

CAMPAIGN RHETORIC AND POLICY MAKING UNDER CAREER CONCERNS

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Abstract

In this paper I develop a model of political platform choice and subsequent policy implementation decisions by political candidates who are primarily motivated by career concerns. Although political platforms are non binding, politicians have some incentive to keep campaign promises in order to uphold their reputation. I analyze the electoral outcome and the determinants which influence the decision to break campaign promises.

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This paper is concerned with the question when and to what extent promises made during an electoral campaign are binding for politicians. It was one of the central insights in the theory of political economy in the recent years that the political arena is plagued by commitment problems. Not only are governments short sighted and do not or only partially internalize the well being of the successors. It is also difficult to bind the hands of political actors by contracts, as one in office they generally have the power to defy the rulings of any enforcing institution (e.g. courts). A host of institutions can be interpreted as an attempt to limit power abuse *ex post*.¹

Besides being bound by institutions, the concern about individual (or collective) reputation may act as a constraint on the behavior of political actors. In this paper we focus on the last mechanism to explore how binding campaign promises are. Although this question is of central importance in any theory of electoral competition, it has received scant attention so far. Persson and Tabellini (2000) (p. 483) summarize the two dominant approaches so far and also point to the unsatisfactory status quo.

“It is thus somewhat schizophrenic to study either extreme: where promises have no meaning or where they are all that matter. To bridge the two models is an important challenge.”

Two reasons can be brought forward for the relevance of this issue. First of all, if campaign promises bear some commitment value, candidates vying for office will anticipate this and adapt their platforms accordingly. A better conception of the commitment implied by political platforms should therefore foster our understanding of electoral competition. Moreover, given that campaign promises are not pure cheap talk, they influence the policies implemented *ex post*. Hence, the degree of commitment not only impacts the electoral race but also policy choice.

As mentioned already, this project elaborates on the idea that reputational concerns may make promise keeping optimal. In particular, we focus on a situation where a politician is primarily concerned about the electorate’s assessment of his competence. Competence as

¹A few very influential contributions are Persson, Roland, and Tabellini (1997), Aghion and Bolton (2003), Aghion, Alesina, and Trebbi (2004), and Messner and Polborn (2004).

defined here manifests itself in the candidate's capability to identify the policy best suited for the needs of the voters. For example, one could think of the politician's ability to process and distill information in order to find appropriate solutions to political problems. Alternatively, the politician's competence could measure the quality of his advisers or future cabinet.

Our approach is fundamentally different from existing papers where the candidates prime reputational concern is to signal ideological congruence with the (median) voter. Indeed, we will neglect any ideological component throughout the analysis. We do so for several reasons. First, there is ample evidence that the electorate's assessment of a candidate's personal characteristics strongly influences their voting behavior. Markus (1982) finds that in the 1980 election, Carter's defeat against Reagan was not due to ideological differences but purely due to different assessments of personal characteristics such as competence. Peterson (2005) reports that voters in the US base their decision to the same extent on traits than on issues and also shows that voters try to infer traits from political platforms. Second, models that focus on ideology posit that the disciplining role of reputation stems from the fear that once a politician has reneged on his platform, his promises will no longer be believed in the future. The threat of being ousted from office in the future readily explains why promises are kept. However, these models have a hard time in explaining why promises are broken.² In particular, why do legislators often deviate on some issues but not on all, where the theory says that independent of the particular deviation at hand, voters should carry out the harshest punishment possible?³ For example, Harrington (1992) and Ringquist and Dasse (2004) find that between 30% and 40% of campaign promises are broken. Also Budge and Hofferbert (1990), King and Laver (1993), and Poole and Rosenthal (1997) find that political platforms have a partially binding character. The model developed here has the appealing feature that it explains both promise keeping and breaking in a parsimonious framework.

But what exactly are the incentives which govern the politician's decision to keep or break his promises? In the model I will assume that before campaign promises are made and after the election the politician receives information about the optimal course of action. Breaking promises signals to the electorate that the political platform was based on poor information and is therefore a sign of incompetence. To avoid this, a politician can try to gamble or muddle through by sticking to his platform knowing that the implemented policy is likely to fail. Hence, a central tension exists between the desire to appear competent and the utilization of

²For example, in Aragonès, Palfrey, and Postlewaite (2007) campaign promises are always honored.

