The Sound of Silence:
Political Accountability and Libel Law

Gabriele Gratton*

UNSW

March 20, 2014

Abstract

This paper explores the role played by press regulation in selecting the information mass media deliver to voters. The focus is on whether press regulation can reduce political corruption and increase voters' welfare. By endogenizing the response of the voters to information from the media, we clarify under which circumstances regulation reduces or increases corruption. We show that punitive laws can reduce political corruption only if the moral hazard problem dominates adverse selection and the punishment is large enough to deter the publication of some well-founded scandals.

Keywords: media and democracy; corruption; defamation; chilling effect.

JEL Classification Numbers: D7, K4.

*School of Economics, Australian School of Business, UNSW Australia (email: g.gratton@unsw.edu.au).
I am grateful to Laurent Bouton, Sambuddha Ghosh, and Andy Newman for their constructive advice. I have also profited from discussions with Aleksandra Balyanova, Alfredo Burlando, Andrea Canidio, Ishita Chatterjee, Ratbek Dzhumashev, Andrew Ellis, Pauline Grosjean, Richard Holden, Hongyi Li, Bart Lipman, Alberto Motta, Dilip Mookherjee, Guillem Riambau Armet and Jesse Shapiro. Thanks to the audiences at Blavatnik School of Government (Oxford), Boston University, Curtin University, University of New South Wales, University of Western Australia, PET10, and LAGV9. Previous versions circulated under the title "The Sound of Silence: Anti-defamation Law and Political Corruption."

1 Introduction

Mass media report to voters about their politicians. But how can the voters tell whether these reports are true? In this paper we explore the role played by press regulation in selecting which cases are reported. The question is whether punitive regulations can increase voters' welfare. For the sake of simplicity, we focus on the publication of political corruption scandal; we call "market profits" the incentives towards publication and "libel laws" the punitive incentives against publication.

Let us begin with a simple story. An editor of a newspaper receives a source in her office. The source reports of a corruption scandal about a politician. He brings some appealing but inconclusive evidence. The editor does not know whether the scandal is true, but she knows how reliable the source is. Before running the story on her newspaper, the editor will compare the increase in sales generated by the scandal with the possible consequences of publishing libel. Thus, libel laws affect which scandals are ultimately published.

Libel law provisions vary greatly even among western democracies or among different jurisdictions in the same country. For example, libel is a criminal offense in Italy and in 17 US states, but not in the remaining 33. Government officials are protected by specific provisions in France; they are less protected than non-public figures in the US.[1] Our model provides a rationale for such variance.

We study a simple theoretical framework in which an incumbent politician chooses a level of corruption. A newspaper observes a corruption scandal and chooses whether to publish it. Voters read the newspaper and choose whether to re-elect the incumbent politician or to replace her with a new one. Crucially, the problem for the voters is two-fold: they want both to monitor corruption (moral hazard) and to select honest politicians (adverse selection).

[1] OSCE (2005). See Section 5 for more details on the US jurisprudence of public figures.

The newspaper observes scandals of different quality and size. *Reliable scandals* are more likely to be defended in a libel trial and are larger when the politician is more corrupt. *Unreliable scandals* are less likely to be defended in a trial and their size is independent from actual corruption. We ask what libel laws increase voters' welfare. We find that a libel law can improve voters' welfare only if (i) moral hazard is the dominant problem; (ii) the punishment for the defamer is large enough to deter the publication of some reliable scandals; and (iii) the law deters only the publication of *small* scandals.

To see this, note that at the time of the election voters focus only on selecting honest politicians for the future. Thus, they choose to re-elect only if they see no scandal. Yet, if the moral hazard problem is dominant, voters would ex ante prefer to commit to forgive some smaller scandals. By hiding smaller scandals from the voters, the law effectively solves the voters' time inconsistency problem. In order to provide the right incentives to the politician, the law must affect the publication of scandals that are correlated with actual corruption. Thus, the law is effective only if it deters the publication of some reliable scandals.

An alternative perspective is that social norms evolve over time so that voters are effectively committed to an optimal re-election rule. We explore this scenario and find that a libel law can improve voters' welfare by promising a compensation to the politician when the newspaper is punished for defamation. In contrast with the no-commitment case, here an optimal law deters only the publication of large scandals. In equilibrium, voters correctly interpret the lack of scandals as evidence of large-scale corruption. Thus, if they see no scandal, they replace the politician. The politician avoids very serious scandals because these would *not* be revealed. If no scandal is revealed, the politician has no chance of being compensated for defamation. It follows that a libel law can improve the expected payoff of the voters only if four conditions are simultaneously met: (i) moral hazard is the dominant problem; (ii) the punishment for the defamer is large enough to deter the publication of *reliable* scandals; (iii) the law deters only the publication of *large*

scandals; (iv) voters can replace the politician when the newspaper publishes no scandals.

In this case, the efficacy of libel laws hinges on whether these conditions are met in reality. It is licit to imagine that, for legal or customary reasons, voters keep a politician when there is no allegation against her. For example, the president of the United States can be impeached by the Congress. Although the Supreme Court has historically defended the independence of Congress's decisions to impeach presidents,[2] it is hard to imagine a president being impeached because of 'lack of evidence.' Imposing this restriction on voters' behavior delivers a further result. If voters can let small scandals go (because this is a social norm of behavior), but never regard a lack of scandals as indicative of large-scale corruption, then free press is optimal: libel laws can only increase corruption.

Two conclusions that we can draw from both models challenge some common beliefs regarding media regulation. First, libel laws can be beneficial only if they generate some *chilling effect* (see, for example, Barendt et al., 1997). Even if we could design a law which deters the publication of all and only all unreliable scandals, the law can reduce corruption only if it also deters the publication of some reliable ones. Thus, a libel law designed to increase voters' welfare inevitably violates the media freedom of speech.[3]

Second, the effect of libel laws on corruption depends on the relative importance of the selection and moral hazard problems. If most politicians are prone to be corrupted and have large incentives to remain in office, then the moral hazard problem is dominant and libel laws might reduce corruption. On the contrary, when most politicians are honest and have small incentives to remain in office, a free press performs better in mitigating corruption.[4] This is perhaps the case when *revolving doors* between public and private sectors guarantee a higher outside option for the politicians.

Our conclusions underpin why the effect of libel laws on corruption is hard to identify.

[2]See United States v. Nixon, 418 U.S. 683 (1974).

[3]See also Section 5.

[4]Evidence from Italian local elections in Drago, Nannicini and Sobbrio (2013) suggests that newspapers play a more relevant role in keeping politicians accountable than in selecting good politicians.

Recent studies (Besley and Prat, 2006; Brunetti and Weder, 2003; Djankov, McLeish, Nenova and Shleifer, 2001; and Suphachalasai, 2005) suggest a causal effect of media ownership, competition, and freedom on a wide range of political outcomes, including *perceived corruption*.[5] Yet, measures of perceived corruption are endogenous to the information voters receive from the media. For example, Stanig (forthcoming) shows that more stringent laws reduce coverage of corruption. This may have differing effects on voters' perception of corruption and on corruption itself.

The theoretical literature on the effects of libel laws has so far overlooked the issue of how voters interpret the information in the media. Our model is closest to the ones in Garoupa (1999a,b), where a politician chooses whether to be corrupt or honest and a media firm chooses whether to report corruption or honesty. The politician is assumed to suffer a loss if and only if she has been accused. Our results show that this is not always voters' optimal reaction. By endogenizing the response of the voters to the information in the media, we provide a theoretical framework to disentangle the effects of media regulation on perceived and actual corruption, thus clarifying under which circumstances regulation reduces or increases corruption.

