperplanes in the parameter space. In particular, it is assumed that  $H \notin \{\bar{H}_1, \bar{H}_2, \bar{H}_3, \bar{H}_4\}, \beta_s \neq 1 - \pi$  and  $\beta_o \notin \{\underline{\beta}_o, \bar{\beta}_o\}$  where  $\underline{\beta}_o = \frac{(1-\pi)\pi(\mu-H)}{\mu-\pi(\mu-H)}$ and  $\bar{\beta}_o = \frac{(1-\pi)\pi(1-H)}{1-\pi(1-H)}$ . The resulting set of equilibria can be found in Appendix Tables 6-10.

PBE 2P: The incumbent sends a tale iff he is a newsmaker:

Necessary conditions:  $(q \le \varepsilon) \lor ((\beta_s < 1 - \pi) \land (\beta_o < \bar{\beta}_o) \land (H < \bar{H}_1)) \lor ((\beta_s < 1 - \pi) \land (\beta_o < \bar{\beta}_o) \land (H < \bar{H}_2)) \lor ((\beta_s > 1 - \pi) \land (\beta_o < \bar{\beta}_o) \land (H < \bar{H}_3)) \lor ((\beta_s > 1 - \pi) \land (\beta_o > \bar{\beta}_o) \land (H < \bar{H}_3)) \lor ((\beta_s > 1 - \pi) \land (\beta_o > \bar{\beta}_o) \land (H < \bar{H}_4)).$ 

It is optimal for good newsmakers to send tales provided that supporters and non-partisans vote for them when seeing a tale (since  $\gamma + \frac{\alpha}{2} > \frac{1}{2}$ ). Given the incumbent's strategy, upon seeing a tale, voters' posterior that the incumbent is good strictly increases. Thus, supporters and non-partisans seeing a tale will vote for the incumbent, making it optimal for good newsmakers to send tales. It is optimal for bad non-newsmakers to remain silent if, either: i) their probability of re-election

when sending a tale is lower than their tale-telling cost  $\varepsilon$ , i.e.  $q \le \varepsilon$ , or: ii) H is too low for them to obtain a majority of votes. Note that it is optimal for opponents to vote for the incumbent when seeing a tale iff  $\beta_o \le (1 - \pi) \frac{\pi(1-H)}{1-\pi(1-H)} = \overline{\beta}_o$ . ii) will therefore be satisfied if either: a)  $\beta_s < 1 - \pi$ ,  $\beta_o < \overline{\beta}_o$  and  $H < \overline{H}_1$ , b)  $\beta_s < 1 - \pi$ ,  $\beta_o > \overline{\beta}_o$ and  $H < \overline{H}_2$ , c)  $\beta_s > 1 - \pi$ ,  $\beta_o < \overline{\beta}_o$  and  $H < \overline{H}_3$ , d)  $\beta_s > 1 - \pi$ ,  $\beta_o > \overline{\beta}_o$  and  $H < \overline{H}_4$ . Note that, under ii), red herrings never succeed. When this is the case, I denote this equilibrium PBE 2P2 ; otherwise, I denote it PBE 2P1.

PBE 3P: The incumbent sends a tale iff he is a bad newsmaker:

#### **Necessary conditions:** $q \ge B$ .

Given the incumbent's strategy, upon seeing a tale, voters learn that i = bad. Since  $\gamma + \frac{\alpha}{2} < \frac{1}{2}$ , red herring senders cannot be re-elected. Thus, incentive compatibility only needs to be verified for good newsmakers. Given the voters' strategy, they prefer remaining silent iff  $q \ge B$ .