³In section 5 I discuss this point in more detail in a model with multiple policy dimensions.

new information which is available after the election.

That this tension might lead to excessively stubborn behavior has also been recognized by the popular press. Douglas Waller complains in the *Times*⁴ that since “economic conditions are constantly changing [...] assumptions and policy decision made in one year can be DOA by the next.” For this reason he wishes “to see politicians be more flexible” and that they “did not keep the promises they make”.

In the model we explore the implications of this trade-off on the politician’s behavior both at the campaign stage and ex post, after the elections took place. We construct an equilibrium where most of the information available ex post is utilized. Nevertheless in equilibrium promises will be broken. We furthermore establish that promise breaking signals low competence, so politicians benefit from the perception of having a firm standpoint. This paper therefore endogenizes the cost of breaking campaign promises instead of exogenously assuming it (as e.g. in Banks (1990)). Alternatively, we provide a mechanism why politicians which do not change their minds are attributed a valence advantage by the voters. In a recent article, Kartik and McAfee (2007) explore the implication of the electorate’s preference for candidates with “character” on electoral competition. We see our paper as complementary to theirs: while we do not model platform choice in that detail, we investigate postelection behavior explicitly and derive the electorate’s preference for candidates keeping their word endogenously.

Moreover the cost of breaking campaign promises need not be uniform across all issues. An advantage of our approach is that we can relate these cost to the environment in which the politician operates, e.g. the degree of uncertainty about his competence or the electorate’s capability to assess the appropriateness of a certain policy. We can therefore make specific predictions under what circumstances campaign promises are more credible and which promises will be revised more often.

The paper proceeds as follows. Following a short review of the related literature, we will present the model. After that the main properties of the equilibrium are derived, followed by an investigation of the voting behavior of the electorate. The paper ends with a short conclusion.

⁴See “Why some Campaign Promises Should be Broken” in the *Times* from September 10, 2001.

1.1 *Related Literature*

The theory developed here attempts to bridge the two dominant approaches to model the link between policy announcements before the election takes place and the actually implemented policy. Hotelling (1929) and Downs (1957) were the first to model electoral competition. They stand for one extreme approach which builds on the assumption that campaign promises are binding. A very much celebrated result of this strand of the literature is the famous median voter theorem which states that political platforms will collapse to the median voter's preferred position. On the other extreme is the literature on postelection politics which presumes that politicians are free to implement whatever policy serves their interests best. This approach which was pioneered by Barro (1973) and Ferejohn (1986), points to the importance of selecting ideologically congruent politicians. In the so called citizen candidate models, Osborne and Slivinski (1996) and Besley and Coate (1997) endogenized the pool of candidates running for office.

In an intermediate approach the cost of breaking campaign promises were (exogenously) assumed to be positive but not infinitely high. Banks (1990) studies the implications of this presumption, which was extended by Callander and Wilkie (2007) who allow for differential cost of breaking campaign promises across candidates. The first idea how to circumvent these extreme commitment assumptions was to invoke repeated game arguments. The papers by Alesina (1988), Alesina and Spear (1988), Duggan (2000) and Harrington (1993) illustrate how politicians concerned about their reputation achieve to communicate (at least partially) their policy intentions. While in these approaches voters are uncertain about the candidates' ideological leanings, Kartik and McAfee (2007) take a different route. Here politicians try to signal personal traits such as "character" which are valued by the electorate. As we are concerned about competence, our model is close in spirit to them.

We thereby extend a literature which studies electoral competition with vertically differentiated politicians. Bernhardt and Ingerman (1985), Ansolabehere and Snyder (2000), Aragonés and Palfrey (2002), and Groseclose (2001) study models of electoral competition where one of the candidates has a valence advantage. In contrast to the approach pursued here, all these models start from the presumption that valence is observable to all voters or, alternatively, can be credibly communicated. Moreover, the candidates can signal their valence only in the campaign stage, while in our model, agents also strive to maintain their reputation after elected into office.