A vast literature[6] in recent years has explored the role played by mass media in the political agency problem. Besley and Prat (2006) study a model of political agency when the government can bribe the media, therefore limiting the latter's ability to transfer information to the electorate. Both their model and our draw from the vast principal-agent-supervisor literature (for example, Antle, 1984; Tirole, 1986; Kofman and Lawarree, 1993). Most of this research focuses on the nature of contracts capable of deterring collusion between the agent and the supervisor against the interests of the principal. In contrast, we

[5]Perceived corruption is measured by surveys which ask about expectations and beliefs about corruption. By contrast, experienced corruption refers to surveys which ask about recollections of past experience of corruption. The results of Freille et al. (2007) suggests that laws and regulations have a lesser impact on corruption than other components of press freedom.

[6]Besides the works mentioned in the text, other examples include Besley and Burgess (2002) and Ferraz and Finan (2008). A recent review of this literature can be found in Prat and Strömberg (2011); Besley (2006) contains an excellent review of political agency models.

assume that media are independent from the government and focus on the role played by regulations.

The result that hiding some information from the voters can be beneficial is a common theme in the contract theory literature (Holmström and Milgrom, 1991; Dewatripont et al., 1999; Holmström, 1999).[7] In the political economy literature, Prat (2005) and Fox and Van Weelden (2012) show that hiding information on the actions taken by the politician (and their consequences) can be beneficial for the voters when the politician has an incentive to pander—choose the policy the voters believe to be best. Both models focus on the selection of politicians when politicians' only payoff derives from their re-election. To the best of our knowledge, our model is the first to combine moral hazard and adverse selection and provide comparative statics on the effects of press regulation when either problem is dominant.[8]

The remainder of the paper is as follows. Section 2 introduces and discusses the model; Section 3 presents the main results; Section 4 considers optimal re-election rules; Section 5 evaluates our results in light of the prevalent US jurisprudence on defamation of public figures.

2 The Model

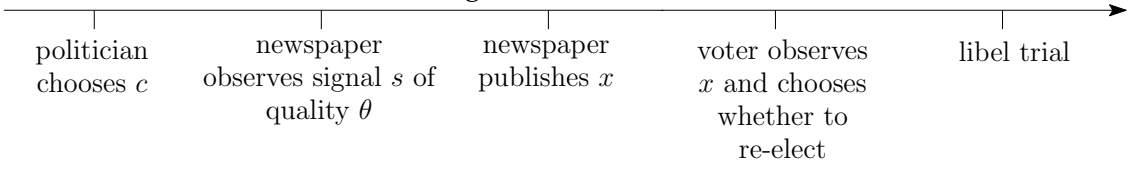
Our aim is to capture the main insights with the simplest model. There are three players: a politician, a newspaper, and a (representative) voter. The politician chooses a level of corruption c. The newspaper observes a signal s of quality θ and chooses whether to publish it. The voter observes the message sent by the newspaper and chooses whether to re-elect the politician. Figure 1 depicts the timing of the model.

We now describe each feature of the model in greater detail. We discuss some key

[7] A similar result is in Goltsman, Hörner, Pavlov and Squintani (2009), who consider optimal mediation rules in a cheap talk game.

[8] It is perhaps worth repeating that information in our setup is (at least partially) hard.

Figure 1: Timeline



aspects of it in Section 2.1.

The Politician The politician chooses a level of corruption c between 0 and 1. The politician is *greedy* with probability μ_0. Otherwise she is *honest*. If she is honest, she always chooses $c = 0$. Otherwise, she maximizes

$$u^P(c) \equiv \gamma c + r \Pr(\text{re-elect} \mid c)$$

where $r > 0$ is the utility of being re-elected and $\Pr(\text{re-elect} \mid c)$ depends on the strategies of the newspaper and the voter. The politician's type is private information.

The Scandals The Newspaper observes a signal s of quality $\theta \in \{R, U\}$. Signals of quality R are reliable; signals of quality U are unreliable. The quality of the signal is private information of the newspaper.

With probability p, the newspaper observe a reliable signal. If the politician is greedy and chooses corruption c, then this signal is $s = c$; if the politician is honest, then the signal is $s = 0$. With probability $1-p$, the newspaper observes an unreliable signal s distributed according to a density function over $[0, 1]$. With some abuse of notation, $\Pr(s \mid U)$ is the probability that an unreliable signal is of size s.[9]

A signal $s > 0$ is a *scandal*; $s = 0$ is *silence*.

[9]Notice that we are assuming that unreliable scandals are unrelated to actual corruption. In principle, one might prefer $\Pr(s \mid U)$ to have a small mass at $s = c$ so that the newspaper actually entertains the doubt that the scandal might be true. Such an assumption would have no qualitative impact on our results and we prefer simplicity over realism.

The Newspaper The newspaper publishes a message $x \in [0,1]$. The newspaper can only publish a scandal it observes. To be precise, if $s > 0$, the newspaper can publish $x = s$ or $x = 0$; otherwise, $x = s = 0$. The payoff of the newspaper is given by

$$u^N(x, \theta) \equiv \pi(x) - \rho(x) \Pr(\text{punish} \mid x, \theta)$$

where $\pi : [0,1] \to \mathbb{R}_{++}$ is the profits from the publication, $\rho : [0,1] \to \mathbb{R}_{+}$ is a punishment function, and $\Pr(\text{punish} \mid x, \theta)$ is the probability the newspaper is punished for libel when publishing x and the signal is of quality θ. We assume that publishing a scandal increases the profits of the newspaper: $\pi(x) > \pi(0)$ for all $x > 0$. Note that we allow for—but do not restrict to—positive expected punishment for the publication of reliable scandals, i.e. $\Pr(\text{punish} \mid x, R) \lesseqgtr 0$ for $x > 0$.

The Law A libel law is a pair $(\rho, \Pr(\text{punish} \mid \cdot))$ defining the expected punishment for publishing a message x of quality θ: $\rho(x) \Pr(\text{punish} \mid x, \theta)$. We say that such a law *deters the publication* of message x of quality θ if the expected punishment is at least as large as the profits $\pi(x)$.

Unreliable scandals are more likely to be punished than reliable ones: for all $x > 0$, $\Pr(\text{punish} \mid x, U) > \Pr(\text{punish} \mid x, R) \geq 0$. The newspaper is never punished if it publishes silence: $\Pr(\text{punish} \mid 0, \theta) = 0$ for all qualities θ.

The Voter The voter observes the publication of the newspaper and chooses whether to re-elect the politician. His payoff is given by

$$u^V(c, \mu) \equiv -(c + \mu)$$

where c is the level of corruption chosen by the politician and μ is the probability that the next period politician is greedy. We assume that if the politician is not re-

elected, then $\mu = \mu_0$.[10] Thus

$$\mu \equiv \mu_0 \left[1 - (1 - \mu_0) \left(\Pr\left(\text{re-elect} \mid h\right) - \Pr\left(\text{re-elect} \mid g\right)\right)\right].$$

We characterize the set of perfect Bayesian equilibria. We focus on the case when a greedy politician prefers maximum corruption $c = 1$ to re-election with probability $p < 1$.

Assumption 1. $\gamma > rp$.

Whenever Assumption 1 is violated, if no scandal is deterred, there exists an equilibrium where all politicians choose $c = 0$. Thus, no libel law can improve the voter's welfare or reduce corruption.