PBE 4P: good newsmakers mix, non-newsmakers are always silent:

Necessary conditions:  $(q \ge B) \land ((q \le \varepsilon + B) \lor ((\beta_s < 1 - \pi) \land (H < \overline{H}_2)) \lor ((\beta_s > 1 - \pi) \land (H < \overline{H}_4)))$ 

It is optimal for good newsmakers to mix iff they are indifferent between remaining silent or engaging in tale-telling. This will be the case if, when the media detects a tale, their re-election probability is  $1 - \frac{B}{q}$ . This requires that non-partisans mix with probability  $r = 1 - \frac{B}{q}$  and requires that  $q \ge B$ . Bad non-newsmakers will prefer remaining silent if their re-election probability is lower than their tale-telling cost  $\varepsilon$ . This will be the case if either: i)  $q \le \varepsilon + B$ , or ii) H is too low for them to obtain a majority of votes. Note that, since non-partisans mix when seeing a tale, opponents will never vote for the incumbent when seeing a tale. ii) will therefore be satisfied if either: a)  $\beta_s < 1 - \pi$  and  $H < \overline{H}_2$ , b)  $\beta_s > 1 - \pi$  and  $H < \overline{H}_4$ . Note that, under ii), red herrings never succeed. When this is the case, I denote this equilibrium PBE 4P2 ; otherwise, I denote it PBE 4P1. **<u>PBE 5P:</u>** newsmakers always send tales, non-newsmakers send tales iff they are bad:

Necessary conditions:  $(\mu \ge H) \land (q \ge \varepsilon) \land ((\beta_s < 1 - \pi) \land (\beta_o \le \beta_o) \land (H > \overline{H_1})) \lor ((\beta_s < 1 - \pi) \land (\beta_o \ge \beta_o) \land (H > \overline{H_2})) \lor ((\beta_s > 1 - \pi) \land (\beta_o \le \beta_o) \land (H > \overline{H_3})) \lor ((\beta_s > 1 - \pi) \land (\beta_o \ge \beta_o) \land (H > \overline{H_4})))$ 

Note it is optimal for non-partisans to vote for the incumbent when seeing a tale iff  $\mu \ge H$ , while it is optimal for opponents iff  $\beta_o \le \frac{(1-\pi)\pi(\mu-H)}{\mu-\pi(\mu-H)} = \underline{\beta}_o \Rightarrow \mu > H$ . For bad non-newsmakers to engage in tale-telling, it is necessary that non-partisans vote for them with positive probability when seeing a tale. Thus,  $\mu \ge H$  is necessary. Assuming  $\mu \ge H$ , they have no interest to deviate if i) their cost of tale-telling  $\varepsilon$  is lower than the probability q that the tale be detected  $(q > \varepsilon)$  and ii) if they can obtain a majority of votes when sending red herrings. ii) will be satisfied if either: a)  $\beta_s < 1 - \pi$ ,  $\beta_o < \underline{\beta}_o$  and  $H > \overline{H}_1$ , b)  $\beta_s < 1 - \pi$ ,  $\beta_o > \underline{\beta}_o$  and  $H > \overline{H}_2$ , c)  $\beta_s > 1 - \pi$ ,  $\beta_o < \underline{\beta}_o$  and  $H > \overline{H}_3$ , d)  $\beta_s > 1 - \pi$ ,  $\beta_o > \underline{\beta}_o$  and  $H > \overline{H}_4$ . Provided that non-partisans vote for the incumbent when seeing a tale (which requires  $\mu \ge H$ ), good newsmakers have no interest to deviate: if they send a tale which is detected by the media, all supporters and non-partisans will vote for them, ensuring their re-election.

**<u>PBE 6P:</u>** good newsmakers mix, non-newsmakers send tales iff they are bad:

Necessary conditions:  $(q \ge \varepsilon + B) \land (((\beta_s < 1 - \pi) \land (H > \overline{H}_2)) \lor ((\beta_s > 1 - \pi) \land (H > \overline{H}_4))).$ 

For good newsmakers to mix, it must be that non-partisans mix when seeing a tale. Non-partisans must vote for the incumbent with probability  $r = 1 - \frac{B}{q}$  when seeing a tale, which requires  $q \ge B$ . For non-partisans to be indifferent, good newsmakers must send tales with probability  $t = \frac{H}{\mu}$ , which requires  $\mu \ge H$ . For bad non-newsmakers to prefer sending tales to remaining silent, it must be that their re-election probability when sending red herrings outweights their tale-telling cost. This requires: i)  $q \ge B + \varepsilon$ , and ii) that red herring senders be able to gather a ma-

jority of votes. If non-partisans mix, opponents strictly prefer not voting for the incumbent when seeing a tale. ii) will therefore be satisfied if: a)  $\beta_s < 1 - \pi$  and  $H > \overline{H}_2$ , b)  $\beta_s > 1 - \pi$  and  $H > \overline{H}_4$ .

