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What to put on and what to keep off the Table?
A Politician's Choice of which Issues to address

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Abstract

At the start of their term, politicians often announce which issue they intend to address. To shed light on this agenda setting, we develop a model in which a politician has to decide whether or not to address a public issue. Addressing an issue means that the politician investigates the issue and next chooses for either a major reform or a minor reform. Not addressing an issue means that the status quo is maintained. Politicians differ in their ability to make correct decisions. They want to make good decisions and want to come across as able decision makers. An important characteristic of the model is that politicians and voters have different priors concerning the desirability of a major reform. We show that electoral concerns may lead to anti-pandering. Politicians tend to put issues on their political agenda when voters are relatively pessimistic about a major reform, and keep issues off the table when voters are optimistic about major reform.

Keywords: Agenda Setting, Career concerns, Pandering

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1 Introduction

Public policy covers a wide range of activities and topics. Political leaders cannot pay full attention to all these activities. They have to set priorities. We say that a political leader puts an issue on the political agenda when she publicly announces that she will address that issue in her term. The following three examples illustrate what we mean by agenda-setting behavior.[1]

One of President Obama's most cited promises during the 2008 US elections was to close down Guantanamo bay detention center. Publicly committed to addressing this issue, the president signed an executive order to close down the detention center only two months after his election (Mazzetti and Glaberson, 2009). While advancing the shutdown, the legal, practical and political hurdles involved in this decision began to surface.[2] By mid-2011, after only mild changes in its operation were implemented, president Obama had effectively decided not to proceed with the shutting down of the center (Finn and Kornblut, 2011).

In 2012 Benjamin Netanyahu, Israel's prime minister, declared that "All threats [to Israel ...] are dwarfed by another threat [Iran]" (Teibel, 2012) as part of an ongoing public commitment to deal with this issue. Netanyahu and others also acknowledged that not all information was yet available for a decision on the best course of action (Bergman, 2012). Two main possibilities seemed to be considered by the Israeli government, a continued push for international action or a military attack. As of September 2012, a decision has not been publicly made.

Recently, Britain's PM David Cameron publicly announced that he will not make any decision on the expansion of Heathrow airport before 2015 (Winnett, 2012). This announcement was a response to growing concerns that Britain urgently requires an increase in airport capacity (Stringer, 2012). Airport capacity will thus remain unchanged for the next years.

In each of the above examples, a political leader makes a public announcement about his political agenda. The first two examples portray a public commitment to address a public issue. This commitment was followed by exploration of the optimal policy response, and concluded by a decision (or future decision) on policy. The last example describes a public pledge not to approach a policy issue. The status quo was maintained.

For political economists and political scientists, the existence of agenda setting means that it is not enough to explain why in a certain policy domain (say health care) a politician

[1] In the literature agenda setting has two meanings. First, it means the control over the issues under consideration. Second, it means the order of proposals within a single issue area (Romer and Rosenthal, 1978). This paper is about the first meaning.

[2] For example, it was shocking to the president's team that only about 20, later 36, of the detainees in the camp could be prosecuted in US civil courts. The number was thought by the team to be much higher previous to elections. (Finn and Kornblut, 2011, p. 4).

selected one course of action (say the Affordable Care Act[3]) out of many alternatives. They should also explain why the domain was on the politician's political agenda in the first place. In this paper we address the question of why a politician places a certain issue on the political agenda or keep that issue off it. In democratic systems, we expect that a politician's agenda is at least partially influenced by the desires of the electorate. As long as voters have an unbiased view of the pros and cons of alternative policy options, the idea that voters influence politicians' agenda-setting behavior is an appealing feature. However, there is strong evidence that at least for some issues voters have biased views. A famous example is voters' biases toward protectionism. Voters regard protectionism a better instrument in the fight against unemployment than most economists and politicians.[4] Rational politicians will be aware that putting an issue on the political agenda may create expectations. A possible implication is that a politician may be reluctant to put trade policy on her agenda if she anticipates that voters will punish her for failing to enforce a strict policy.

To gain insight into agenda-setting behavior of politicians, we develop a model in which a society faces some problem. A politician has to decide whether or not to put this problem on the political agenda. Putting a problem on the agenda means that the politician publicly announces her intention to address the problem. Addressing the problem is followed by 1) an investigation of the problem, and 2) a binary decision between a minor shift in policy (a minor reform) and a major shift (a major reform). If the problem is not placed on the political agenda then no change in policy is enacted. Our model exhibits two key characteristics. First, apart from wanting to make the socially optimal decision, the politician is concerned with her reputation for being an able decision maker. The idea is that a good reputation enhances the politician's chances of reelection. In our model the difference between an able and a less able politician is that an able politician receives private information about the need for a major reform, while a less able politician does not. We assume that from a social point of view, the politician should only choose a major reform if she received information that the major reform is beneficial. An implication is that a choice for a major reform suggests that the politician is able.

Second, we assume heterogeneous prior beliefs in the sense that the probability that the representative voter assigns to the need for a major reform deviates from the probability that the politician assigns to it. This characteristic implies that relative to the politician, the voter can be pessimistic or optimistic about the need for a major reform. These two characteristics

[3] Offically known as the Patient Protection and Affordable Care Act, and more commonly known as Obamacare. This highly debated law introduced major changes into the American health system.

[4] Politicians are not necessarily policy experts but it stands to reason that they have easy access to policy expertise. Additionally, they have a much stronger incentive to aquire policy relevant knowledge than individual voters have.

allow us to examine whether electoral concerns induce the politician to pander, that is, to bias agenda-setting and decision-making toward the voter's prior beliefs.

We derive three sets of results. Our first result concerns the way the electorate perceives the behavior of the politician. The voter anticipates that electoral concerns may induce a less able politician to distort her decision to a major reform. The reason is that, as discussed above, a choice for a major reform improves the politician's reputation. The stronger are electoral concerns, the stronger is the incentive to distort. Moreover, the more optimistic the voter is about the consequences of a major reform, the more the voter expects the politician to distort her decision.

The second set of results pertains to the politician's actual decision on the reform. We show that if the voter is more optimistic about the consequences of a major reform than the politician, the politician is reluctant to distort the decision on the reform. From a reputational point of view, choosing a major reform improves the politician's reputation. However, because the politician is relatively pessimistic about a major reform, she is less inclined to choose a major reform than the voter believes she is. If the voter is relatively pessimistic about the consequences of a major reform, the reverse holds. The politician is more inclined to choose a major reform than the voter believes.

Our third set of results concerns the politician's agenda setting behavior. By not putting the problem on the political agenda, the politician does not have to make a decision on a reform, and consequently ensures that the issue does not affect her reputation. Two issues are at stake when making the agenda-setting decision. First, does addressing the problem lead to a proper solution for it, and second, does addressing the problem boost the politician's reputation? If the voter is optimistic, the politician anticipates that her expected reputation decreases. As a result, the politician is less inclined to put the problem on her agenda. If the voter is pessimistic, the politician may distort the decision, but her expected reputation improves. We show that the latter effect dominates the former. So, with a pessimistic electorate, the politician is more likely to put a problem on the agenda. while with an optimistic electorate the opposite holds. One may regard this result as anti-pandering. The politician agenda-setting behavior is biased against the beliefs of the electorate. This result is consistent with Kingdon (1984) who finds that many issues rise on political agendas without public support.

2 Related literature

This paper contributes to a voluminous literature that tries to explain policy. In much of the existing literature, the emphasis is on how political competition influences politician's choices in a given area. For example, using a Downsian model of electoral competition, Meltzer and Richard (1981) try to explain redistribution. They show that the redistribution policy coincides with the policy the median voter prefers. The Downsian model can be applied to all kinds of policies (see Mueller, 2003, and Persson and Tabellini, 2002). Given a policy domain, the model generates a median voter result. Our model does not take a policy domain as given. Rather it tries to explain why in some years policy focuses on redistribution while in other years it focuses on health care issues. As in other political economic studies, policy outcomes and electoral concerns play an important role.

As mentioned above, a key characteristic of our model is that voters and politicians have different prior beliefs. The notion that many voters are poorly informed is widely accepted. Illustrative is Bartels (1996) who writes "The political ignorance of the American voter is one of the best-documented features of contemporary politics". Downs (1957) pointed out that voters have no incentives to become informed. Voters are rationally ignorant. For a long time, however, many economists have rejected the idea that voters have systematically biased beliefs. Recently, Caplan (2008) has challenged the idea that voters have unbiased expectations. For a wide variety of issues, he shows that voters' and economists' beliefs differ significantly. To come back to our earlier example, he finds that indeed voters hold the view that protectionism helps the economy while economists generally reject this view. It is worth emphasizing that the fact that voters' beliefs are systematically biased does not imply that voters are irrational. When incentives to acquire information are weak, the assumption that voters' beliefs are unbiased is a strong one.

The notion that electoral concerns may lead politicians to choose unexpected policies is not new. Cukierman and Tommasi (1998) discuss several examples of reforms implemented by politicians whose traditional position was to oppose such reforms. A key feature of the model they have developed to explain unexpected reforms is that politicians have better information about circumstances than voters. Politicians' choices therefore contain information about external circumstances. A politician who implements a policy that is against his ideology shows that circumstances are very much in favor for that policy. Voters infer that the policy deserves support. Our model differs from that of Cukierman and Tommasi in two main respects. First, in our model, policies do not only contain information about circumstances, but also about the politician's ability. Second, apart from explaining unexpected policies, our model explains why some problems are put on the political agenda and others are not.