2.1 Discussion of the Model

A crucial feature of the model is that the voter cannot wait for the result of the libel trial to choose whether to re-elect the politician. This assumption catches a fundamental problem of political agency: the voter needs to use the information provided by the media before this can be verified in a courtroom. Indeed, in the sample collected by Welch and Hibbing (1997), 67% of politicians charged with corruption scandals in the media faced no formal investigation by the time of the election. Welch and Hibbing (1997) find that, "if anything, the charges that are not accompanied by formal action are more damaging" for the politicians.

We assume that publishing a scandal always increases profits. That is, in the absence of any punitive law, the newspaper publishes all scandals. We also allow for a positive expected punishment for the publication of reliable scandals. We this allow for any combination of positive and negative incentives for the publication of any scandal, with the

[10] This is the reduced form of a two-period model where (i) the second period politician is not up for re-election (and thus chooses whatever she prefers) and (ii) if the first period politician is not re-elected, a new politician is drawn from an identical pool (see, for example, Besley and Prat, 2006).

only restriction that a completely free newspaper will publish all scandals. Thus, our question is not whether existing libel laws can increase voters' welfare, but whether it is in principle possible to design laws that increase voters' welfare. We defer real-life—and constitutional laws—implications to Section 5.

When the expected punishment for the publication of reliable scandals is positive, the newspaper observes scandals, but it is unsure of whether it will be punished for defamation if it publishes them. A possible interpretation is that this feature of the model captures the newspaper's uncertainty about the reliability of its sources. Alternatively, one might think of reliable scandals as true and unreliable scandals as false. In this case, the assumption that reliable scandals are punished with positive probability captures mistakes in the justice systems.

As mentioned in Footnote 9 above, the assumption that unreliable scandals are not equal to the actual corruption with some small positive mass simplifies the model without changing any qualitative result. Of course, the model should realistically be interpreted *as if* the newspaper believes that the unreliable scandals are actually true with some positive probability.

The newspaper can choose whether to publish the scandal it observes, but it cannot create (or modify) a scandal.[11] We see this as a realistic feature of the model. Reporters construct stories regarding politicians that cannot be proven in court or are plainly false. Nonetheless, these stories are based on some factual (though inconclusive) evidence that is misinterpreted, misreported, or slanted. Thus, reporters cannot construct *any* story, but are limited to the hard information they can obtain.

In our model, there is only one newspaper. Arguably, competition among multiple outlets induces mass media to publish only reliable scandals.[12] We focus on a monopolistic scenario to stress that even in this case, the scope for a libel law is limited. Furthermore,

[11] See, for example, Besley and Prat (2006) for a similar assumption.

[12] To some extent, the punishment function in our model also captures reputational losses for the newspaper when it defames a politicians.

if political libel persists when there are multiple competing outlets, our model is sufficient to highlight the channels through which the law affects the political agency problem.

3 Time Inconsistency and Libel Laws

We first characterize the equilibrium when there is no libel law—that is, when the newspaper only has incentives towards the publication of all scandals.

Proposition 1. *When there is no libel law, greedy politicians choose $c = 1$, the newspaper publishes all scandals, and the voter's expected welfare is $-\mu_0 (2 - (1 - \mu_0) p)$.*

Proof. All proofs are in Appendix. □

To give an intuition, we first focus on a simple equilibrium in which the voter re-elects the politician if and only if he observes no scandal. To see why this is an equilibrium, note first that in the absence of any punishment for libel, the newspaper publishes all scandals. Since the voter re-elects only if he sees no scandal, the probability that a greedy politician is re-elected is independent of her level of corruption. Thus, greedy politicians choose to maximize corruption.

At the time of the election, the voter focuses on selecting honest politicians. He reasons that any scandal is at least as likely to be published if the politician is greedy than if she is innocent. Thus, the voter re-elects the politician if and only if he observes no scandal.

It is not difficult to see that there are multiple equilibria in which the voter re-elects with positive probability for some scandals $x \in (0, 1)$. Yet, in all equilibria, greedy politicians choose $c = 1$ with probability 1. Suppose otherwise: for some scandal $x < 1$, the voter re-elects with sufficiently high probability that the politician chooses $c = x$ with positive probability. Then the voter believes that if a scandal equal to x is published, then the politician is greedy with probability strictly greater than μ_0. Thus, the voter would not re-elect if he sees x being published.

Furthermore, in all equilibria,

$$\Pr\left(\text{re-elect} \mid h\right) - \Pr\left(\text{re-elect} \mid g\right) = p$$

implying $u\left(c, \mu\right) = -\mu_0 \left(2 - \left(1 - \mu_0\right) p\right)$.

We turn now to the issue of whether there exist libel laws that can improve the voter's welfare. Proposition 2 says that this is possible under two conditions.

Proposition 2. *A libel law reduces current corruption only if it deters the publication of some relatively small reliable scandals; when moral hazard is the dominant problem, such a law can also increase the voter's welfare. The optimal law deters the publication of reliable scandals of size* $1 - rp/\gamma$ *but not larger.*

As above, we focus on a simple equilibrium in which the voter re-elects the politician if and only if he observes no scandal.

We first explain why current corruption decreases. Let $(\rho, \Pr\left(\text{punish} \mid \cdot\right))$ be a libel law that deters the publication of reliable scandals of size $\bar{s}$ but not larger, with

$$\bar{s} \geq 1 - \frac{rp}{\gamma}. \tag{1}$$

In equilibrium, the politician chooses $c = \bar{s}$; the newspaper publishes (i) all reliable scandals greater than $\bar{s}$ but not equal to it, and (ii) unreliable scandals only if in a set $\mathcal{S} \subseteq [0, 1]$; the voter re-elects the politician if and only if he observes no scandal.

To see why this is the equilibrium, note that the politician is re-elected with higher probability whenever she chooses $c = \bar{s}$ than when she is more corrupted. In particular, $c = \bar{s}$ gives her an expected payoff equal to

$$\underbrace{\gamma \bar{s}}_{\text{payoff from corruption}} + \underbrace{r\left[p + \left(1 - p\right)\left(1 - \Pr\left(\mathcal{S} \mid U\right)\right)\right]}_{\text{expected payoff from re-election}}; \tag{2}$$

$c = 1$ gives her an expected payoff equal to

$$\underbrace{\gamma}_{\text{payoff from corruption}} + \underbrace{r\left[(1-p)\left(1-\Pr\left(\mathcal{S} \mid U\right)\right)\right]}_{\text{expected payoff from re-election}}. \tag{3}$$

Comparing (2) with (3), we note that if the politician reduces her corruption to $c = \bar{s}$, she loses $\gamma\left(1-\bar{s}\right)$ payoff from corruption, but she gains rp because her probability of being re-elected increases by the probability p that the newspaper observes a reliable scandal. Thus, the politician is willing to reduce corruption to $\bar{s}$ whenever (1) is satisfied.

From the discussion above, it is easy to see that $1 - rp/\gamma$ is also the minimum level of corruption attainable. This depends on the marginal rate of substitution between expected re-election rent and corruption rp/γ. The greater the loss rp in expected re-election rent when increasing corruption and the smaller the marginal direct payoff γ of corruption, the greater will the incentive for the politician to limit corruption be.

The decrease in corruption comes at the expense of a loss in the ability of the voter to select honest politicians. In equilibrium, a greedy politician has the same chances to be re-elected as an honest one. Thus, the probability that next-period politician is greedy is equal to the prior probability μ_0. By contrast, in the absence of any libel law, greedy politicians are never re-elected and honest politicians are re-elected with probability p. Thus, next period politician is greedy with probability $\mu_0\left[1 - p\left(1-\mu_0\right)\right] < \mu_0$. It follows that libel laws can increase the voter's welfare only if adverse selection is a minor problem compared to moral hazard: $1 - \mu_0 < r/\gamma$.