**<u>PBE 7P:</u>** newsmakers always send tales, bad non-newsmakers mix:

**Necessary conditions:** 

 $(\mu \leq H) \land (q \in [\varepsilon, \varepsilon + B]) \land \left( \left( (\beta_s < 1 - \pi) \land (\beta_o > \bar{\beta}_o) \land (H > \bar{H}_2) \right) \lor \left( (\beta_s > 1 - \pi) \land (\beta_o > \bar{\beta}_o) \land (H > \bar{H}_2) \right) \right) (\text{(}\beta_s > 1 - \pi) \land (\beta_o < \bar{\beta}_o) \land (H > \bar{H}_1) \right) \lor ((\beta_s > 1 - \pi) \land (\beta_o < \bar{\beta}_o) \land (H > \bar{H}_1)) \lor ((\beta_s > 1 - \pi) \land (\beta_o < \bar{\beta}_o) \land (H > \bar{H}_3))) (\text{opponents mix})$ 

For bad non-newsmakers to mix, it must be that the tie-breaking group (nonpartisans or opponents) mixes when seeing a tale. This group must therefore be indifferent between voting for the incumbent or his opponent when seeing a tale. Given the incumbent's strategy, non-partisans will be indifferent if bad non-newsmakers send tales with probability  $s = \frac{\mu(1-H)}{(1-\mu)H}$ , which requires  $\mu \leq H$ . Opponents will be indifferent if bad non-newsmakers send tales with probability  $s = \varepsilon \frac{\mu}{(1-\mu)\pi H} (\pi(1-H) - \frac{\beta_o}{1-\pi+\beta_o})$ , which requires  $\beta_o \in [\underline{\beta}_o, \overline{\beta}_o]$ . For bad non-newsmakers to mix, it must be that: i)  $q \geq \varepsilon$  and ii) that red herring senders be able to gather a majority of votes. ii) will be satisfied if: a)  $\beta_s < 1 - \pi$ ,  $\beta_o < \overline{\beta}_o$  and  $H > \overline{H}_1$  (opponents mix), b)  $\beta_s < 1 - \pi$ ,  $\beta_o > \overline{\beta}_o$  and  $H > \overline{H}_2$  (non-partisans mix), c)  $\beta_s > 1 - \pi$ ,  $\beta_o < \overline{\beta}_o$  and  $H > \overline{H}_3$ (opponents mix), d)  $\beta_s > 1 - \pi$ ,  $\beta_o > \overline{\beta}_o$  and  $H > \overline{H}_4$  (non-partisans mix). For good newsmakers to prefer sending tales, it must be that either: opponents rather than non-partisans mix (see a) and c)), ensuring good newsmakers' re-election as they do not need the opponent vote, or  $q \leq B + \varepsilon$ . When non-partisans mix, I denote this PBE 7P1 ; when opponents mix, I denote it PBE 7P2.

**PBE 8P:** good newsmakers mix while bad non-newsmakers mix:

Necessary conditions:  $(q = \varepsilon + B) \land (((\beta_s < 1 - \pi) \land (H > \overline{H}_2)) \lor ((\beta_s > 1 - \pi) \land (H > \overline{H}_$ 

 $(H > \overline{H}_4)))$ 

For good newsmakers to mix, it must be that non-partisans mix when seeing a tale, voting for the incumbent with probability  $r = 1 - \frac{B}{q}$ . For bad non-newsmakers to be indifferent, it must therefore be the case that: i)  $q = B + \varepsilon$ , and ii) that red herring senders be able to gather a majority of votes. ii) will be satisfied if: a)  $\beta_s < 1 - \pi$  and  $H > \overline{H}_2$ , b)  $\beta_s > 1 - \pi$  and  $H > \overline{H}_4$ .

This PBE is mentioned for completeness. However, it only exists for a hyperplane in the parameter space and is therefore omitted in the remaining analysis.