In Letterie and Swank (1998) politicians possess superior information as to how the economy works. They show that in a partisan world, politicians have incentives to pretend that they believe in a view of the economy that fits with their preferences. Partisan preferences lead to partisan views of the economy. The implication is a further polarization of policies. This result can also be interpreted as anti-pandering. Politicians choose policies that are further away from the policy most preferred by the median voter.

More recently, in a Downsian setting, Kartik et al. (2012) provide an explanation for anti-pandering in politics. Two candidates receive a private signal about the state of the world. On the basis of this signal, each candidate chooses a platform. Their paper shows that candidates overreact to their signal: they have an incentive to choose a platform that is more extreme than their signal. The reason for this overreacting is that at the elections, voters observe two platforms and can infer two signals. The implication is that they tend to prefer the more extreme platform, because they rely less on their prior belief than each politician. An important difference between the model by Kartik et al. and ours is that in Kartik et al. elections revolve around choosing proper policies, whereas in our model elections revolve around choosing the most competent candidate.

There are also papers that show that electoral concerns may induce politicians to choose policies that are consistent with voters' beliefs. An early example of such a contribution is Harrington (1993) who assumes that voters' beliefs as to policy consequences differ. Electoral concerns induce politicians to choose policy that is consistent with the view of the economy held by the median voter. His model thus explains pandering rather than anti-pandering. In our model, we do not model political competition directly. Rather we assume that electoral concerns provide incentives to politicians to come across as good decision makers. In this respect our paper builds on Rogoff (1990).[5] By focusing on coming across as competent, we ignore possible ideological differences between candidates. Of course, ideology may also help to explain why some problems are on the political agenda while others are not.

3 The Model

We consider a society that faces some problem, x. A politician (she) can decide to address the problem (to put it on the political agenda), $r = 1$, or not to address it (not to put it on

[5] Rogoff (1990) builds on the seminal paper on career concerns by Holmstrom (1999). Like us, Suurmond et al. (2004) focus on agents who are concerned with a repuation for being able decision makers.

the political agenda), $r = 0$. The electorate, to which we refer as the voter (he), observes r. Putting the problem on the political agenda ($r = 1$) means that the politician (1) investigates the problem, and (2) makes a binary decision on it: $x \in \{H, L\}$, where $x = H$ denotes that the politician chooses a major shift in policy, and $x = L$ denotes that the politician chooses a minor shift in policy. A choice for $r = 0$ implies no shift in policy.

In case the politician addresses the problem, she incurs a cost c_0. This c_0 is randomly drawn from a density function $f(c_0)$, with $f(c_0) = 0$ for $c_0 < k$ and $f(c_0) > 0$ for $c_0 \geq k$. The politician observes c_0, but the voter does not. c_0 can be interpreted as the opportunity cost of addressing problem x. By addressing x, less resources are available for addressing other problems. Alternatively, c_0 can be interpreted as the cost of investigating the consequences of a major reform.

When the politician addresses the problem, the proper decision on x depends on the state of the world, $\mu \in \{-h, h\}$: $x = H$ yields a payoff equal to $p_0 + \mu - c$, with $p_0 < 0$, and $x = L$ yields a payoff equal to $k - c_0$, with $k \geq 0$. In case the politician does not address the problem x, the politician's payoff is zero, by normalization. To ensure that the model describes an interesting situation we assume that $p_0 + h > k$ and $p_0 - h < k$. The restriction $k > 0$ implies that we focus on a situation where investigation of the project always reveals small improvements. Such improvements are sometimes called low hanging fruit. The stochastic term captures that the consequences of a major reform are often risky. *Ex ante*, a major reform may improve matters or may make things worse. As we will show below, the assumption that $p_0 < 0$ means that the politician is biased against a major reform. In the absence of further information about μ, she receives a higher payoff from a minor reform than from a major reform. The case that $p_0 > 0$ is the mirror case of $p_0 < 0$. The analysis of it would not generate new insights.

The prior probability that $\mu = h$ equals the prior probability that $\mu = -h$, $\Pr(\mu = h) = \frac{1}{2}$.[6] The politician knows this. The voter, by contrast, believes that the prior probability that $\mu = h$ equals α. Moreover, the voter believes that the politician's prior that $\mu = h$ also equals α. The voter's perception is common knowledge. By allowing the voter's prior to differ from that of the politician, the voter and the politician may have different predispositions towards a major reform. Suppose $r = 1$. Then, in the absence of information about μ, the politician believes that a major reform yields a lower payoff than a minor reform, as $p_0 < 0$. If $\alpha > \frac{h-(p_o-k)}{2h}$, the voter beliefs that a major reform yields a higher payoff than a minor reform in the absence of information about μ. In other words, he is optimistic in

[6] In Appendix B we show that assuming $\Pr(\mu = h) = \beta$ instead of assuming $\Pr(\mu = h) = \frac{1}{2}$ does not affect our results qualitatively.

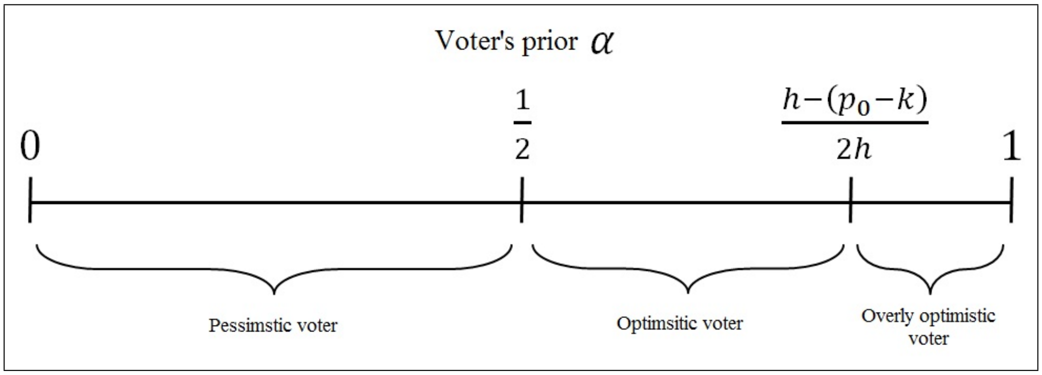

Figure 1: Defintion of voter's type by voter's prior

an absolute sense about the outcome of a major reform. If $\alpha > \frac{h-(p_o-k)}{2h}$, we call the voter overly optimistic. If $\frac{1}{2} < \alpha < \frac{h-(p_o-k)}{2h}$, without information about μ, the voter prefers a minor reform to a major reform. However, he is more optimistic about a major reform than the politician. In this situation, we call the voter (relatively) optimistic. In case $\alpha < \frac{1}{2}$, we call the voter pessimistic. See Figure 1 for a graphical representation of the voter's type dichotomy.

A politician who chooses $r = 1$ receives a private signal, $s \in \{-h, h, \varnothing\}$ about the state. If $s = \varnothing$, the signal does not contain information about μ. If $s \neq \varnothing$, then s is fully informative, $s = \mu$. There are two types of politicians, $t \in \{D, S\}$, dumb $(t = D)$ and smart $(t = S)$ ones. The prior probability that a politician is smart equals π: $\Pr(t = S) = \pi$ and $\Pr(t = D) = 1 - \pi$. This is common knowledge. At the beginning of the game neither the politician herself nor the voter knows the politician's type. A smart politician always receives an informative signal, $\Pr(s = \mu | t = S) = 1$. A dumb politician always receives $s = \varnothing$, $\Pr(s = \varnothing | t = D) = 1$.[7] After having received s, the politician makes a decision on x.

At the end of the game, the voter forms a belief about the probability that the politician is smart. We assume that when the voter updates her belief, she observes r and x. In the conclusions we come back to this assumption. We denote by $\hat{\pi}(r, x)$ the posterior probability that the politician is smart, conditional on r and x. We refer to $\hat{\pi}(r, x)$ as the politician's reputation.

Apart from wanting to take the right decision and incurring c_0 when $r = 1$, the politician wishes to come across as a smart decision maker. The idea is that a reputation for being smart enhances the politician's electoral prospects. The politician's preferences are represented by

[7] The assumption that a smart politician always receives an informative signal, and a dumb politician never receives an informative signal is made to reduce straightforward algebra. What matters for our results qualitatively is that smart politicians receive an informative signal with a higher probability than dumb ones.

the following functions, $U(r,x)$:

$$\begin{aligned} U(1,H) &= p_0 + \mu + \lambda\hat{\pi}(1,H) - c_0 \\ U(1,L) &= k + \lambda\hat{\pi}(1,L) - c_0 \\ U(0,0) &= \lambda\hat{\pi}(0,0) \end{aligned} \tag{1}$$

where λ denotes the weight the politician attributes to his reputation. With no loss of generality we define $p = p_0 - k$ and $c = c_0 - k$, and write the politician preferences as:

$$\begin{aligned} U(1,H) &= p + \mu + \lambda\hat{\pi}(1,H) - c \\ U(1,L) &= \lambda\hat{\pi}(1,L) - c \\ U(0,0) &= \lambda\hat{\pi}(0,0) \end{aligned} \tag{2}$$

We assume that social welfare is given by (2) with $\lambda = 0$. From a social point of view, the politician should choose $x = H$ if and only if she received $s = h$. We speak about an undistorted decision rule if the politician chooses $x = H$ if $s = h$, and $x = L$ otherwise. Given that the politician takes the socially optimal decision on x, she should choose $r = 1$ if and only if $c \leq \frac{1}{2}\pi(p+h)$.