Remark 1. Libel laws can decrease the current level of corruption, but can only increase the probability of selecting greedy politicians in the future.

Our results also imply that political turnout—the rate of replacement of politicians—is slower when the media are more regulated, since tougher laws reduce the probability that a scandal is published (both reliable and unreliable).

Remark 2. More stringent laws increase the probability of re-election of all politicians.

In a cross-country sample, Besley and Prat (2006) show some suggestive evidence of this effect.[13]

Notice that when a punitive libel law has a beneficial effect on voters' welfare, it also (i) (at least weakly) increases the expected payoff of greedy politicians and (ii) increases the probability of re-election of honest politicians (see Remark 2).

Remark 3. If honest politicians are office-motivated, then a libel law that increases voters' welfare is Pareto improving.

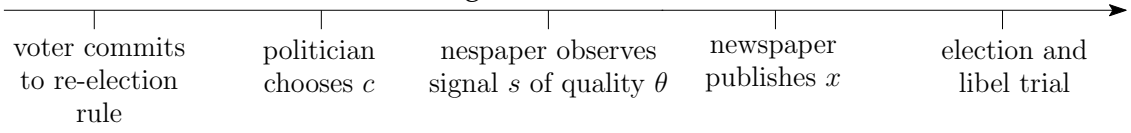
The following section studies the set of equilibria when the voter can commit to an optimal re-election rule. If there is no libel law, when adverse selection is a minor problem, the optimal re-election rule re-elects the politician whenever the voter sees a scandal equal to $1 - rp/\gamma$. In equilibrium, the politician chooses $c = 1 - rp/\gamma$ and the next period politician is greedy with probability μ_0. Intuitively, if the voter can commit to a re-election rule, he prefers to promise the politician that he will forgive some smaller scandals. This gives greedy politicians a sufficient incentive to limit corruption. By contrast, when the voter cannot commit, the politician knows that at the time of the election the voter will focus only on selecting honest politicians. Thus, in the absence of any libel law, there is no incentive for greedy politicians to limit their corruption. A libel law that deters the publication of small reliable scandals solves this time inconsistency problem for the voter.

4 Optimal Re-election Rule

This section explores the optimal re-election rule the voter would choose to commit to ex-ante. A re-election rule is a contract specifying a probability of relection for each possible

[13]See additional material available at http://econ.lse.ac.uk/staff/prat/papers/mediafigures.pdf (last accessed March 20, 2013).

Figure 2: Timeline



message published by the newspaper.

The timing of the model is modified as in Figure 2. We introduce a compensation $\delta \in [0, r]$ the politician receives if the newspaper is punished.[14] Thus, a greedy politician maximizes

$$u^P(c) \equiv \gamma c + r \Pr(\text{re-elect} \mid c) + \delta \Pr(\text{punish} \mid c).$$

For simplicity, we assume that the probability that any reliable scandal is punished is a constant Π.

Assumption 2. *For all $s \in [0, 1]$, $\Pr(\textit{punish} \mid s, R) \equiv \Pi \in (0, 1)$.*

Our solution concept is perfect Bayesian equilibrium.

We begin by establishing the optimal re-election rule when there is no libel law.

Proposition 3. *Assume there is no libel law. If moral hazard is dominant, the optimal rule re-elects the politician with probability 1 when a scandal of size $1 - rp/\gamma$, but no larger, is published. A greedy politician chooses $c = 1 - rp/\gamma$. If adverse selection is dominant, the optimal rule never re-elects the politician when a scandal is published. A greedy politician chooses $c = 1$.*

To see why this is the optimal re-election rule, recall that in the absence of a libel law, the newspaper publishes all scandals. When moral hazard is the dominant problem, the voter focuses on inducing greedy politicians to choose a low level of corruption. If scandals of size $1 - rp/\gamma$ are forgiven by the voter, then a greedy politician is willing to choose that level of corruption since the expected increase in the probability of being re-elected compensates the loss in corruption. Note that this implies that an optimal customary rule

[14] We avoid introducing such compensation in Section 2 as it has no qualitative effect when the voter cannot commit to a re-election rule.

for voters is to accept that some corruption is structural to the political process and systematically forgive it. This is consistent with the evidence that different scandals have differing effects on voters' support of politicians (Welch and Hibbing, 1997).

When adverse selection is dominant, the voter focuses on selecting honest politicians. Since greedy politicians are more likely to produce scandals, the voter commits to re-elect the politician only if there is no scandal.

We turn now to the issue of whether there exist libel laws that can improve the voter's welfare. Proposition 4 says that this is possible under three conditions. The libel law which improves the voter's welfare is somewhat counterintuitive, as it deters the publication of large reliable scandals. We should note that this result relies on the second condition, which we discuss later.

Proposition 4. *A libel law increases the voter's welfare only if (i) it deters the publication of some relatively large reliable scandals, (ii) the re-election rule does* not *re-elect the politician when the newspaper publishes* no *scandal, and (iii) moral hazard is the dominant problem.*

To fix ideas, we describe the equilibrium under one optimal libel law. This law deters the publication of (i) reliable scandals if and only if strictly greater than

$$\bar{s} = 1 - \frac{p\left(r + \delta\Pi\right)}{\gamma}$$

and (ii) all the unreliable scandals not in some $\mathcal{S} \subseteq [0, 1]$. Under such law, if moral hazard is dominant, one optimal re-election rule prescribes re-election with probability 1 if the newspaper publishes a scandal not greater than $\bar{s}$; otherwise, re-election with probability 0 (including when the newspaper publishes no scandal).

In equilibrium, the politician chooses a level of corruption $c = \bar{s}$; the newspaper publishes all reliable scandals less or equal to $\bar{s}$ and unreliable scandals in $\mathcal{S}$. To see why this is the equilibrium, note that the politician is re-elected with higher probability whenever she chooses $c = \bar{s}$ than when she is more corrupt. In particular, $c = \bar{s}$ gives her an

expected payoff equal to

$$\gamma\bar{s} + r\left[p + (1-p)\left(1 - \Pr\left(\mathcal{S} \mid U\right)\right)\right] + \delta\left[p\Pi + (1-p)\,\Xi\left(\mathcal{S}\right)\right]$$

where $\Xi\left(\mathcal{S}\right)$ is the total expected compensation from unreliable scandals:

$$\Xi\left(\mathcal{S}\right) \equiv \int_{\mathcal{S}} \Pr\left(\text{punish} \mid s, U\right) \Pr\left(s \mid U\right) ds.$$

Choosing $c > \bar{s}$, gives the politician an expected payoff equal to

$$\gamma c + r\left[(1-p)\left(1 - \Pr\left(\mathcal{S} \mid U\right)\right)\right] + \delta\left(1-p\right)\Xi\left(\mathcal{S}\right).$$

Note that there is a loss in expected re-election equal to rp and a loss in expected compensation equal to $\delta p\Pi$. The reason is that higher corruption leads the newspaper to conceal reliable scandals. Since the voter does not re-elect if there is no scandal, the politician's chances of re-election decrease by the probability p of a reliable scandal. Similarly, since the newspaper cannot be punished for libel if it does not publish a scandal, the politician's chances of compensation decrease by $p\Pi$. Thus, the politician prefers $c = \bar{s}$ to $c > \bar{s}$ if the increase in expected rent from re-election and compensation $p\left(r + \delta\Pi\right)$ is larger than the loss in corruption $\gamma\left(1 - \bar{s}\right)$. The law is therefore optimal, as this condition is just binding.