#### 8.5 Attention-Seeker Specification

One might argue that certain "newsmakers" may be better interpreted as "attentionseekers" who derive a benefit from their tale being picked-up by the media rather than from tale-telling itself. I show that the discipline effect of media attention to tales evidenced in Proposition 3 is robust to this alternative modelling assumption.

#### **Assumptions:**

Attention-seekers are assumed to incur the same tale-telling cost  $\varepsilon$  as "nonattention-seekers" but to additionally earn a payoff  $B > \varepsilon$  when their tale is detected by the media ( $T \in S_m$ ). Formally, the only change to the baseline model is that "newsmakers" are replaced by "attention-seekers" with the following payoff function:

$$U_i(T_i|i = attention - seeker) = V + BT_i \mathbb{1}\{T \in S_m\} - \varepsilon T_i$$
(3)

#### **Results:**

To characterize the equilibria under this alternative specification, note the following: only newsmakers' (now relabelled "attention-seekers") incentive compability conditions change. As a result, Lemmas 1.1 and 1.3 still hold but Lemma 1.2 no longer holds (if *q* is very small such that  $qB < \varepsilon$ , bad attention-seekers may refrain tale-telling). To rule out unfeasible candidate PBEs as done in Section 4, Lemma 1.2 can however be replaced by the two weaker conditions in Lemma A.8.5.2.b) and Lemma A.8.5.2.c):

#### Lemma A.8.5 (attention-seeker analogue of Lemma 1): In any PBE:

- 1. Good non-attention-seekers do not engage in tale-telling:  $Pr(T_i = 1 | i = good non attention seeker) = 0$
- 2. b) Bad attention-seekers engage in tale-telling weakly more frequently than good attention-seekers:  $Pr(T_i = 1|i = bad attention seeker) \ge Pr(T_i = 1|i = good non attention seeker)$

c) Conditional on quality, attention-seekers engage in tale-telling weakly more frequently than non-attention-seekers:  $Pr(T_i = 1 | i = attention - seeker, quality) \ge Pr(T_i = 1 | i = non - attention - seeker, quality) \forall quality \in \{good, bad\}$ 

3. If good attention-seekers do not engage in tale-telling, bad non-attention-seekers do not engage in tale-telling:  $Pr(T_i = 1 | i = good attention - seeker) = 0 \Rightarrow Pr(T_i = 1 | i = bad non - attention - seeker) = 0$ 

#### **Proof:**

#### Part 2.b)

Denote  $r = Pr(V = 1 | S_v = T)$  the probability with which the voter re-elects the incumbent upon seeing a tale.

Like in the proof of Lemma 1, seeing the generic story indicates that the incumbent is good, so the voter re-elects the incumbent if she sees the generic story. Therefore, good attention-seekers will strictly prefer engaging in tale-telling iff:  $1-q+q(B+r)-\varepsilon > 1 \Leftrightarrow q(B+r-1) > \varepsilon$ .

Since  $S_v = S \Rightarrow V = 0$ , bad attention-seekers will strictly prefer engaging in taletelling iff:  $q(B+rH) - \varepsilon > 0 \Leftrightarrow q(B+r) > \varepsilon$ .

Since q(B+rH) > q(B+r-1), it follows that, in any PBE, attention-seekers must engage in tale-telling weakly more often when bad.

#### Part 2.c):

Conditional on quality, an attention-seeker's expected payoff from engaging in taletelling is equal to a non-attention-seeker's payoff from engaging in tale-telling plus qB > 0 ( $\mathbf{E}(U_i(T_i = 1|i = attention - seeker, quality)) = \mathbf{E}(U_i(T_i = 1|i = non - attention - seeker, quality)) + qB)$ , while their expected payoffs from remaining silent are identical ( $\mathbf{E}(U_i(T_i = 0|i = attention - seeker, quality)) = \mathbf{E}(U_i(T_i = 0|i = non - attention - seeker, quality)))$ . It follows that, in any PBE, attention-seekers engage in tale-telling weakly more often than non-attention-seekers conditional on quality.