The timing of the model is as follows:

1. Nature chooses $t \in \{D, S\}$, $\mu \in \{-h, h\}$ and c. The politician observes c.
2. The politician chooses r. If $r = 0$, then $x = 0$ and the game proceeds to 5. If $r = 1$, then the game proceeds to
3. The politician receives a signal about μ, $s \in \{-h, h, \varnothing\}$.
4. The politician chooses $x \in \{H, L\}$.
5. The voter updates his belief about the politician's type on the basis of r and x.
6. Payoffs are realized.

Our model is a dynamic game with incomplete information. It deviates from a more standard game in that the voter's and politician's priors with respect to the states differ. We solve the model in three steps. First, we identify a Perfect Bayesian Equilibrium of the game under the assumptions that $r = 1$, and both the voter and politician assign prior probability α to the event that $\mu = h$. This equilibrium describes the voter's world and delivers the voter's beliefs about the politician's strategy on x, given $r = 1$. We denote by $\sigma_\alpha(s)$ the voter's belief about the politician's strategy on x, given $r = 1$. It maps signal s to a probability with which the voter believes the politician to choose a major reform, $x = H$. The posterior probabilities, $\hat{\pi}(1, L)$ and $\hat{\pi}(1, H)$, result from the conjectured equilibrium strategy on x through Bayes' rule. In identifying the equilibrium we ignore equilibria which can only be sustained by out-of-equilibrium beliefs. Second, given equilibrium behavior as perceived by the voter, we derive the politician's optimal strategy on x, which we denote by $\sigma(s)$. It maps s to a probability with which the politician chooses $x = H$. Finally, we determine agenda setting behavior. The politician chooses r so as to maximize her expected utility, anticipating her own equilibrium strategy on x, $\sigma^*(s)$, and how in equilibrium her actions will be perceived by the voter, $\sigma^*_\alpha(s)$. As to r, the politician equilibrium strategy can be represented by a threshold strategy. She chooses $r = 1$ if and only if $c \leq c^*$. At $c = c^*$, the politician is indifferent between $r = 0$ and $r = 1$.

4 The Voter's World

In this section, we derive the politician's optimal strategy as conceived by the voter. To this end, we identify a Perfect Bayesian Equilibrium of our game in which both the voter and the politician assign prior probability α to the event that $\mu = h$. We pretend that this prior is common knowledge. For the moment, we assume that $r = 1$. At the end of this section, we turn to the case that $r = 0$.

We start with identifying the conditions under which in the voter's perception the politician does not distort the decision on x. This means that in the voter's perception a smart politician should follow her signal. As discussed in the previous section, if the voter is not overly optimistic, $\alpha \leq \frac{h-p}{2h}$, the undistorted decision rule stipulates that a dumb politician chooses $x = L$. If, by contrast, the voter is overly optimistic, $\alpha > \frac{h-p}{2h}$, the undistorted decision rule stipulates that a dumb politician chooses $x = H$. For ease of exposition we now define this benchmark as $\tilde{\alpha} \equiv \frac{h-p}{2h}$. Below we discuss the two situations.

Situation 1: The voter is not overly optimistic, $\alpha < \tilde{\alpha}$

The undistorted decision strategy is

$$\sigma_\alpha(s) = \begin{cases} 1 & \text{if } s = h \\ 0 & \text{otherwise.} \end{cases} \tag{3}$$

Given (3), the voter infers from $x = H$ that the politician must be smart, $\hat{\pi}[1, H; \sigma_\alpha(s)] = 1$, as only smart politicians receive $s = h$. A choice for $x = L$, by contrast, can be the result of a smart politician who observed $s = -h$ and a dumb politician. Bayes' rule implies: $\hat{\pi}[1, L; \sigma_\alpha(s)] = \frac{\pi(1-\alpha)}{\pi(1-\alpha)+(1-\pi)} = \frac{1-\alpha}{1-\alpha\pi}\pi$.

The posteriors imply that $x = H$ improves the politician's reputation, whereas $x = L$ damages it. As a result, if the politician is sufficiently concerned about her reputation, the voter conjectures that the politician has an incentive to choose $x = H$, even though $s \neq h$. This temptation is strongest for a dumb politician. Hence, (3) can only be the conjectured equilibrium strategy for the politician if

$$\alpha(p+h) + (1-\alpha)(p-h) + \lambda\hat{\pi}[1, H; \sigma^*_\alpha(s)] \leq \lambda\hat{\pi}[1, L; \sigma^*_\alpha(s)]$$

Using the expression for the posteriors, we can rewrite this equation as

$$\lambda \leq \bar{\lambda}_\alpha = \frac{[-p + (1-2\alpha)h](1-\alpha\pi)}{1-\pi}$$

where $\bar{\lambda}_\alpha$ is the perceived threshold level of electoral concerns.

Now suppose that $\lambda > \bar{\lambda}_\alpha$. Then, with $\hat{\pi}[1, H; \sigma_\alpha(s)] = 1$ and $\hat{\pi}[1, L; \sigma_\alpha(s)] = \frac{1-\alpha}{1-\alpha\pi}\pi$, it is optimal for a dumb politician to choose $x = H$. However, a conjectured decision-rule "choose $x = L$ if and only if $s = -h$" cannot be part of an equilibrium. If it were, then for $s = \varnothing$, $x = L$ would yield a better reputation as well as a higher expected payoff than $x = H$. In fact, $\hat{\pi}[1, H; \sigma_\alpha(s)] > \hat{\pi}[1, L; \sigma_\alpha(s)]$ requires that for $s = \varnothing$, the politician chooses x with a probability smaller than α for any value of λ.[8]

All in all, the discussion above indicates that if $\lambda > \bar{\lambda}_\alpha$ the voter believes that the politician follows a mixed strategy:

$$\sigma_\alpha(s) = \begin{cases} 1 & \text{if } s = h \\ \gamma & \text{if } s = \varnothing \\ 0 & \text{otherwise.} \end{cases} \tag{4}$$

with γ implicitly defined by

$$p + h(2\alpha - 1) + \lambda\hat{\pi}[1, H; \sigma_\alpha(s)] = \lambda\hat{\pi}[1, L; \sigma_\alpha(s)] \tag{5}$$

Together (3-5) describe the voter's perception of the politician's decision strategy for various values of λ. If $\lambda \leq \bar{\lambda}_\alpha$, the voter expects the politician not to distort the decision on x. For $\lambda > \bar{\lambda}_\alpha$, the voter expects a dumb politician to choose $x = H$ with probability γ. Bayes' rule implies

$$\begin{aligned} \hat{\pi}[1, H; \sigma_\alpha(s)] &= \frac{\alpha}{\alpha\pi + \gamma(1-\pi)}\pi \\ \hat{\pi}[1, L; \sigma_\alpha(s)] &= \frac{(1-\alpha)}{(1-\alpha)\pi + (1-\gamma)(1-\pi)}\pi \end{aligned} \tag{6}$$

[8] Using Equation (6) it is easy to show that $\hat{\pi}[1, H; \sigma_\alpha(s)] > \hat{\pi}[1, L; \sigma_\alpha(s)]$ requires $\gamma < \alpha$.

Note that the conjectured decision strategy of the politician depends on the voter's prior that $\mu = h$, not on the politician's prior.

The analysis above shows that if the voter is not overly optimistic, $x = H$ yields a better reputation than $x = L$. The implication is that if the politician is sufficiently concerned with her reputation, the voter conjectures that with some positive probability a dumb politician chooses $x = H$.

Situation 2: The voter is overly optimistic, $\alpha \geq \tilde{\alpha}$

If the voter is overly optimistic, in his perception the undistorted decision rule is

$$\sigma_\alpha(s) = \begin{cases} 0 & \text{if } s = -h \\ 1 & \text{otherwise.} \end{cases} \tag{7}$$

Given (7), the voter infers from $x = L$ that the politician is smart, $\hat{\pi}[1, L; \sigma_\alpha(s)] = 1$. The politician's reputation deteriorates when the voter observes $x = H$, $\hat{\pi}[1, H; \sigma_\alpha(s)] = \frac{\alpha}{1-(1-\alpha)\pi}\pi < \pi$. The implication is that if λ is sufficiently large, $\lambda > \bar{\lambda}'_\alpha$, the politician has an incentive to deviate from (7):

$$\lambda < \bar{\lambda}'_\alpha = \frac{[p - h(1-2\alpha)](1-(1-\alpha)\pi)}{1-\pi}$$

Analogous to the first situation, if $\lambda > \bar{\lambda}'_\alpha$, the voter does not expect a dumb politician to always choose $x = L$. Instead, the politician is conjectured to follow the mixed strategy:

$$\sigma_\alpha(s) = \begin{cases} 1 & \text{if } s = h \\ \gamma & \text{if } s = \varnothing \\ 0 & \text{otherwise.} \end{cases} \tag{8}$$

where γ is implicitly defined by:

$$p + h(2\alpha - 1) + \lambda\hat{\pi}[1, H; \sigma_\alpha(s)] = \lambda\hat{\pi}[1, L; \sigma_\alpha(s)] \tag{9}$$

with $\hat{\pi}[1, H; \sigma_\alpha(s)]$ and $\hat{\pi}[1, L; \sigma_\alpha(s)]$ given by (6). In contrast to situation 1, and for similar reasons, in any equilibrium in mixed strategies we must have that $\gamma > \alpha$.