One might argue that compensations to victims of libel are usually low *vis-à-vis* other factors that motivate politicians. For example, Irish Prime Minister Albert Reynolds was awarded only 1 penny despite having lost his post.[15] Yet, British MP Jeffrey Archer infamously received £500,000 when he sued the Daily Star in 1987. Furthermore, local officers are often awarded large damages if compared to their yearly salary. For example, a senior municipal official in a suburb of Toronto, Ontario was awarded $780,000 plus interest in

[15]See Garoupa (1999b) and *Reynolds v. Times Newspapers Ltd and Others*, House of Lords, 28 October 1999, for a complete report on the case.

a case of corruption libel.[16] Similarly, the Chairman of the Capital Regional District in British Columbia was awarded $285,000 in another case.[17]

Proposition 4 relies on the ability of the voter to commit not to re-elect the politician when no scandal has been published. The efficacy of libel laws hinges therefore on whether this condition is met in reality. Proposition 5 (below) says that if the voter re-elects the politician when the newspaper publishes no scandal, libel laws can only reduce the voters' expected payoff and increase the level of corruption. Thus, if voters can customarily let go small scandals, but re-elect the politician when there is no scandal, then a free press is optimal.

Proposition 5. *If the re-election rule re-elects the politician when the newspaper publishes no scandal, then any libel law is either ineffective or it induces more corruption and lower welfare for the voters than a completely free press.*

5 Conclusions

We have suggested a framework to study the effects of libel laws on the political agency problem. By endogenizing the response of the voters to the information in the media, we identified the conditions under which such laws can reduce political corruption. We argue that these conditions are quite stringent. Indeed, they require that monitoring politicians' behavior is a more important issue than selecting honest politicians. Furthermore, if voters are (i) capable of forgiving some smaller scandals and (ii) not capable of punishing the politician when there is no scandal at all, then any libel law can only increase political corruption. Furthermore, any law that reduces corruption must be designed to create some chilling effect, thus fundamentally violating the press freedom of speech.

Taken literally, this statement justifies a *laissez-faire* media policy, under which media

[16] See *Hodgson v. Canadian Newspapers Co., 49 O.R. (3D) 161 Ont. C.A. (2000).*
[17] See *Clark v. East Sooke Rural Association et al., B.C.S.C. 1120 (2004).*

are free to publish evidence of stories even when they have reasons to doubt their veracity. In this sense, the results presented here constitute a rationale for the distinction between *negligence* and *actual malice* drawn in U.S. Supreme Court ruling *New York Times Co. v. Sullivan*, 376 U.S. 254 (1964). The Supreme Court decision on this case held that all statements about the conduct of public officials, even those that can be proven to be false, are protected under the First Amendment guarantee of the freedom of the press. The case for libel exists only if the plaintiff can prove that the defendant's statements are made with *actual malice*, that is, "with knowledge that they are false or in reckless disregard of their truth or falsity" (p. 280). The Court also made explicit that actual malice is different from bad motive or ill will (*common-law malice*).[18] For the Supreme Court, indeed, "erroneous statement is inevitable in free debate, and [...] it must be protected" (p. 271).

Citing the opinion by Justice Burch (78 Kan., at 724, 98 P. at 286):

> It is of the utmost consequence that the people should discuss the character and qualifications of candidates for their suffrages. The importance to the state and to society of such discussions is so vast, and the advantages derived are so great, that they more than counterbalance the inconvenience of private persons whose conduct may be involved, and occasional injury to the reputations of individuals must yield to the public welfare, although at times such injury may be great. The public benefit from publicity is so great, and the chance of injury to private character so small, that such discussion must be privileged.

The Alabama law provision, judged as unconstitutional by the Supreme Court, held that it sufficed to prove the falsity of the accusation for the defendant to be liable. This constituted indeed a threat for the media, which are in most cases unable to know for certain whether the allegation can be proven in court to be true. The Supreme Court held that "a finding of negligence [...] is constitutionally insufficient to show the recklessness that is

[18] *Harte-Hanks Communications, Inc. v. Connaughton*, 491 U.S. 666 (1989)

required for a finding of actual malice" (p. 288).

In our model, the US jurisprudence regarding the defamation of politicians can be summarized as follows. First, if it is possible to prove that the newspaper knew that the scandal was unreliable, then it should be punished to preserve the politician's right of not being defamed. This is in line with our findings. Indeed, such a provision would only decrease the number of unreliable scandals that are published. This does not decrease voters' expected payoff and instead increases the expected payoff of a honest politician, since she is re-elected more often. Second, no punishment should be granted on the sole ground that the statement is false, because this would damage *public welfare*. In particular, it damages voters' ability to select honest politicians.

This paper constitutes a very partial step into the analysis of the link between legal frameworks for the press and the functioning of democratic institutions. Our results highlight the importance of the endogenous response of the voters to allegations made by the press. Nevertheless, we excluded the possibility that a media outlet has a political or personal motivation to ruin the reputation of the politician (see Warren, 2012 for a model where media are biased in favor of the incumbent). Furthermore, media slant might also be demand driven when there is uncertainty about the quality of different outlets. In this case, a bias towards readers' prior beliefs improves the outlet's reputation and future profits (Gentzkow and Shapiro, 2006, 2010). In both cases, the more appropriate question is whether defamatory statement made with *common-law malice*, that is, with the intention of ruining the politician's reputation, should be punished more harshly. Given the impact that such legal provisions have on the functioning of democratic institutions, both questions demand further research.

References

Antle, Rick, "Auditor Independence," *Journal of Accounting Research*, Spring 1984, *22* (1),

1–20.

Barendt, Eric, Laurence Lustgarten, Kenneth Norrie, and Hugh Stephenson, *Libel and the Media: the Chilling Effect*, Oxford University Press, 1997.

Besley, Timothy, *Principled Agents? The Political Economy of Good Government*, Oxford University Press, 2006.

_ **and Andrea Prat**, "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability," *American Economic Review*, June 2006, *96* (3), 720–736.

_ **and Robin Burgess**, "The Political Economy of Government Responsiveness: Theory and Evidence from India," *The Quarterly Journal of Economics*, November 2002, *117* (4), 1415–1451.

Brunetti, Aymo and Beatrice Weder, "A free press is bad news for corruption," *Journal of Public Economics*, 2003, *87* (7-8), 1801–1824.

Dewatripont, Mathias, Ian Jewitt, and Jean Tirole, "The economics of career concerns, Part I: Comparing information structures," *Review of Economic Studies*, 1999, *66* (1), 183–198.

Djankov, Simeon, Caralee McLeish, Tatiana Nenova, and Andrei Shleifer, "Who Owns the Media?," *NBER Working Paper*, 2001, (8288).

Drago, Francesco, Tommaso Nannicini, and Francesco Sobbrio, "Meet the Press: How Voters and Politicians Respond to Newspaper Entry and Exit," *IZA Discussion Paper No. 7169*, 2013.

Ferraz, Claudio and Frederico Finan, "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes," *The Quarterly Journal of Economics*, May 2008, *123* (2), 703–745.

Fox, Justin and Richard Van Weelden, "Costly transparency," *Journal of Public Economics*, 2012, *96*, 142–150.

Freille, Sebastian, M. Emranul Haque, and Richard Kneller, "A contribution to the empirics of press freedom and corruption," *European Journal of Political Economy*, 2007, *23*, 838–862.