There are relatively few papers which view politicians as "experts" who are concerned about the electorate's assessment of their competence. Canes-Wrone, Herron, and Shotts (2001), Majumdar and Mukand (2004) and Fox (2007) are exceptions which in contrast to this paper focus on the implications of this assumption on policy implementation, but neglect the campaigning stage.

2 THE MODEL

We consider a model with three players: the electorate and two politicians who compete against each other to win an election. They do so by specifying a policy platform $m \in \{a, b\}$ which stipulates a policy $d \in \{a, b\}$ to be implemented after the election.⁵ We assume that the platform is non binding, i.e. after the election the successful candidate can choose freely among the available policy options a or b .⁶ Making promises to the voters comes at no cost, so the policy platforms are best thought of pure cheap talk.

Which policy is best for the voters depends on the realization of a state of the world $x \in X = \{a, b\}$. If the policy implemented fits the state of the world it will yield a positive payoff $\omega = 1$ to the electorate with probability λ . The wrong policy in turn never generates any positive payoff, hence $\omega = 0$. Formally, we assume that

$$\text{Prob}(\omega = 1|d = x) = \lambda \quad \text{and} \quad \text{Prob}(\omega = 1|d \neq x) = 0$$

It is noteworthy that all members of the electorate share the same preferences, so we can think of the voters as a unitary actor in what follows. The prior probability of state a being true is denoted by $q \geq \frac{1}{2}$. In absence of any information about the true state all voters prefer policy a over b , so we can think of policy measure a as a standard course of action.

Before the politicians specify their platform, they both receive a signal $s \in S = \{a, b\}$ about the true state of the world. The signals are assumed to be conditionally independent. How precise the information of the politician is, depends on his type denoted by $\theta \in \Theta = \{\underline{\theta}, \bar{\theta}\}$, $\bar{\theta} > \underline{\theta}$. The higher type occurs with ex ante probability $p = \frac{1}{2}$ and possesses better information.

⁵Given that the information structure is binary, it comes without loss of generality to restrict the message space of the politicians to two elements.

⁶Although most models take some interval to be the policy space, our binary specification is not unusual and might in some circumstances even be more plausible; e.g. one either supports or is against stem cell research. See Krasa and Polborn (2007).

Specifically, we assume

$$\text{Prob}(s = x|\theta) = \theta, \quad x \in \{a, b\}.$$

To simplify the exposition we will assume that the bad politician's signal does not contain any information and will set $\underline{\theta} = \frac{1}{2}$. Moreover we make the following assumption concerning the the values of $\underline{\theta}$, q and $\bar{\theta}$.

ASSUMPTION 2.1 $\bar{\theta} > q > \underline{\theta}$.

This assumption has the following important implication. If a good politician receives a signal in favor of state b he considers state b more likely to be true than state a , since the precision of his information source is high enough to more than offset the prior, which is leaned toward state a . The same is not true for the bad agent. Given that $\underline{\theta} < q$, the bad politician's information is so noisy that even after $s = b$ posterior puts more weight on state a .

Importantly we assume that the politician's type is private information and only known to the politician. One could think of different information sources that the politician uses whose quality is not observable to the public. Furthermore, the precision of the information is non verifiable and can therefore not be credibly communicated to the electorate. However, the politician can try to signal his type by the choice of his policy platform and the electorate can condition its voting behavior on the campaign promises made.

After one of the politicians is voted into office he learns the true state of the world x before he has to make the decision d . Subsequently the policies' success or failure ω is realized.

Each policy maker is concerned about his reputation. Specifically, we assume that the utility u_P of each candidate is given by the electorates assessment of his type.

$$u_P = \mathbb{E}(\theta|m, d, \omega) = \text{Prob}(\bar{\theta}|m, d, \omega)\bar{\theta} + \text{Prob}(\underline{\theta}|m, d, \omega)\underline{\theta}, \quad (1)$$

where the voters use all of their information $I = (m, d, \omega)$ to compute the politicians expected type. Note that similar to the electorate we abstract from any ideological leanings of the policy makers, as they have no preferences for a specific policy per se. Although somewhat unusual, this "common value" approach where in principle all citizens share the same preferences, has a long standing tradition in the field of Political Economy. Condorcet (1785) was the first one to assess political institutions in the light of their capability to aggregate

dispersed information such that the optimal policy for the citizenry could be found. This approach has been revived very recently. Feddersen and Pesendorfer (1996, 1997) put Condorcet’s insights on a solid game theoretic basis and showed that this approach remains valid even if preference heterogeneity is introduced.⁷ Moreover, our modelling strategy is neither rejected by the data. Sigelman and Sigelman (1986) find that voters do support a politician even if his policy diverges from their bliss point, if they believe that this divergence is caused by superior information on the politician’s side.