Lemma A.8.5 is accordingly used to rule out unfeasible PBEs (see Appendix Table 12) before characterizing the remaining equilibria using the steps detailed in

Section 4 and ordering the resulting equilibria along different values of q.

#### **Equilibrium Characterization:**

In the following proofs, *r* denotes the probability with which the voter re-elects the incumbent upon seeing a tale, i.e.  $r = Pr(V = 1|S_v = T)$ . The proofs further make use of the facts that:  $Pr(V = 1|S_v = G) = 1$  and  $Pr(V = 1|S_v = S) = 0$ .

**<u>PBE 1A:</u>** The incumbent never engages in tale-telling, the voter re-elects him iff she sees the generic story.

#### Necessary conditions: $q \leq \frac{\varepsilon}{R}$

This is a PBE iff  $q \leq \frac{\varepsilon}{B}$ . It can be supported by an off-path belief that the incumbent is bad if the voter sees a tale. Given this belief, r = 0. Indeed, bad attention-seekers prefer remaining silent rather than engaging in tale-telling iff  $rqH + (1 - qH)Pr(V = 1|S_v = S) + qB - \varepsilon \leq Pr(V = 1|S_v = S) \Leftrightarrow q \leq \frac{\varepsilon}{B}$ . Given Lemmas A.8.5. 2b and 3, if bad attention-seekers prefer remaining silent, the incumbent will always prefer remaining silent.

**<u>PBE 2A:</u>** The incumbent engages in tale-telling iff he is an attention-seeker. The voter re-elects him unless she sees a scandal.

#### Necessary conditions: $q \in \left[\frac{\varepsilon}{B}, \frac{\varepsilon}{H}\right]$

The voter's problem is unaffected by the specification change, hence, r = 1. Since the voter's strategy is unchanged, non-attention-seekers' problem is similarly unaffected by the specification change, hence  $q \leq \frac{\varepsilon}{H}$  is necessary. Good attentionseekers prefer engaging in tale-telling iff  $qr + (1-q)Pr(V = 1|S_v = G) + qB - \varepsilon \geq$  $Pr(V = 1|S_v = G) \Leftrightarrow q \geq \frac{\varepsilon}{B}$ . From Lemma A.8.5.2b, it follows that, if good attentionseekers prefer engaging in tale-telling, so do bad attention-seekers.

PBE 3A: The incumbent engages in tale-telling iff he is a bad attention-seeker.

The voter only re-elects him when she sees the generic story.

## **Necessary conditions:** $(q \ge \frac{\varepsilon}{B}) \land ((B \le 1) \lor (q \le \frac{\varepsilon}{B-1}))$

The voter and non-attention-seeker's problems are unaffected by the specification change. Hence, r = 0 and, given the voter's strategy, non-attention-seekers strictly prefer remaining silent. Good attention-seekers prefer remaining silent iff  $(1-q)Pr(V = 1|S_v = G) + qr + qB - \varepsilon \le Pr(V = 1|S_v = G) \Leftrightarrow q(B-1) \le \varepsilon$ . This will be satisfied iff  $B \le 1$  or  $q \le \frac{\varepsilon}{B-1}$ . Bad attention-seekers prefer engaging in tale-telling iff  $qB - \varepsilon \ge 0 \Leftrightarrow q \ge \frac{\varepsilon}{B}$ .

**<u>PBE 4A</u>**: The incumbent mixes (engages in tale-telling with probability  $s \in [0,1]$ ) if he is a bad attention-seeker, remains silent otherwise. The voter re-elects him iff she sees the generic story.

#### Necessary conditions: $q = \frac{\varepsilon}{R}$

Given the incumbent's strategy, upon seeing a tale, the voter learns that the incumbent is bad, hence r = 0. Given the voter's strategy, a bad attention-seeker is indifferent between engaging in tale-telling or remaining silent iff  $rqH + (1 - qH)Pr(V = 1|S_v = S) + qB - \varepsilon = Pr(V = 1|S_v = S) \Leftrightarrow q = \frac{\varepsilon}{B}$ . From Lemma A.8.5.2b, good attention-seekers therefore strictly prefer remaining silent. From Lemma A.8.5.3, bad non-attention-seekers strictly prefer remaining silent.