Garoupa, Nuno, "Dishonesty and Libel Law: The Economics of the 'Chilling Effect'," *Journal of Institutional and Theoretical Economics*, June 1999, *155* (2), 284–.

_ , "The Economics of Political Dishonesty and Defamation," *International Review of Law and Economics*, June 1999, *19* (2), 167–180.

Gentzkow, Matthew and Jesse M. Shapiro, "Media Bias and Reputation," *Journal of Political Economy*, 2006, *114* (2), 280–316.

_ **and** _ , "What Drives Media Slant? Evidence from U.S. Daily Newspapers," *Econometrica*, 2010, *78*, 35–71.

Goltsman, Maria, Johannes Hörner, Gregory Pavlov, and Francesco Squintani, "Media, arbitration and negotiation," *Journal of Economic Theory*, 2009, *144*, 1397–1420.

Holmström, Bengt, "Managerial incentive problems: A dynamic approach," *Review of Economic Studies*, 1999, *66* (1), 169–182.

_ **and Paul Milgrom**, "Multitask Principal-Agent Analysis: Incentive Contracts, Asset Ownership, and Job Design," *Journal of Law, Economics, & Organization*, 1991, *7*, 24–52.

Kofman, Fred and Jacques Lawarree, "Collusion in Hierarchical Agency," *Econometrica*, May 1993, *61* (3), 629–656.

OSCE, "Libel and Insult Laws: A Matrix on Where We Stand and What We Would Like to Achieve," Technical Report, Organization for Security and Co-operation in Europe, The Representative on Freedom of the Media 2005.

Prat, Andrea, "The wrong type of transparency," *American Economic Review*, 2005, *95*, 862–877.

_ **and David Strömberg**, "The Political Economy of Mass Media," *CEPR Discussion Paper*, 2011, *DP8246.*

Stanig, Piero, "Regulation of Speech and Media Coverage of Corruption: An Empirical Analysis of the Mexican Press," *American Journal of Political Science*, forthcoming.

Suphachalasai, Suphachol, "Bureaucratic Corruption and Mass Media," *Environmental Economy and Policy Research*, 2005, (05.2005).

Tirole, Jean, "Hierarchies and Bureaucracies: On the Role of Collusion in Organizations," *Journal of Law, Economics, & Organization*, Autumn 1986, *2* (2), 181–214.

Warren, Patrick L, "Independent auditors, bias, and political agency," *Journal of Public Economics*, February 2012, *96* (1-2), 78–88.

Welch, Susan and John R Hibbing, "The Effects of Charges of Corruption on Voting Behavior in Congressional Elections, 1982-1990," *The Journal of Politics*, February 1997, *59* (1), 226–239.

A Appendix

A.1 Proof of Proposition 1

Existence We prove existence of a simple equilibrium in which the voter re-elects if and only if he observes no scandal.

Step 1 A greedy politician expects all scandals to be published. Thus, the probability of re-election is independent of c unless $c = 0$. By Assumption 1, she maximizes γc and chooses $c = 1$.

Step 2 The newspaper faces no punishment for libel and by assumption $\pi(x) > \pi(0)$ for all $x > 0$. Thus, it publishes $x = s$.

Step 3 The voter knows all scandals are published. He holds beliefs

$$\Pr(\text{greedy} \mid x) = \begin{cases} \frac{[p+(1-p)\Pr(1|U)]\mu_0}{[p+(1-p)\Pr(1|U)]\mu_0+(1-p)\Pr(1|U)(1-\mu_0)} > \mu_0 & \text{if } x = 1; \\ \mu_0 & \text{if } x \in (0,1); \\ \frac{[(1-p)\Pr(0|U)]\mu_0}{(1-p)\Pr(0|U)\mu_0+[p+(1-p)\Pr(0|U)](1-\mu_0)} < \mu_0 & \text{if } x = 0. \end{cases}$$

Thus, it is a best response to re-elect if and only if he observes $x = 0$.

The expected welfare of the voter is given by $u(c, \mu) = -\mu_0(2 - (1 - \mu_0)p)$ since $\Pr(\text{re-elect} \mid h) - \Pr(\text{re-elect} \mid g) = p$.

Uniqueness First, note that in any equilibrium, either (i) $c < 1$ with positive probability or (ii) the voter holds beliefs as in Step 3.

Suppose (i) and let $c^* < 1$ be chosen with positive probability. Then the voter holds beliefs $\Pr(\text{greedy} \mid c^*) > \mu_0$ and never re-elects if he observes $x = c^*$. But then the politician strictly prefers $c = 1$ to $c = c^*$, reaching a contradiction.

Suppose (ii) and let $\sigma(x)$ be the probability of re-election when the voter observes a scandal $x \in [0, 1]$. Of course $\sigma(0) = 1$ and $\sigma(1) = 0$. (Note that $\sigma(x)$ must be sufficiently low for $x \in (0, 1)$, otherwise the politician would prefer to choose $c = x$, contradicting the previous result.) Thus

$$\begin{aligned} \Pr(\text{re-elect} \mid g) &= (1-p)\int_0^1 \sigma(x)\Pr(s \mid U)\,dx; \\ \Pr(\text{re-elect} \mid h) &= p + (1-p)\int_0^1 \sigma(x)\Pr(s \mid U)\,dx; \\ \Pr(\text{re-elect} \mid h) - \Pr(\text{re-elect} \mid g) &= p \end{aligned}$$

which implies $u(c, \mu) = -\mu_0(2 - (1 - \mu_0)p)$. □

A.2 Proof of Proposition 2

Let $(\rho, \Pr(\text{punish} \mid \cdot))$ be a law which deters the publication of (i) reliable scandals of size $\bar{s}$ but not larger and (ii) unreliable scandals not in $\mathcal{S} \subseteq [0,1]$. Note that this includes (i) all laws which deter any reliable scandals if $\bar{s} \geq 0$ and (ii) all laws which deter only (if at all) unreliable scandals if $\bar{s} < 0$.

Proposition 2 follows directly from Proposition 1 and the following theorem.

Theorem 1.

(i) *If $\bar{s} \geq 1 - rp/\gamma$, the politician chooses $c = \bar{s}$, the newspaper publishes reliable scandals only if larger than $\bar{s}$, and the voter's welfare is $-\mu_0(1+\bar{s})$.*

(ii) *If $\bar{s} < 1 - rp/\gamma$. the politician chooses $c = 1$, the newspaper publishes reliable scandals only if larger than $\bar{s}$, and the voter's welfare is $-\mu_0[2-(1-\mu_0)p]$.*

Proof.

Part (i)

Existence We prove existence of a simple equilibrium in which the voter re-elects if and only if he observes no scandal.

Step 1 A greedy politician expects the voter to re-elect her if and only if he observes no scandal. If the politician chooses c such that the law deters publication of reliable scandals of size c, then her expected payoff is

$$\underbrace{\gamma c}_{\text{payoff from corruption}} + \underbrace{r\left[p + (1-p)\left(1 - \Pr(\mathcal{S} \mid U)\right)\right]}_{\text{expected payoff from re-election}}; \qquad (4)$$

if she chooses c' such that the law does not deter publication of reliable

scandals of size c', her expected payoff is

$$\underbrace{\gamma c'}_{\text{payoff from corruption}} + \underbrace{r\left[(1-p)\left(1-\Pr\left(\mathcal{S} \mid U\right)\right)\right]}_{\text{expected payoff from re-election}} . \quad (5)$$

Thus, the politician prefers the first option to the second if and only if the largest scandal deterred by the law $\bar{s}$ is greater or equal to $1 - rp/\gamma$.