The preference configuration we use can be interpreted as a shortcut of a more general dynamic model, where the policy maker’s future success, e.g. his reelection probability depends on the electorates assessment of his valence. The voters do also assess the ability of the loosing candidate by conditioning on his platform m and their information about the appropriateness of the platform as revealed by the realization of ω .⁸ Note that the expected type can be written as a linear function of the posterior probability of the politician to be competent as

$$\mathbb{E}(\theta|m, d, \omega) = \underline{\theta} + \pi(m, d, \omega)(\bar{\theta} - \underline{\theta}),$$

where $\pi(m, d, \omega) := \text{Prob}(\bar{\theta}|m, d, \omega)$. Hence to save notation we will define the policy maker’s preferences directly over $\pi(m, d, \omega)$.

The electorates preferences are governed by their desire to elect a competent decision maker and the probability of a correct decision. Specifically we assume that given their information I voters maximize

$$u_E = \eta \text{Prob}(\bar{\theta}|I) + (1 - \eta) \text{Prob}(d = x|I). \tag{2}$$

The timing of the game can be summarized as follows.

1. Each policy maker receives $s \in \{a, b\}$.
2. Platforms $m \in \{a, b\}$ are announced.
3. Election takes place.

⁷Piketty (1999) offers a good overview over this branch of research. See also Canes-Wrone and Shotts (2007) for a paper strongly arguing in favor of the assumption that politicians can be viewed as expert holding superior information.

⁸There is evidence that voters are indeed that sophisticated. See Butt (2006) for the electorate’s effort to assess the quality of the opposition.

4. Winning candidate learns true state of the world x .
5. Winning candidate chooses policy $d \in \{a, b\}$.
6. Realization of success or failure of the policy.
7. Pay-offs are realized.

Each politician's strategy is given by functions $m : S \rightarrow \Delta(\{a, b\})$ and $d : S \times X \rightarrow \Delta(\{a, b\})$ where $\Delta(\{a, b\})$ denotes the set of probability distributions over the set $\{a, b\}$. The electorate's strategy is given by a voting function $v : \{a, b\} \times \{a, b\} \rightarrow [0, 1]$ where $v(\cdot, \cdot)$ gives the probability of voting in favor of candidate 1. In addition the voters use an updating function $B : \{a, b\} \times \{a, b\} \times \{0, 1\} \rightarrow [0, 1]$ which gives the posterior probability of facing a good agent given the voter's information I .

Throughout the paper we will focus on Perfect Bayesian Equilibria (PBE). In a PBE each policy maker's strategy must be optimal given the beliefs and the strategy of the other politician and the electorate. Moreover the beliefs are formed through Bayes' Rule whenever possible.

3 ANALYSIS

Since the political platforms are non binding, the model outlined above is a cheap talk game. It is well known that these games are plagued by a multiplicity of equilibria. In what follows I will restrict attention to an equilibrium with the appealing property that the maximum amount of information, which is available after the election, is utilized. For this to happen, revising one's own previous political position must be least costly. This is the case if the good type always implements the ex post efficient policy.

3.1 Basic Structure and Results

But even before the election takes place, the design of the political program may be governed by strategic incentives. In particular, it is tempting to think that the candidates will distort their electoral programs in order to win the election. This is not due to holding office is

valuable per se⁹, but may be due to the possibility to conceal a wrongful political platform. Hence, gaining office may be valuable for pure reputational concerns. However, as I will show below, this is not the case. In equilibrium, the reputational payoffs adjust such that each candidate is indifferent between winning and losing the election. This has the important implication that the agents will exclusively focus on maximizing their reputation. Equipped with this insight one can prove the following result.