The upshot is that in case the voter is overly optimistic about a major reform, the voter believes that electoral concerns may induce a dumb politician to choose for a minor reform.

How does the voter conceive the politician's decision on r**?**

So far we have assumed that $r = 1$. Using the strategies the voter believes the politician to follow, he can derive the politician's expected utility resulting from $r = 1$. The voter does not know the cost c associated with addressing an issue, but knows the underlying cost distribution $f(c)$. By assumption, when choosing r, the politician does not know her type. The voter knows this. From the perspective of the voter, a high cost c must be the reason for the politician to choose not do address an issue. Bayes' rule implies that if the politician chooses $r = 0$, the politician's reputation remains $\hat{\pi}(0,0) = \pi$.

5 The Politician

In equilibrium, the politician's strategy on r and x should be optimal given the voter's beliefs about (i) the politician's strategy and (ii) the politician's type. The politician anticipates that the voter interprets her behavior as described in the previous section. Four cases can be distinguished: 1. $\alpha < \tilde{\alpha}$ and $\lambda \leq \bar{\lambda}_\alpha$; 2. $\alpha < \tilde{\alpha}$ and $\lambda > \bar{\lambda}_\alpha$; 3. $\alpha > \tilde{\alpha}$ and $\lambda \leq \bar{\lambda}'_\alpha$; and 4. $\alpha > \tilde{\alpha}$ and $\lambda > \bar{\lambda}'_\alpha$. In this section, we describe the politician's equilibrium strategies on r and x for each case.

In each case the optimal response of a smart politician is to make a decision on x that is in line with her signal, $\sigma^*(h) = 1$ and $\sigma^*(-h) = 0$. So, with respect to x, a smart politician acts the way the voter perceives a smart politician to act $[\sigma^*_\alpha(h) = 1$ and $\sigma^*_\alpha(-h) = 0]$. The reason is that a smart politician faces exactly the same decision problem as the voter perceived her to face. She knows the state and takes the voter's updated beliefs into account. Having established the optimal response with respect to x of a smart politician, the discussion below focuses on the optimal response with respect to x of a dumb politician.

When choosing r, the politician does not know her type. She decides to address x if her expected utility from addressing it is higher than her outside utility $\hat{\pi}(0,0) = \lambda\pi$. The politician expected utility $U(r = 1; \sigma^*(s))$, conditional on her equilibrium strategy on x, is[9]

$$\begin{aligned} E[U(r=1;\sigma^*(s))] &= \frac{1}{2}\pi h + \left(\frac{1}{2}\pi + \sigma^*(\varnothing)\cdot(1-\pi)\right) \\ &\quad \cdot (p + \lambda(\hat{\pi}[1,H;\gamma] - \hat{\pi}[1,L;\gamma])) + \lambda\hat{\pi}[1,L;\gamma] - c \end{aligned} \tag{10}$$

In each of the four cases examined below the optimal decision strategies, actual and perceived ($\sigma^*(\varnothing)$ and γ, respectively), differ. In turn, each case leads to a different condition determining the politician choice on r.

Case 1: The voter is not overly optimistic and does not expect the politician to distort the decision on x: $\alpha < \tilde{\alpha}$ and $\lambda \leq \bar{\lambda}_\alpha$.

In this case, $x = H$ improves the politician's reputation, while $x = L$ damages it. Moreover, electoral concerns are weak such that the voter does not expect the politician to distort the

[9] For derivations see Appendix A.

decision on x.

First suppose that $r = 1$, and consider a dumb politician's decision on x. Does a dumb politician have an incentive to deviate from the undistorted decision rule? If $s = \varnothing$, $x = H$ yields a payoff $p + \lambda - c$, while $x = L$ yields a payoff $\lambda \frac{1-\alpha}{1-\alpha\pi}\pi - c$. It directly follows that a dumb politician chooses $x = L$ if

$$\lambda \leq \bar{\lambda} = \frac{-p\left(1-\alpha\pi\right)}{1-\pi}$$

and $x = H$ if $\lambda > \bar{\lambda}$. Recall that in case 1, $\lambda < \bar{\lambda}_{\alpha}$. Using (5), one can show that $\lambda > \bar{\lambda}$ requires that the voter is pessimistic about a major reform, $\alpha < \frac{1}{2}$. The reason is that if $\alpha < \frac{1}{2}$, the voter believes that $\mu = -h$ is more likely than it actually is. The voter thus overestimates the cost of $x = H$. This makes him believe that with moderate electoral concerns $\lambda \leq \bar{\lambda}_{\alpha}$, a dumb politician does not choose $x = H$. Since the actual cost of $x = H$ is lower for a dumb politician, she may be willing to choose $x = H$. The reverse holds if the voter is optimistic about a major reform, $\alpha > \frac{1}{2}$. The actual cost of choosing $x = H$ for a dumb politician is higher than the cost perceived by the voter. As an optimistic voter does not expect a dumb politician to distort in the present case, a dumb politician never distorts her decision on x.

Now consider the agenda-setting decision, r. Suppose that electoral concerns are low $\lambda \leq \bar{\lambda}$. In equilibrium, as discussed above, a dumb politician chooses $x = L$. The politician's expected payoff from $r = 1$ then equals

$$\frac{1}{2}\pi\left(p+h\right) + \lambda E\left[\hat{\pi}\left(r=1;\sigma^{*}\left(\varnothing\right)=0\right)\right] - c$$

where $E\left[\hat{\pi}\left(r=1;\sigma^{*}\left(\varnothing\right)=0\right)\right] = \frac{1-\frac{1}{2}\pi+\left(\frac{1}{2}-\alpha\right)}{1-\alpha\pi}\pi$ denotes the politician's expected reputation at the moment she chooses $r = 1$, given her equilibrium strategy on x. The politician's expected payoff from $r = 0$ equals $\lambda\pi$. So, $r = 1$ yields a higher expected payoff than $r = 0$ if

$$c < \frac{1}{2}\pi\left(p+h\right) + \lambda\pi\frac{\left(\frac{1}{2}-\alpha\right)\left(1-\pi\right)}{1-\alpha\pi} \tag{11}$$

The first term in (11) is the expected payoff from addressing the issue. Since the politician does not distort her policy decision, a major reform is chosen only in case the politician is smart and with probability $\Pr\left(\mu = h\right) = \frac{1}{2}$. The second term denotes the difference between the reputational benefit from addressing the problem and not addressing it.

Notice that if $\alpha = \frac{1}{2}$, the second term of the right-hand side of (11) equals zero. The reason is that for $\alpha = \frac{1}{2}$, $E\left[\hat{\pi}\left(r=1;\sigma^{*}\left(\varnothing\right)=0\right)\right] = \pi$. This reflects the Martingale property. The implication is that for $\alpha = \frac{1}{2}$ electoral concerns do not influence the agenda-setting decision. As $E\left[\hat{\pi}\left(r=1;\sigma^*\left(\varnothing\right)=0\right)\right]$ decreases in α, a lower value of α widens the range of parameters for which the politician puts x on the political agenda. The effect of λ on the agenda-setting decision depends on whether α is smaller or larger than $\frac{1}{2}$. If the voter is optimistic about a major reform, electoral concerns weaken the politician's incentives to choose $r=1$. The reason is that if $\alpha>\frac{1}{2}$, the voter assigns a high probability to the event that a smart politician chooses $x=H$. However, the politician anticipates that if she is smart, she will choose $x=H$ only with probability $\frac{1}{2}$. As a result, in expected terms, for $\alpha>\frac{1}{2}$, $r=1$ damages the politician's reputation. For $\alpha<\frac{1}{2}$, the opposite holds.

Now suppose that electoral concerns are high $\lambda>\bar{\lambda}$. In equilibrium a dumb politician chooses $x=H$. Choosing $r=1$ yields an expected reputation equal to

$$E\left[\hat{\pi}\left(r=1;\sigma^*\left(\varnothing\right)=1\right)\right]=\frac{1-\pi\left(\alpha+\frac{1}{2}\left(1-\pi\right)\right)}{1-\alpha\pi}$$

which is larger than π. The payoff from choosing $r=1$ exceeds the payoff from $r=0$ if

$$c<\frac{1}{2}\pi h+\left(1-\frac{1}{2}\pi\right)p+\lambda\frac{1-\pi\left(\alpha\left(1-\pi\right)+\frac{1}{2}\left(3-\pi\right)\right)}{1-\alpha\pi} \tag{12}$$

Recall that $\lambda>\bar{\lambda}$ requires that the voter is pessimistic about a major reform, $\alpha<\frac{1}{2}$. It follows that the last term in (12) is always positive and that electoral concerns increase the politician's incentive to put x on the political agenda.