Step 2 The newspaper strictly prefers to publish reliable scandals if they are greater than $\bar{s}$. When it observes a scandal of size $\bar{s}$, it is either indifferent or it strictly prefers to publish $x = 0$.

Step 3 If $\bar{s} \geq 1 - rp/\gamma$, the voter holds beliefs

$$\Pr\left(\text{greedy} \mid x\right) = \begin{cases} \mu_0 & \text{if } x \in \mathcal{S} \setminus \{0\}; \\ \frac{[(1-p)\Pr(0|U)]\mu_0}{(1-p)\Pr(0|U)\mu_0 + [p+(1-p)\Pr(0|U)](1-\mu_0)} < \mu_0 & \text{if } x = 0; \\ \bar{\mu} \geq \mu_0 & \text{if } x \notin \mathcal{S} \cup \{0\}. \end{cases}$$

Thus, it is a best response to re-elect if and only if he observes $x = 0$.

The expected welfare of the voter is given by $-\mu_0\left(1+\bar{s}\right)$ since $c = \bar{s}$ and all politicians are re-elected with probability $1 - p$ independently of their type.

Uniqueness We discuss Step 2 later on (see "A note on uniqueness). First, note that the politician will always prefer the largest corruption such that a reliable scandal of that size is not published (see Step 1 above) to any level below it. Thus, in any equilibrium, either (i) $c > \bar{s}$ with positive probability or (ii) the voter holds beliefs as in Step 3.

Suppose (i) and let $c^* > \bar{s}$ be chosen with positive probability. Then the voter holds beliefs $\Pr\left(\text{greedy} \mid c^*\right) > \mu_0$ and never re-elects if he observes $x = c^*$. But then the politician strictly prefers $c = \bar{s}$ to $c = c^*$ (see Step 1), reaching a contradiction.

Suppose (ii) and let $\sigma(x)$ be the probability of re-election when the voter observes a scandal $x \in [0,1]$. Of course $\sigma(0) = 1$. (Note that $\sigma(x)$ must be sufficiently low for $x \neq 0, \bar{s}$, otherwise the politician would prefer to choose $c = x$, contradicting the previous result.) Thus

$$\Pr(\text{re-elect} \mid g) = \Pr(\text{re-elect} \mid h) \quad = \quad p + (1-p) \int_0^1 \sigma(x) \Pr(\mathcal{S} \mid U)\, dx;$$

which implies $u(c, \mu) = -\mu_0 (1 + \bar{s})$. □

Part (ii)

Existence We prove existence of a simple equilibrium in which the voter re-elects if and only if he observes no scandal. Steps 1, 2, and 3 are identical to Part (i) and we omit them. (Though notice that the condition at the end of Step 1 does not hold anymore, meaning that the politician chooses $c = 1$).

The expected welfare of the voter is given by $-\mu_0 [2 - (1 - \mu_0) p]$ since $c = 1$ and $\Pr(\text{re-elect} \mid h) - \Pr(\text{re-elect} \mid g) = p$.

Uniqueness We discuss Step 2 later on (see *A Note On Uniqueness*). Note that in any equilibrium, either (i) $\bar{s} < c < 1$ with positive probability or (ii) the voter holds beliefs as in Step 3.

Suppose (i) and let c^* be chosen with positive probability. Then the voter holds beliefs $\Pr(\text{greedy} \mid c^*) > \mu_0$ and never re-elects if he observes $x = c^*$. But then the politician strictly prefers $c = 1$ to $c = c^*$ (see Step 1), reaching a contradiction.

Suppose (ii) and let $\sigma(x)$ be the probability of re-election when the voter observes a scandal $x \in [0,1]$. Of course $\sigma(0) = 1$. (Note that $\sigma(x)$ must be sufficiently low for $x \neq 0, \bar{s}$, otherwise the politician would prefer to choose $c = x$, contradicting the

previous result.) Thus

$$\begin{aligned}
\Pr(\text{re-elect} \mid g) &= (1-p)\int_0^1 \sigma(x)\Pr(s \mid U)\,dx; \\
\Pr(\text{re-elect} \mid h) &= p + (1-p)\int_0^1 \sigma(x)\Pr(s \mid U)\,dx; \\
\Pr(\text{re-elect} \mid h) - \Pr(\text{re-elect} \mid g) &= p
\end{aligned}$$

which implies $u(c,\mu) = -\mu_0(2-(1-\mu_0)p)$.

A Note on Uniqueness

The equilibrium is essentially unique as the newspaper might choose to publish a reliable scandal when it is indifferent.

Suppose $\pi(\bar{s}) = \rho\Pr(\text{punish} \mid \bar{s}, R)$. Then the newspaper would publish a reliable scandal of size $\bar{s}$. But then the politician would not choose $c = \bar{s}$, because this scandal will be revealed and the politician will not be re-elected. Let

$$\underline{\mathcal{S}} \equiv \{s \in [0,1] : \pi(s) < \rho\Pr(\text{punish} \mid s, R)\}$$

be the set of reliable scandals which are *strictly* deterred. There are two cases. First, if $\underline{\mathcal{S}}$ has maximum $\underline{s}$, then the politician chooses $c = \underline{s}$, the newspaper publishes reliable scandals larger than $\underline{s}$, and the voter re-elects if and only if he observes no scandal. This equilibrium is essentially identical to the one described above with corruption being equal to the largest *strictly* deterred scandal. Second, if $\underline{\mathcal{S}}$ has no maximum, then there is no other equilibrium.

□

A.3 Proof of Proposition 3

Let $\Pr(\text{re-elect} \mid \cdot)$ be a re-election rule. We know that the newspaper publishes all scandals. By the revelation principle, it is sufficient to solve

$$\min_{\Pr(\text{re-elect}|\cdot)} \mu_0 \left[1 + c - (1 - \mu_0)\left(\Pr(\text{re-elect} \mid h) - \Pr(\text{re-elect} \mid g)\right)\right]$$

$$\text{s.t. } u^P(c) \geq u^P(c') \text{ for all } c' > c$$

Compute the expected payoff for the politician if she chooses c:

$$u^P(c) = \gamma c + r \underbrace{p \Pr(\text{re-elect} \mid c)}_{\text{well-founded scandal}} + \underbrace{r(1-p)\int_0^1 \Pr(\text{re-elect} \mid s) \Pr(s \mid U)\, ds}_{\text{unfounded scandal}}.$$

Note that the expected re-election rent from unreliable scandals is independent of c. Thus, the incentive compatibility constraint is

$$\gamma c + rp \Pr(\text{re-elect} \mid c) \geq \gamma c' + rp \Pr(\text{re-elect} \mid c') \text{ for all } c' > c.$$

Let moral hazard be the dominant problem: $r/\gamma > 1 - \mu_0$. Then, any optimal re-election rule has $\Pr(\text{re-election} \mid c) = 1$ and $\Pr(\text{re-election} \mid c') < 1$ for all $c' > c$. Note that the incentive compatibility constraint is binding only at $c = 1 - rp/\gamma$. For any larger c, we can decrease the probability of re-election for some $c' > c$ and relax the constraint. Thus, $\Pr(\text{re-election} \mid 1 - rp/\gamma) = 1$ and $\Pr(\text{re-election} \mid c') = 0$ for all $c' > 1 - rp/\gamma$ is an optimal re-election rule and we have $c = 1 - rp/\gamma$.