# This PBE is mentioned for completeness. However, it only exists for a hyperplane in the parameter space and is therefore omitted from Appendix Table 13. ■

**PBEs 5A, 7A, 9A:** good attention-seekers mix, bad attention-seekers engage in tale-telling ; what bad non-attention-seekers do depends on the parameters. The voter mixes (re-electing the incumbent with probability  $r = 1 + \frac{\varepsilon}{q} - B$ ) upon seeing a tale.

**Necessary conditions:** 

•  $(q \ge \frac{\varepsilon}{B}) \land \left( \left( (B \ge 1) \land (q \le \frac{\varepsilon}{B-1}) \right) \lor \left( (B \le 1) \land (q \le \varepsilon \frac{1-H}{H(1-B)}) \right) \right)$  (with bad non-

attention-seekers remaining silent)

- $(\mu \ge H) \land (B < 1) \land (q \ge max \left\{ \frac{\varepsilon}{B}, \varepsilon_{\frac{1-H}{H(1-B)}} \right\})$  (with bad non-attention-seekers engaging in tale-telling)
- $(B < 1) \land (q \ge \frac{\varepsilon}{B}) \land (q = \varepsilon \frac{1-H}{H(1-B)})$  (with bad non-attention-seekers mixing)

The voter's problem is unaffected by the specification change, hence,  $t = H \frac{\mu + (1-\mu)s}{\mu}$  (where *t* denotes the tale-telling frequency of good attention-seekers, while *s* denotes the tale-telling frequencty of bad non-attention-seekers) ensures that the voter is indifferent between re-electing or voting the incumbent out upon seeing a tale.

A good attention-seeker is indifferent between engaging in tale-telling or remaining silent iff:  $(1-q)Pr(V = 1|S_v = G) + q(B+r) - \varepsilon = Pr(V = 1|S_v = G) \Leftrightarrow r = 1 + \frac{\varepsilon}{q} - B$ .  $r < 1 \Rightarrow q > \frac{\varepsilon}{B}$  and  $r > 0 \Leftrightarrow$  either B < 1 or  $q < \frac{\varepsilon}{B-1}$ . From Lemma A.8.5.2b, if  $r = 1 + \frac{\varepsilon}{q} - B$ , attention-seekers, being indifferent when good, strictly prefer engaging in tale-telling when bad.

Bad non-attention-seekers strictly prefer remaining silent iff:  $rqH + (1-qH)Pr(V = 1|S_v = S) - \varepsilon < Pr(V = 1|S_v = S) \Leftrightarrow qH(1-B) < \varepsilon(1-H)$ . This is satisfied iff either B > 1 or  $q < \varepsilon \frac{1-H}{H(1-B)}$ .

Hence, iff  $q \ge \frac{\varepsilon}{B}$  and, either  $B \ge 1$  and  $q \le \frac{\varepsilon}{B-1}$ , or  $B \le 1$  and  $q \le \varepsilon \frac{1-H}{H(1-B)}$ , there is a PBE (PBE 5A) where good attention-seekers mix with probability t = H, bad attention-seekers always engage in tale-telling while non-attention-seekers remain silent and the voter always re-elects the incumbent if she sees the generic story, re-elects him with probability  $r = 1 + \frac{\varepsilon}{q} - B$  upon seeing a tale, votes him out otherwise.

Iff  $\mu \ge H$ , B < 1, and  $q \ge max\left\{\frac{\varepsilon}{B}, \varepsilon \frac{1-H}{H(1-B)}\right\}$ , there is a PBE (PBE 7A) where bad incumbents always engage in tale-telling, good attention-seekers mix with probability  $t = \frac{H}{\mu}$ , while good non-attention-seekers remain silent and the voter always re-elects the incumbent if she sees the generic story, re-elects him with probability  $r = 1 + \frac{\varepsilon}{a} - B$  upon seeing a tale, votes him out otherwise.