Proposition 1 *Suppose $\alpha<\tilde{\alpha}$ and $\lambda\leq\bar{\lambda}_{\alpha}$. Then, if the voter is optimistic about a major reform ($\alpha>\frac{1}{2}$), the politician does not distort the decision on x, Moreover, electoral concerns discourage the politician to put x on the political agenda. If, by contrast, the voter is pessimistic about a major reform, the politician may distort the decision on x, and electoral concerns encourage the politician to put x on the agenda.*

The difference between (11) and (12) is twofold. First, because of the distortion on x, expected payoff from addressing is lower for $\lambda>\bar{\lambda}$ than for $\lambda\leq\bar{\lambda}$. Of course, a lower expected payoff discourages the politician to put x on the political agenda. Second, the expected reputation is higher when the politician distorts her decision on x. The reason is that for $\lambda>\bar{\lambda}$, a dumb politician is perceived as smart by the voter. The implication is that if $\lambda>\bar{\lambda}$, an increase in λ always encourages the politician to choose $r=1$.

Case 2: The voter is not overly optimistic but expects the politician to distort the decision on x: $\alpha<\tilde{\alpha}$ and $\lambda>\bar{\lambda}_{\alpha}$

As in case 1, in case 2 a choice of $x=H$ improves the politician's reputation, while $x=L$

damages it. Unlike in case 1, in case 2, the voter expects a dumb politician to distort the decision on x with positive probability $\sigma_\alpha^*(\varnothing) = \gamma$.

First consider the politician's strategy on x. For a dumb politician $x = H$ yields a higher payoff than $x = L$ if $p + \lambda\hat{\pi}(1, H; \gamma) - c > \lambda\hat{\pi}(1, L; \gamma) - c$. Using (5), one can show that this amounts to $\alpha < \frac{1}{2}$. Hence, a dumb politician always distorts the decision on x if the voter is pessimistic, and never distorts it if the voter is optimistic.

To understand this result consider the case that $\alpha = \frac{1}{2}$. In that case the politician's behavior is identical to her behavior as perceived by the voter. A dumb politician is indifferent between $x = L$ and $x = H$. If the voter is optimistic, a dumb politician has a lower expected payoff from $x = H$ than the voter. As a result, the politician strictly prefers $x = L$. If, by contrast, the voter is pessimistic, a dumb politician attaches a lower cost to $x = H$ and strictly prefers $x = H$.

Let us now turn to the agenda-setting decision. We have shown above that for $\lambda > \bar{\lambda}_\alpha$, a dumb politician never distorts her decision if the voter is optimistic, and always distorts her decision if the voter is pessimistic. Using (5), one can show that for $\alpha > \frac{1}{2}$ the politician places the problem on the agenda if[10]

$$c < \frac{1}{2}\pi(p+h) + \left[\frac{1}{2}\pi(-p + h(1-2\alpha))\right] - \left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\gamma(1-\pi)-\alpha\pi}\right)\right] \tag{13}$$

For $\alpha < \frac{1}{2}$, $r = 1$ yields a higher expected payoff to the politician than $r = 0$ if

$$c < \left[\frac{1}{2}\pi h + \left(1 - \frac{1}{2}\pi\right)p\right] + \left[\left(1-\frac{1}{2}\pi\right)(-p + h(1-2\alpha))\right] - \left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\gamma(1-\pi)-\alpha\pi}\right)\right] \tag{14}$$

In (13) and (14) the first term, represents the expected policy outcome given the politician's strategy $\sigma^*(\varnothing) = 0$ and $\sigma^*(\varnothing) = 1$, respectively. In line with intuition, if the politician anticipates that she may distort the decision on x, she is less inclined to put x on her political agenda. The last two terms represent the net utility gain from expected reputation. The expression $-p + h(1-2\alpha)$ is equal to the expected utility gain in reputation resulting from choosing a major reform instead of a minor reform. It is multiplied by the probability the politician selects a major reform. From equation (5) it follows that this part is independent of λ. That is, a change in λ is exactly matched by a change in the perceived probability of distortion γ, such that the utility gain from choosing a major shift remains the same. The last term in (13) and (14) is equal to the expected utility gain from choosing $x = L$ on the one hand, and not addressing the issue on the other, $\lambda[\hat{\pi}(1, L; \gamma) - \hat{\pi}(0, 0)]$. It is always

[10] For derivations see Appendix A.

negative and decreasing in λ.[11] Hence, (13) and (14) imply that if the voter believes that the politician distorts the decision on x, electoral concerns discourage politicians to put x on the political agenda.

Proposition 2 *Suppose $\alpha < \tilde{\alpha}$ and $\lambda > \bar{\lambda}_\alpha$. Then, if the voter is optimistic about μ ($\alpha > \frac{1}{2}$), the politician does not distort the decision on x. If the voter is pessimistic about μ, the politician always distorts the decision on x. Moreover, electoral concerns λ discourage the politician to put x on the political agenda.*

Proposition 2 illustrates that the more the voter expects the politician to distort her decision on x, the more the politician is reluctant to put x on her agenda. The intuition is that if $\alpha < \tilde{\alpha}$ and $\lambda > \bar{\lambda}_\alpha$, voters are uncertain about the reason why a politician has chosen a major reform. Is it because she observed $s = h$ or is it because she wanted to pretend to have observed $s = h$? The higher is λ, the more sceptical the voter becomes. One implication is that for higher values of λ, a major reform becomes a weaker signal of high ability. With more sceptical voters, politicians have less to win in terms of reputation by putting a problem on her agenda.

Case 3: The voter is overly optimistic and does not expect the politician to distort the decision on x, $\alpha > \tilde{\alpha}$ and $\lambda \leq \bar{\lambda}'_\alpha$

In case 3, the voter is so optimistic about the benefits of a major reform that he believes that a dumb politician should implement it. The implication is that $x = L$ improves the politician's reputation, while $x = H$ damages it. Moreover, in case 3, electoral concerns are weak. The voter believes that a dumb politician chooses $x = H$.

Consider the politician's strategy on x. For a dumb politician it is a dominant strategy to choose $x = L$.[12] The reason is that $x = L$ yields a higher project payoff than $x = H$ and leads to a better reputation. Anticipating her strategy on x, the politician prefers $r = 1$ to $r = 0$ if

$$c < \frac{1}{2}\pi\left(p + h\right) + \lambda\left(\frac{1 - \pi\left(1 + \left(1 - \pi\right)\left(\frac{3}{2} - \alpha\right)\right)}{1 - \left(1 - \alpha\right)\pi}\right) \tag{15}$$

Equation (15) shows that electoral concerns encourage the politician to put x on the political agenda. The reason is that if the voter is overly optimistic, $x = L$ improves the politician's reputation. The voter expects a dumb politician to choose $x = H$. The politician anticipates

[11] Note that the perceived strategy of the politician is a function of electoral concerns $\gamma(\lambda)$ where $\frac{\partial \gamma}{\partial \lambda} > 0$. As γ and λ have opposite effects on this last term it has to be shown that the total effect of λ on expected utility is negative. See Appendix A for a proof.

[12] A smart politician, having received $s = H$, prefers $x = H$ to $x = L$ if $\lambda \leq \frac{(p+h)(1-\alpha\pi)}{1-\pi}$. One can show that for $\alpha > \frac{h-p}{2h}$ and $\lambda \leq \bar{\lambda}'_\alpha$, this inequality is always satisfied. Hence, in case 3, the politician has no incentive to distort the decision on x.

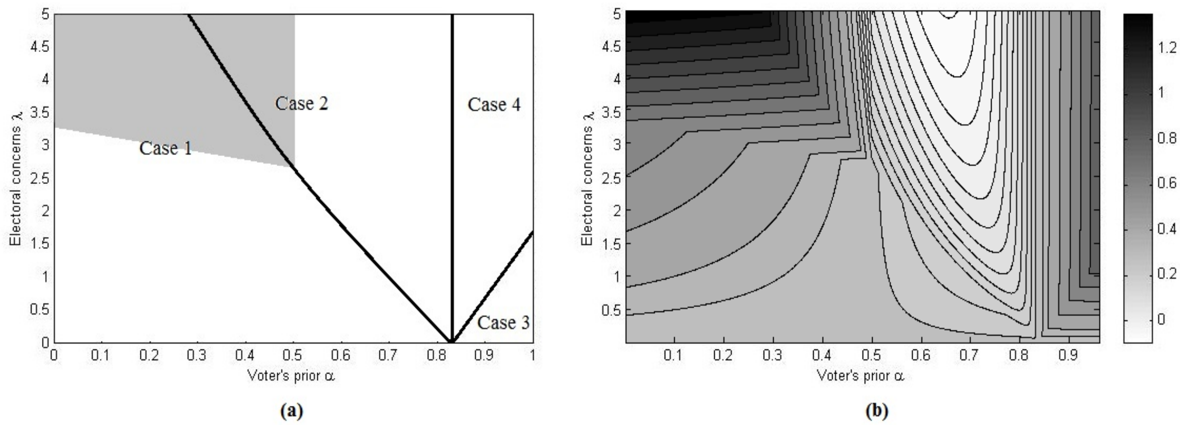

Figure 2: Strategy and expected utility.

that if she is dumb, she will choose $x = L$. Putting x on the political agenda increases the expected reputation of the politician.