Let adverse selection be the dominant problem: $r/\gamma < 1 - \mu_0$. Then notice that reducing corruption to $1 - rp/\gamma$ is not worth the loss in selection. Thus, $\Pr(\text{re-elect} \mid x) = 0$ for all $x \in [0, 1]$ is optimal and we have $c = 1$. □

A.4 Proof of Proposition 4

We divide the proof in 2 parts. Part 1 shows that any law which does not deter the publication of a reliable scandal of size 1 induces at least as much corruption as no law and at most as much expected payoff for the voter. Part 2 shows that a law which deters the publication of large reliable scandals reduces corruption and increases the voter's payoff if moral hazard is the dominant problem.

Part 1 Let $(\rho, \Pr(\text{punish} \mid \cdot))$ be a law which does not deter the publication of (i) reliable scandals of size 1 and (ii) unreliable scandals in $\mathcal{S} \subseteq [0,1]$.

The expected payoff for a greedy politician who chooses c such that a reliable scandal of size c is published is given by

$$u^P(c) = \gamma c + \underbrace{rp \Pr(\text{re-elect} \mid c)}_{\text{reliable scandal}} + \underbrace{r(1-p)\left[\int_{\mathcal{S}} \Pr(\text{re-elect} \mid s) \Pr(s \mid U)\, ds + \Pr(\text{re-elect} \mid 0) \Pr(\mathcal{S} \mid U)\right]}_{\text{unfounded scandal}} + \underbrace{\delta p \Pi + \delta(1-p)\int_{\mathcal{S}} \Pr(\text{re-elect} \mid s) \Pr(s \mid U)\, ds}_{\text{expected compensation}}. \quad (6)$$

Compare the expected payoffs of $c = 1$ and some $c' < 1$ such that a reliable scandal of size c' is published. The re-election rule minimizes the expected payoff of $c = 1$ and maximizes the expected payoff of c' if $\Pr(\text{re-elect} \mid 1) = 0$ and $\Pr(\text{re-elect} \mid c) = 1$. Thus, $u^P(c') \geq u^P(c)$ for some re-election rule if and only if

$$c' \geq 1 - \frac{rp}{\gamma}.$$

The expected payoff for a greedy politician who chooses c'' such that a reliable scandal of

size c'' is not published is given by

$$u^P(c'') = \gamma c'' + r \underbrace{p \Pr(\text{re-elect} \mid 0)}_{\text{well-founded scandal}} + \underbrace{+ r(1-p)\left[\int_{\mathcal{S}} \Pr(\text{re-elect} \mid s) \Pr(s \mid U)\, ds + \Pr(\text{re-elect} \mid 0) \Pr(\mathcal{S} \mid U)\right]}_{\text{unfounded scandal}} + \underbrace{+ \delta(1-p) \int_{\mathcal{S}} \Pr(\text{re-elect} \mid s, U) \Pr(s \mid U)\, ds}_{\text{expected compensation}}. \quad (7)$$

Note that the "unreliable scandal" term in (6) and (7) is the same in both expression. The "expected compensation term differs by the expected compensation from reliable scandals $\delta p \Pi$. Compare the expected payoffs of $c = 1$ and some $c'' < 1$ such that a reliable scandal of size c'' is not published. The re-election rule minimizes the expected payoff of $c = 1$ and maximizes the expected payoff of c'' if $\Pr(\text{re-elect} \mid 1) = 0$ and $\Pr(\text{re-elect} \mid 0) = 1$. Thus, $u^P(c'') \geq u^P(c)$ for some re-election rule if and only if

$$c'' \geq 1 - \frac{(r - \delta\Pi)\, p}{\gamma} > 1 - \frac{rp}{\gamma}.$$

We then conclude that any law which does not deter the publication of reliable scandals of size 1 cannot decrease corruption. Also notice that the probability of re-electing honest and greedy politicians is the same as in the case of free press both when adverse selection is dominant and when moral hazard is.

Part 2 Let $(\rho, \Pr(\text{punish} \mid \cdot))$ be a law which (i) deters the publication of reliable scandals of size $\bar{s}$ but not larger and (ii) does not deter the publication of unreliable scandals in $\mathcal{S} \subseteq [0, 1]$.

The expected payoff for a greedy politician who chooses $c = \bar{s}$ is given by

$$u^P(c) = \gamma c + \underbrace{rp \Pr(\text{re-elect} \mid \bar{s})}_{\text{reliable scandal}} + \underbrace{r(1-p)\left[\int_{\mathcal{S}} \Pr(\text{re-elect} \mid s) \Pr(s \mid U)\, ds + \Pr(\text{re-elect} \mid 0) \Pr(\mathcal{S} \mid U)\right]}_{\text{unreliable scandal}} + \underbrace{\delta p \Pi + \delta(1-p) \int_{\mathcal{S}} \Pr(\text{re-elect} \mid s) \Pr(s \mid U)\, ds}_{\text{expected compensation}}. \quad (8)$$

If the politician chooses $c' > \bar{s}$, the expected payoff is given by

$$u^P(c') = \gamma c' + \underbrace{rp \Pr(\text{re-elect} \mid 0)}_{\text{reliable scandal}} + \underbrace{r(1-p)\left[\int_{\mathcal{S}} \Pr(\text{re-elect} \mid s) \Pr(s \mid U)\, ds + \Pr(\text{re-elect} \mid 0) \Pr(\mathcal{S} \mid U)\right]}_{\text{unreliable scandal}} + \underbrace{\delta(1-p) \int_{\mathcal{S}} \Pr(\text{re-elect} \mid s, U) \Pr(s \mid U)\, ds}_{\text{expected compensation}} \quad (9)$$

which is increasing in c'. Thus, $u(\bar{s}) \geq u(c')$ for all $c' > \bar{s}$ is tightest at $c' = 1$.

Note that the "unreliable scandal" term in (8) and (9) is the same in both expression. The "expected compensation term differs by the expected compensation from reliable scandals $\delta p \Pi$.

The re-election rule maximizes the expected payoff of $\bar{s}$ and minimizes the expected payoff of c'if $\Pr(\text{re-elect} \mid \bar{s}) = 1$ and $\Pr(\text{re-elect} \mid 0) = 0$. Thus, $u^P(\bar{s}) \geq u^P(1)$ for some re-election rule if and only if

$$\bar{s} \geq 1 - \frac{(r + \delta\Pi)\, p}{\gamma}.$$

Thus, a law with $1 - (r + \delta\Pi)\, p/\gamma \leq \bar{s} < 1 - rp/\gamma$ effectively reduces corruption if the

re-election rule has $\Pr(\text{re-elect} \mid 0) = 1$ and $\Pr(\text{re-elect} \mid s)$ sufficiently low for large s.

Notice that such a re-election rule does not select honest politicians because in equilibrium greedy politicians are re-elected with the same probability as honest ones. Thus, the re-election rule is optimal and the voter's expected payoff is increased only if moral hazard is the dominant problem: $r/\gamma > 1 - \mu_0$.

A.5 Proof of Proposition 5

From Proposition 4, the only case in which corruption is less than in free press is when the law deters the publication of all scandals above $\bar{s}$. Consider such a law. From Part 2, Proof of Proposition 4, the optimal re-election rule in that case prescribes $\Pr(\text{re-elect} \mid 0) = 0$. Let $\Pr(\text{re-elect} \mid 0) = 1$. Then, from (8) and (9), $u^P(1)$ is strictly greater than $u^P(c)$ for any $c \leq 1 - rp/\gamma$.