PROPOSITION 3.1 *There exists an equilibrium with the following structure.*¹⁰

1. A good agent will always announce $m = s$ and chooses $d = x$.
2. The bad type sets

$$m = \begin{cases} a & \text{if } s = a \\ a & \text{if } s = b \text{ with probability } 1 - \beta^* \\ b & \text{if } s = b \text{ with probability } \beta^* \end{cases}$$

Moreover the bad agent will stick to his platform even after having learned that it is wrong with probability $\gamma_a^* \in (0, 1)$ if $m = a$ (and $x = b$) and $\gamma_b^* \in (0, 1)$ if $m = b$ and $x = a$.

PROOF: See the appendix.

Note that one can sustain an equilibrium where the good agent always behaves efficiently. If he does, however, bad agents will sometimes "gamble" in the sense that they adhere to their platform although there is no chance of success. To understand why this must be the case, consider the opposite. If the politicians were to behave in an ex post efficient manner, the reputation of the agent would be unaffected whether the policy is a success or not. Once the electorate knows whether the politician has received a correct or wrong signal (which it will if no agent gambles), the realization of ω carries no additional information. But as long as the political platform contains some information about the politician's signal, the agent will earn a higher reputation in case of a correct signal. Hence there would be no incentive anymore to revise the own political program.

⁹Remember that we do not assume any rents from office.

¹⁰The equilibrium outlined here comes closest to the equilibria which are commonly studied in the literature experts, see e.g. Levy (2004) and Ottaviani and Sorensen (2006a,b).

In addition to gambling ex post, bad politicians will also distort their political platform. Reporting one's own signal truthfully implies that the reputation does not depend on the platform choice anymore, but only on the realization of ω and the fact whether the agent has revised his platform. But assumption 1 assures that even after having received a signal in favor of state b the bad agent considers state a more likely to be true. Since his reputation increases if the platform specifies the correct policy, bad types shy away from the non standard policy b . Note, however, that the politician will not reveal his posterior either: as his information is too noisy, this would mean to choose a electoral program with the standard policy a all the time. It is then easy to see, that $m = b$ would immediately reveal a good type, so bad agents, despite distorting the platform toward the standard policy, still behave to risky.

The behavior of the agents in equilibrium and the resulting reputational payoffs are summarized in the next proposition.

PROPOSITION 3.2 *In equilibrium the following relations hold.*

1. *Reputation:* $\pi(b, b, 0) > \pi(a, a, 1) > \pi(b, b, 0) = \pi(b, a, \omega) > \pi(a, a, 0) = \pi(a, b, \omega)$.
2. *Gambling:* $\gamma_a^* > \gamma_b^*$.

PROOF: See the appendix.

Remember that $\pi(m, d, \omega)$ denotes the probability of facing a good type conditional on having observed platform m , decision d , and outcome ω . Quite intuitively, successful politician earn a higher reputation compared to their unsuccessful counterparts. While a success reveals that the agent must have received the correct signal, a failure can be attributed to two things: either the politician was just unlucky but has chosen the right policy or his platform was incorrect, but he decided to gamble. Because good agents always choose the best policy, it is the possibility of the second scenario which drives down reputation. Note also that since a wrong policy never generates a success all agents must be indifferent between a failure and revising their platform.¹¹ In addition, the equilibrium has the reasonable feature that reneging on one's own campaign promises is a bad signal about competence. This is a direct consequence from the fact that adjustment of the own position reveals wrong ex ante

¹¹Otherwise a politician would, after he has learned that his platform was wrong, always gamble.

information.

Hence, the model is insightful from a theoretical point of view as it provides a mechanism which endogenizes the cost of reneging one's own campaign promises. There are some recent papers which analyze electoral competition under the assumption that politicians can deviate from their previous announcement only at a cost. Banks (1990) and Callander and Wilkie (2007) consider settings where politicians with potentially different inclinations to lie bear a cost in case they renege on their initial political platform.