Case 4: The voter is overly optimistic and expects the politician to distort the decision on x, $\alpha > \tilde{\alpha}$ and $\lambda > \bar{\lambda}'_{\alpha}$

As in case 3 the politician has no incentive to distort the decision on x. The strategy on agenda setting is given by

$$c < \frac{1}{2}\pi\left(p+h\right) + \left[\frac{1}{2}\pi\left(-p+h\left(1-2\alpha\right)\right)\right] + \left[\lambda\pi\left(\frac{\left(\gamma-\alpha\right)\left(1-\pi\right)}{1-\gamma\left(1-\pi\right)-\alpha\pi}\right)\right]$$

Note that this condition is identical to condition (13). Since now $\gamma > \alpha$, the propensity of the politician to address the issue is increasing in λ. As the voter expects the politician to mix, in comparison with case 3, electoral concerns have a smaller effect on the politician's agenda-setting decision.

Proposition 3 *Suppose $\alpha > \tilde{\alpha}$. Then, the politician does not distort the decision on x regardless of the belief of the voter about μ. Electoral concerns always encourage the politician to put x on the political agenda regardless of the voter's beliefs.*

Proposition 3 demonstrates that if the voter is overly optimistic, such that $x = L$ improves the politician's reputation, a dumb politician does not face a trade-off between project payoff and electoral concerns. What is good project-wise is also good electoral-wise. Anticipating this, electoral concerns encourage the politician to put x on her political agenda.

Figure 2 graphically summarizes the equilibrium analysis with respect to the voter's prior α and electoral concerns λ.[13] Figure 2(a) presents a dumb politician's strategy on x. The

[13] Both graphs 2(a) and 2(b) are generated by using the parameter values $p = -2$, $h = 3$, $c = 0$ and $\pi = 0.4$.

black boundaries separate the parameter space into four different areas which correspond to the four different cases described in this section. The shaded area illustrates the parameter combinations for which the politician distorts her decision on x, $\sigma^* (\varnothing) = 1$. For all other parameter values $\sigma^* (\varnothing) = 0$. In our model, smart politicians never distort the decision on x. If voters are not overly optimistic, a dumb politician has an incentive to distort the decision on x. A major reform improves her reputation. However, a major reform is an inferior choice policy wise. Figure 2(a) demonstrates that a dumb politician distorts the decision on x if electoral concerns are sufficiently strong and voters are relatively pessimistic about a major reform $\left(\alpha < \frac{1}{2}\right)$. For small values of λ, the electoral benefits of a major reform does not outweigh the costs of a distorted decision. If voters are relatively optimistic, the actual costs of distorting the decision on x are higher than the costs as perceived by the voter. We have shown that this implies that a dumb politician does not distort the decision on x. If voters are pessimistic about a major reform, the actual costs of distorting the decision on x are smaller than the costs voters perceive. As a result, the politician may distort the decision on x. If voters are overly optimistic about a major reform [case 3 and 4 in 2(a)], a minor reform boosts the politician's reputation. Consequently, the undistorted decision is optimal both from a policy and electoral perspective.

Figure 2(b) presents a contour map of the politician's expected utility gain from placing x on the agenda $E\left[U\left(r = 1; \alpha, \lambda\right)\right] - U\left(r = 0; \lambda\right)$. The lighter it is, the lower is the expected gain. Figure 2(b) clearly shows that the voter's beliefs are highly important for agenda setting. If the voter is relatively pessimistic, electoral concerns encourage the politician to put x on her political agenda. The reason is that relative to the voter, the politician assigns a low probability that she will choose a minor reform. Since the voter expects a smart politician to opt for a minor reform often, the reputational cost of doing so is relatively low. Addressing the issue thus becomes attractive from an electoral point of view. If the voter is optimistic, but not overly optimistic, electoral concerns discourage the politician to put x on her agenda. In this situation, the politician assigns a lower probability to the event that she will choose a major reform than the voter does. Finally, if the voter is overly optimistic, the politician has a strong incentive to put x on her political agenda. In this case a minor reform is good from an electoral perspective and likely to be good from a policy perspective.

6 Concluding remarks

Political leaders face numerous issues they can impossibly all address. This raises the question of how politicians set priorities. This paper has tried to shed light on the types of issues politicians put on their political agendas. In our paper, putting an issue on the agenda means that the politician must make a choice between a minor reform and a major reform on that issue. A crucial feature of our model is that ex ante, *relative* to the politician, voters can be optimistic or pessimistic about the need for a major reform. One might expect that in such a model, electoral concerns would induce politicians to address issues about which voters are relatively optimistic. We have shown that this intuition is not always correct. In our model, unless voters are optimistic in an absolute sense, a politician is less likely to put an issue on her political agenda if voters are relatively optimistic about the need for a major reform. The reason is that if voters are relatively optimistic, the politician anticipates that her ultimate decision may damage her reputation for being an able decision maker. By not putting an issue on her agenda, the politician can avoid the reputational loss. If voters are overly optimistic about an issue, electoral concerns make it more likely that the politician addresses the issue.

As far as we know, hardly any economics literature on political agenda-setting exists.[14] In the political science literature, the best-known model of political agenda-setting is the garbage can model (see Kingdon, 1984). The main point of this model is that the agenda-setting process is disorganized, and hence unpredictable. A motivation for the garbage can model was that Kingdon found that often issues rose on political agendas without public support (Larocca, 2006). This empirical finding can be interpreted as anti-pandering. For Kingdon this finding was inconsistent with a model in which rational politicians respond to the desires of the electorate. Our paper shows that anti-pandering may result from rational politicians who are concerned about winning elections. So, anti-pandering does not necessarily result from a disorganized process.

Our model of agenda setting is based on several assumptions. Some of these assumptions are made to drive home our main results in a simple way. For example, we have assumed that the politician attributes a prior probability $\frac{1}{2}$ to the event that a major reform is needed. The voter by contrast attributes a prior probability α to this event. In Appendix B, we analyze a more general model in which the politician attributes prior probability β to the event that a major reform is needed. The analysis shows that the voter's prior relative to politician's prior drives the anti-pandering result. Thus the assumption that $\beta = \frac{1}{2}$ does not qualitatively affect our main results.

Another innocuous assumption that when updating their beliefs about the politician's ability voters do not observe the state. Quantitatively, this assumption is important. Politi-

[14] See Glazer and Lohman (1999) for an analysis of electoral agenda setting.

cians are less likely to distort policy decisions and are less inclined to put issue on their agendas when voters learn the state. Qualitatively, however, the results are unaffected. The main effect of transparency is that it shifts voters' attention from decisions to outcomes. This reduces the politician's scope for affecting her reputation.

The most unconventional assumptions of our model are the ones about the players' priors. We do not regard the assumption of heterogenous priors as a limitation for two reasons. First of all, as discussed in the introduction, there is a lot of evidence that the priors of voters and politicians actually do differ on many issues. Second, this assumption allows us to identify the conditions under which politicians pander to voters' priors. The assumption that politicians have a correct view of voters' beliefs, but voters have an incorrect view of politicians' beliefs is more restrictive. The usual motivation for this assumption is that politicians, especially during political campaigns, spend much money on learning voters' opinions and beliefs. Voters, by contrast, have hardly incentives to become informed. The assumption that voters believe that politicians have the same priors as themselves has been made for simplicity. If we had assumed that voters are uncertain about politicians' beliefs, policies would have contained information about those beliefs. This has already been investigated (see, for example, Cukierman and Tommasi, 1998). The simplification allowed us to focus on politicians' incentives to pander.

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A Appendix: Derivations and proofs

This section of the Appendix presents extended derivations of a few of the equations shown in the paper as well as proofs of propositions.