Iff B < 1,  $q \ge \frac{\varepsilon}{B}$ , and  $q = \varepsilon \frac{1-H}{H(1-B)}$ , there is a PBE (PBE 9A) where bad nonattention-seekers engage in tale-telling with probability  $s \in [0, \frac{\mu(1-H)}{(1-\mu)H}]$ , good nonattention-seekers remain silent, bad attention-seekers always engage in tale-telling, while good attention-seekers mix with probability  $t = H \frac{\mu + (1-\mu)s}{\mu}$  and the voter always re-elects the incumbent if she sees the generic story, re-elects him with probability  $r = 1 + \frac{\varepsilon}{q} - B$  upon seeing a tale, votes him out otherwise. This PBE is only possible for a hyperplane in the parameter space and is therefore omitted in Appendix Table 13.

**<u>PBE 6A</u>**: The incumbent engages in tale-telling if he is an attention-seeker, or if he is a bad non-attention-seeker, but remains silent otherwise. The voter re-elects him unless she sees a scandal.

**Necessary conditions:**  $(q \ge max\{\frac{\varepsilon}{H}, \frac{\varepsilon}{B}\}) \land (\mu \ge H).$ 

The voter's problem is unaffected by the specification change, hence, r = 1 is optimal iff  $\mu \ge H$ . Non-attention-seekers' problem is similarly unaffected by the specification change, hence  $q \ge \frac{\varepsilon}{H}$  is necessary. Good attention-seekers prefer engaging in tale-telling iff  $qr + (1-q)Pr(V = 1|S_v = G) + qB - \varepsilon \ge Pr(V = 1|S_v = G) \Leftrightarrow q \ge \frac{\varepsilon}{B}$ . Lemma A.8.5.2b completes the proof.

**<u>PBE 8A</u>**: The incumbent engages in tale-telling if he is an attention-seeker, mixes (engages in tale-telling with probability  $s = \frac{\mu(1-H)}{(1-\mu)H}$ ) if he is a bad non-attention-seeker, remains silent otherwise. The voter always re-elects him if she sees the generic story, with probability  $r = \frac{\varepsilon}{aH}$  if she sees a tale, votes him out otherwise.

**Necessary conditions:**  $(\mu \le H) \land (q \ge \frac{\varepsilon}{H}) \land ((B > 1) \lor (q \le \varepsilon \frac{1-H}{H(1-B)}))$ 

The voter's problem is unaffected by the specification change, hence,  $s = \frac{\mu(1-H)}{(1-\mu)H}$ ensures that she is indifferent between re-electing the incumbent or voting him out upon seeing a tale if  $\mu \le H$ . Non-attention-seekers' problem is similarly unaffected by the specification change, hence  $r = \frac{\varepsilon}{qH}$  ensures that, when bad, they are indifferent between engaging in tale-telling or remaining silent.  $r \le 1 \Rightarrow q \ge \frac{\varepsilon}{H}$ . Given the voter's strategy, good attention-seekers prefer engaging in tale-telling iff:  $(1-q)Pr(V = 1|S_v = G) + q(r+B) - \varepsilon \ge Pr(V = 1|S_v = G) \Leftrightarrow q(B-1) \ge \frac{\varepsilon(H-1)}{H}$ . This is satisfied iff B > 1 or  $q \le \varepsilon \frac{1-H}{H(1-B)}$ . Lemma A.8.5.2b completes the proof.

Proposition 3-bis shows that the overall U-shaped effect of media attention q on

screening when newsmakers are a minority and *B* is moderate (evidenced in Proposition 3) is preserved if "newsmakers" are replaced by "attention-seekers" who only earn B when their tale is detected by the media.

# **Proposition 3-bis:** (Effect of media attention to tales on red herring and screening in the attention-seeker specification)

When the fraction of attention-seekers is small ( $\mu < H$ ) and their tale-telling benefit intermediate ( $B \in (H, 1 - \frac{\varepsilon(1-H)}{H})$ ): Increasing the media attention to tales qfrom a low baseline initially increases red herring success  $\sigma$  (worsening screening  $\phi$ ) but eventually decreases it (improving screening): when the media attention to tales is high ( $q > \frac{\varepsilon}{H} \frac{1-H}{1-B}$ ), the unique PBE of the game is a no red herring PBE which achieves first-best screening.

**Proof:** See the equilibrium path in Appendix Table 13. ■

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