A.1 Derivations

An extended derivation of the beliefs given in equation (6) is given below:

$$\begin{aligned}
\hat{\pi}\left[1, H; \sigma_{\alpha}(s)\right] &= \Pr(t=S|x=H) = \frac{\Pr(x=H|t=S)\Pr(t=S)}{\Pr(x=H)} \\
&= \frac{\Pr(x=H|t=S)\Pr(t=S)}{\Pr(x=H|t=S)\Pr(t=S)+\Pr(x=H|t=D)\Pr(t=D)} \\
&= \frac{\alpha}{\alpha\pi+\gamma(1-\pi)}\pi
\end{aligned}$$

$$\begin{aligned}
\hat{\pi}\left[1, L; \sigma_{\alpha}(s)\right] &= \Pr(t=S|x=L) = \frac{\Pr(x=L|t=S)\Pr(t=S)}{\Pr(x=L)} \\
&= \frac{\Pr(x=L|t=S)\Pr(t=S)}{\Pr(x=L|t=S)\Pr(t=S)+\Pr(x=L|t=D)\Pr(t=D)} \\
&= \frac{(1-\alpha)}{(1-\alpha)\pi+(1-\gamma)(1-\pi)}\pi
\end{aligned}$$

We now present the full derivation of the politician's expected utility from putting a problem on the agenda $r=1$ as given in equation (10). The expected utility can be written as:

$$\begin{aligned}
&E\left[U\left(r=1;\sigma^{*}(s)\right)\right] = \Pr(t=S)\cdot\left[\Pr(s=h)\cdot U(1,H;s=h)+\Pr(s=-h)\cdot U(1,L)\right]+ \\
&\Pr(t=D)\cdot\left[\sigma^{*}(s)\cdot U(1,H;s=\varnothing)+(1-\sigma^{*}(s))\cdot U(1,L)\right]
\end{aligned}$$

Plugging in the values for probabilities and utilities:

$$\begin{aligned}
&E\left[U\left(r=1;\sigma^{*}(s)\right)\right] = \pi\cdot\left[\frac{1}{2}\cdot\left(p+h+\hat{\pi}[1,H;\gamma]-c\right)+\frac{1}{2}\cdot\left(\hat{\pi}[1,L;\gamma]-c\right)\right]+ \\
&\Pr(t=D)\cdot\left[\sigma^{*}(\varnothing)\cdot\left(p+\hat{\pi}[1,H;\gamma]-c\right)+(1-\sigma^{*}(\varnothing))\cdot\left(\hat{\pi}[1,L;\gamma]-c\right)\right]
\end{aligned}$$

Which is equal to:

$$\begin{aligned}
E\left[U\left(r=1;\sigma^{*}(s)\right)\right] &= \frac{1}{2}\pi h+\left(\frac{1}{2}\pi+\sigma^{*}(\varnothing)\cdot(1-\pi)\right) \\
&\quad\cdot\left(p+\lambda\left(\hat{\pi}[1,H;\gamma]-\hat{\pi}[1,L;\gamma]\right)\right)+\lambda\hat{\pi}[1,L;\gamma]-c
\end{aligned}$$

The condition for the politician to place an issue on the political agenda is given by inequalities (13) and (14). We present here the derivation of inequality (13). Since with $\alpha<\frac{1}{2}$ the politician's strategy is $\sigma^{*}(\varnothing)=0$ we can rewrite equation (10) as:

$$E\left[U\left(r=1;\sigma^{*}(s)\right)\right] = \frac{1}{2}\pi h+\frac{1}{2}\pi\cdot\left(p+\lambda\left(\hat{\pi}[1,H;\gamma]-\hat{\pi}[1,L;\gamma]\right)\right)+\lambda\hat{\pi}[1,L;\gamma]-c$$

From (5) we know that $p+\lambda\hat{\pi}[1,H;\sigma_\alpha(s)]-\lambda\hat{\pi}[1,L;\sigma_\alpha(s)]=-h(2\alpha-1)$. Plugging this expression:

$$E[U(r=1;\sigma^*(s))]=\frac{1}{2}\pi h-\frac{1}{2}\pi\cdot h(2\alpha-1)+\lambda\hat{\pi}[1,L;\gamma]-c$$

The politician opts to place an issue on the agenda only if her expected utility from doing so is higher than her utility from not addressing an issue, such that:

$$E[U(r=1;\sigma^*(s))]>U(r=0)=\lambda\pi$$

Using equation (6) we can rewrite this condition as:

$$\frac{1}{2}\pi h-\frac{1}{2}\pi\cdot h(2\alpha-1)+\lambda\frac{(1-\alpha)}{(1-\alpha)\pi+(1-\gamma)(1-\pi)}\pi-\lambda\pi>c$$

or:

$$\frac{1}{2}\pi h-\frac{1}{2}\pi\cdot h(2\alpha-1)-\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\gamma(1-\pi)-\alpha\pi}\right)>c$$

To separate the effects of expected policy outcome and reputation we add:

$$\frac{1}{2}\pi h+\frac{1}{2}\pi p-\frac{1}{2}\pi p-\frac{1}{2}\pi\cdot h(2\alpha-1)-\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\gamma(1-\pi)-\alpha\pi}\right)>c$$

which becomes:

$$\frac{1}{2}\pi(p+h)+\left[\frac{1}{2}\pi(-p+(1-2\alpha)h)\right]-\left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\gamma(1-\pi)-\alpha\pi}\right)\right]>c$$

The derivation of inequality (14) is identical.

A.2 Proof for Proposition 2 and Proposition 3

Proposition 2 states that increase in λ discourages the politician from putting x on the political agenda. Proposition 3 states that increase in λ encourages the politician to put x on the political agenda. From equations (13) and (14) we can observe that these statements are true iff $\frac{d}{d\lambda}\left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\alpha\pi-\gamma(1-\pi)}\right)\right]>0$. This condition is not clearly satisfied since $\frac{d\gamma}{d\lambda}>0$ and $\frac{d}{d\gamma}\left[\frac{(\alpha-\gamma)(1-\pi)}{1-\alpha\pi-\gamma(1-\pi)}\right]<0$. To show that it is satisfied we first find an expression for $\frac{d\gamma}{d\lambda}$. Plugging equation (6) in (5) we find:

$$\frac{\alpha\pi}{\alpha\pi+\gamma(1-\pi)}-\frac{(1-\alpha)\pi}{(1-\alpha)\pi+(1-\gamma)(1-\pi)}=-\frac{1}{\lambda}(p+h(2\alpha-1)) \tag{16}$$

To find $\frac{d\gamma}{d\lambda}$ we use implicit differentiation:

$$\frac{d}{d\gamma}\left[\frac{\alpha\pi}{\alpha\pi+\gamma(1-\pi)}\right]\frac{d\gamma}{d\lambda}-\frac{d}{d\gamma}\left[\frac{(1-\alpha)\pi}{(1-\alpha)\pi+(1-\gamma)(1-\pi)}\right]\frac{d\gamma}{d\lambda}=\frac{d}{d\lambda}\left[-\frac{1}{\lambda}(p+h(2\alpha-1))\right]$$

where:

$$\begin{aligned}\frac{d\left[\frac{\alpha\pi}{\alpha\pi+\gamma(1-\pi)}\right]}{d\gamma} &= \frac{d\left[\alpha\pi\cdot(\alpha\pi+\gamma(1-\pi))^{-1}\right]}{d\gamma}\\ &= -\alpha\pi(\alpha\pi+\gamma(1-\pi))^{-2}\cdot(1-\pi)\\ &= -\frac{\lambda\alpha\pi\cdot(1-\pi)}{(\alpha\pi+\gamma(1-\pi))^2}\end{aligned}$$

and:

$$\frac{d\left[\frac{(1-\alpha)\pi}{(1-\alpha)\pi+(1-\gamma)(1-\pi)}\right]}{d\gamma} = \frac{d\left[(1-\alpha)\pi\cdot\left((1-\alpha)\pi+(1-\gamma)(1-\pi)\right)^{-1}\right]}{d\gamma}$$
$$= -(1-\alpha)\pi\cdot\left((1-\alpha)\pi+(1-\gamma)(1-\pi)\right)^{-2}\cdot\left(-(1-\pi)\right)$$
$$= \frac{(1-\alpha)\pi(1-\pi)}{\left((1-\alpha)\pi+(1-\gamma)(1-\pi)\right)^2}$$

We can now write $\frac{d\gamma}{d\lambda}$ as:

$$\frac{d\gamma}{d\lambda} = \frac{-(p+h(2\alpha-1))}{\lambda^2}\left(\frac{\alpha\pi(1-\pi)}{(\alpha\pi+\gamma(1-\pi))^2}+\frac{(1-\alpha)\pi(1-\pi)}{\left((1-\alpha)\pi+(1-\gamma)(1-\pi)\right)^2}\right)^{-1} \quad (17)$$

Note that this expression is positive for $\alpha<\tilde{\alpha}$ (as $-(p+h(2\alpha-1))>0$) and negative for $\alpha>\tilde{\alpha}$. Rewrite $\frac{d}{d\lambda}\left(\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\alpha\pi-\gamma(1-\pi)}\right)\right)$ as:

$$\frac{d}{d\lambda}\left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\alpha\pi-\gamma(1-\pi)}\right)\right] = \frac{\partial}{\partial\lambda}\left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\alpha\pi-\gamma(1-\pi)}\right)\right]\frac{d\lambda}{d\lambda}+\frac{\partial}{\partial\gamma}\left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\alpha\pi-\gamma(1-\pi)}\right)\right]\frac{d\gamma}{d\lambda}$$

which can be written as:

$$\frac{d}{d\lambda}\left[\lambda\pi\left(\frac{(\alpha-\gamma)(1-\pi)}{1-\alpha\pi-\gamma(1-\pi)}\right)\right] = \pi(1-\pi)\left(\frac{(\alpha-\gamma)}{(1-\alpha\pi-\gamma(1-\pi))}-\frac{\lambda(1-\alpha)}{(1-\alpha\pi-\gamma(1-\pi))^2}\cdot\frac{d\gamma}{d\lambda}\right)$$

We thus need to show that the following condition holds:

$$\frac{(\alpha-\gamma)}{(1-\alpha\pi-\gamma(1-\pi))}-\frac{\lambda(1-\alpha)}{(1-\alpha\pi-\gamma(1-\pi))^2}\cdot\frac{d\gamma}{d\lambda}>0$$

Rewrite equation (16) as $\lambda=-(p+h(2\alpha-1))\left(\frac{\alpha\pi}{\alpha\pi+\gamma(1-\pi)}-\frac{(1-\alpha)\pi}{(1-\alpha)\pi+(1-\gamma)(1-\pi)}\right)^{-1}$. We can now plug this expression instead of λ and $\frac{d\gamma}{d\lambda}$ from equation (17) to receive:

$$\frac{(\alpha-\gamma)(1-\pi)}{(1-\alpha)}(1-\alpha\pi-\gamma(1-\pi)) > \frac{\frac{\alpha}{\alpha\pi+\gamma(1-\pi)}-\frac{(1-\alpha)}{(1-\alpha)\pi+(1-\gamma)(1-\pi)}}{\frac{\alpha}{(\alpha\pi+\gamma(1-\pi))^2}+\frac{(1-\alpha)}{((1-\alpha)\pi+(1-\gamma)(1-\pi))^2}}$$

which becomes:

$$(\alpha-\gamma)(1-\pi)(1-\alpha\pi-\gamma(1-\pi))\begin{cases} >0 \text{ if } \alpha>\gamma \text{ (proposition 2)} \\ <0 \text{ if } \alpha<\gamma \text{ (proposition 3)}\end{cases}$$

Since $(\alpha-\gamma)>0$ if $\alpha>\gamma$, $(\alpha-\gamma)<0$ if $\alpha<\gamma$ and $(1-\pi)(1-\alpha\pi-\gamma(1-\pi))$ is always positive, this condition always holds.

B Appendix: Changing politician's prior

We are now considering a model identical to the one presented in the paper but in the politician's prior. we now assume that the politician prior $\Pr(\mu=h)=\beta$ where $\beta\in[0,1]$. As a result, we write the politician's preference as:

$$\begin{aligned} U(1,H) &= p + h(2\beta - 1) + \lambda\hat{\pi}(1,H) - c \\ U(1,L) &= \lambda\hat{\pi}(1,L) - c \\ U(0,0) &= \lambda\hat{\pi}(0,0) \end{aligned}$$

The analysis of the voter's world is identical to the analysis done in section (4) and we thus directly start with the analysis of the politician's optimal choice of x and r given the beliefs of the voter.

B.1 The Politician

In equilibrium, the politician's strategy on r and x should be optimal given the voter's beliefs about (1) the politician's strategy and (2) the politician's type. The politician anticipates that the voter interprets his behavior as described in the previous section. Four cases can be distinguished: 1. $\alpha < \tilde{\alpha}$ and $\lambda \leq \bar{\lambda}_\alpha$; 2. $\alpha < \tilde{\alpha}$ and $\lambda > \bar{\lambda}_\alpha$; 3. $\alpha > \tilde{\alpha}$ and $\lambda \leq \bar{\lambda}'_\alpha$; and 4. $\alpha > \tilde{\alpha}$ and $\lambda > \bar{\lambda}'_\alpha$. In this appendix, we describe the politician's equilibrium strategy on r and x only for case 1.

Case 1: The voter is not overly optimistic and does not expect the politician to distort the decision on x: $\alpha < \tilde{\alpha}$ and $\lambda \leq \bar{\lambda}_\alpha$.

In the first case, $x = H$ improves the politician's reputation, while $x = L$ damages it. Moreover, the voter believes that a dumb politician never distorts his decision and always chooses $x = L$. What is the optimal response of the politician? Clearly, it is a dominant strategy to choose $x = H$ if $s = h$. If $s = h$, $x = H$ is good decision-wise and reputation-wise. The politician has the strongest incentive to deviate from the undistorted decision rule if $s = \varnothing$. Then, $x = H$ yields a payoff $p + h(2\beta - 1) + \lambda - c$, while $x = L$ yields a payoff $\lambda\frac{1-\alpha}{1-\alpha\pi}\pi - c$. It directly follows that the politician chooses $x = L$ if:

$$\lambda < \bar{\lambda}_\beta = \frac{(-p + (1 - 2\beta)h)(1 - \alpha\pi)}{1 - \pi}$$

and $x = H$ if $\lambda > \bar{\lambda}_\beta$

Note that $\bar{\lambda}_\beta < \bar{\lambda}_\alpha$ ($\bar{\lambda}_\beta > \bar{\lambda}_\alpha$) if $\beta > \alpha$ ($\beta < \alpha$). Similarly, when comparing to the basic model, $\bar{\lambda}_\beta < \bar{\lambda}$ ($\bar{\lambda}_\beta > \bar{\lambda}$) if $\beta > \frac{1}{2}$ ($\beta < \frac{1}{2}$). The higher is the politician's prior, the more attractive does distorting seems to a dumb politician and the the larger $\bar{\lambda}_\beta$ becomes. The politician, considering whether to address the problem or not $r \in \{0, 1\}$, takes into account the expected outcome of his choice. She chooses the option that leads to a higher expected utility, where her expected utility from addressing the problem is given by:[15]

$$E\left[U\left(r=1\right)\right]=2\pi h\beta\left(1-\beta\right)+\left(\beta\pi+\left(1-\pi\right)\cdot\sigma_{x}\left(\varnothing\right)\right)\left(p+\left(2\beta-1\right)h+\lambda\hat{\pi}\left(1,H\right)-\lambda\hat{\pi}\left(1,L\right)\right)$$
$$+\lambda\hat{\pi}\left(1,L\right)-c$$

Now consider the agenda-setting decision, r. Suppose $\lambda\leq\bar{\lambda}_{\beta}$. The politician's expected payoff from $r=1$ equals:

$$\begin{aligned}E_{1}\left[\hat{\pi}\left(r=1\right)\right] &= \beta\pi\hat{\pi}\left(1,H\right)+\left(\beta\pi+\left(1-\pi\right)\right)\hat{\pi}\left(1,L\right)\\ &= \left(\frac{1+\beta-\alpha-\pi\left(1-\beta\right)+\alpha\pi\left(1-2\beta\right)}{1-\alpha\pi}\right)\pi\end{aligned}$$

The participation condition is:

$$c<\beta\pi\left(p+h\right)+\lambda\pi\frac{\beta-\alpha-\pi\left(1-\beta\right)+2\alpha\pi\left(1-\beta\right)}{1-\alpha\pi}$$

With $\lambda>\bar{\lambda}_{\beta}$ The voter believes that the politician does not distort her decision but the politician always distorts it when receiving an uninformative signal $s=\varnothing$. This situation may arise only with $\beta>\alpha$. The expected reputation of the politician from addressing the problem is:

$$\begin{aligned}E\left[\hat{\pi}\left(r=1\right)\right] &= \left(\beta\pi+\left(1-\pi\right)\right)\hat{\pi}\left(1,H\right)+\left(1-\beta\right)\pi\hat{\pi}\left(1,L\right)\\ &= \frac{1-\pi\left(\alpha+\left(1-\pi\right)\left(1-\beta\right)\right)}{1-\alpha\pi}\end{aligned}$$

As in the basic model, an increase in voter prior α decreases $E\left[\hat{\pi}\left(r=1\right)\right]$. The participation condition is:

$$c<\beta\pi h+\left(1-\pi\left(1-\beta\right)\right)p+\lambda\frac{1-\pi\left(2-\pi+\left(\alpha-\beta\right)\left(1-\pi\right)\right)}{1-\alpha\pi}$$

[15] The full derivation of the expected utility from $r=1$ is given by:

$$\begin{aligned}&E\left[U\left(r=1\right)\right]=\beta\pi\left[p+h+\lambda\hat{\pi}\left(1,H\right)\right]+\left(1-\beta\right)\pi\lambda\hat{\pi}\left(1,L\right)+\\ &\left(1-\pi\right)\cdot\sigma^{*}\left(\varnothing\right)\cdot\left[p+\left(2\beta-1\right)h+\lambda\hat{\pi}\left(1,H\right)\right]+\left(1-\pi\right)\left(1-\sigma^{*}\left(\varnothing\right)\right)\lambda\hat{\pi}\left(1,L\right)-c\\ = &\left(\beta\pi+\left(1-\pi\right)\cdot\sigma^{*}\left(\varnothing\right)\right)p+\beta\pi h+\left(1-\pi\right)\cdot\sigma^{*}\left(\varnothing\right)\cdot\left(2\beta-1\right)h+\left(\beta\pi+\left(1-\pi\right)\cdot\sigma^{*}\left(\varnothing\right)\right)\lambda\hat{\pi}\left(1,H\right)\\ &+\left(1-\pi-\sigma^{*}\left(\varnothing\right)+\pi\sigma\right)\right)\lambda\hat{\pi}\left(1,L\right)-\beta\pi\lambda\hat{\pi}\left(1,L\right)+\pi\lambda\hat{\pi}\left(1,L\right)-c\\ = &2\pi h\beta\left(1-\beta\right)+\left(\beta\pi+\sigma^{*}\left(\varnothing\right)\cdot\left(1-\pi\right)\right)\left(p+\left(2\beta-1\right)h+\lambda\hat{\pi}\left(1,H\right)-\lambda\hat{\pi}\left(1,L\right)\right)+\lambda\hat{\pi}\left(1,L\right)-c\end{aligned}$$