Moreover, the model indicates that the cost of breaking promises is not uniform over policy dimensions, but can be traced back to fundamentals. How bad a platform revision is for reputation is the driving force for the gambling decision. The proposition stipulates that agents who revise a standard political program suffer a sharper loss in reputation. To understand this property of the model, note that promise breaking is less costly the more often good agents err on a specific platform. As competent candidates always adapt to new information, the electorate knows in this case that even upon observing a platform revision, the probability of facing a good type is still high. What makes breaking a standard platform so costly is hence the fact that good agents only rarely make a mistake upon choosing $m = a$.¹² This readily explains the higher gambling incentive in case the agent has chosen the standard platform.

How the cost of promise breaking and hence ex post behavior of the agents is influenced by the environment is presented in the following corollary.

COROLLARY 3.1 (*Comparative Statics*)

1. γ_a^* increases in q while γ_b^* decreases in q .
2. Independently of platform choice, gambling decreases in λ and increases in $(\bar{\theta} - \underline{\theta})$.

PROOF: See the appendix.

The first part of the corollary says that the gambling intensities move in different directions as policy measure a becomes more likely to be optimal. Ceteris paribus, upon observing $(b, b, 0)$ the electorate understands that the higher is q the more likely the platform b turned out to be the wrong one. Hence, to a larger extend a failure is attributed to a bad agent

¹²As the prior is based in favor of state a and good agents always choose $m = s$, the good agent is much more likely to choose the right platform upon $s = a$.

being wrong and gambling than to bad luck. This drives down the payoff from sticking to platform b and therefore makes gambling less attractive. Exactly the reverse holds true for $m = a$ which explains the higher gambling incentive for q rising.

Additionally the corollary states that politicians will use more ex post information if their performance can be monitored better. The lower is λ the less information the electorate obtains regarding the appropriateness of the implemented policy. Confessing that the own political program is based on wrongful information clearly becomes less attractive under these circumstances. Higher gambling is therefore predicted in those policy areas which have long term consequences and in which the electorate lacks assessment capability. In both cases it is reasonable to assume that the electorate's signal is only loosely related to the optimality of the chosen policy. In the model this is represented by a lower value of λ .

The last part of the corollary stipulates that higher type uncertainty as measured by the difference between a good and a bad type decreases ex post efficiency. To see why, assume that the information of the good agent becomes better while the bad type remains unchanged. This depresses the reputation attached to breaking one's own political promises because this payoff depends on how often the good type receives a wrong signal relative to the bad type.¹³ Accordingly, sticking to the own platform becomes more attractive. Hence, especially in relatively new or quickly changing political fields, where politicians do not have a well established track record, the model predicts stubborn behavior.

3.2 *The Voting Decision*

We have already shown that the politicians in the model simply strive to maximize their reputation and do not care about winning office. Nevertheless it is an interesting question which (if any) platform has an advantage in the electoral race. The answer to that question will crucially depend on the importance voters assign to the selection of able politicians relative to the likelihood of correct decision making.

We will start with the first dimension determining the voting decision, namely the electorates assessment of the politician's type given the observed platform. In general, one can distin-

¹³It may be illustrative to take a look at the extreme case where the good agent's signal becomes perfect, i.e. $\bar{\theta} = 1$. As the good agent's signal can never be wrong, revising one's own platform would immediately reveal the bad type, hence gambling will always occur.

guish two competing forces. To see the point most clearly, assume first that all types of agents truthfully report their information during the campaign (so $\beta = 1$). As incompetent candidates only receive noise they obtain both signals and therefore select both platforms with equal probability. Good types, however, would choose the standard platform $m = a$ more often.¹⁴ Thus, under truthful reporting the composition of agents choosing $m = a$ is better. However, we know already that through the desire to appear competent bad types distort their platform and shy away from $m = b$. It turns out that this countervailing effect is stronger.

LEMMA 3.1 *The electorates assessment of the agent's type is higher after having observed $m = b$.*

PROOF: See the appendix.

Note that this lemma makes intuitive sense given that we have already seen that the reputational payoffs that can be earned with the non standard platform are higher.

The lemma substantiates the feeling of a tension between competence and populism.¹⁵ Carrillo and Castanheira (2007) reports several circumstances where parties adopting centrist platforms lost elections by a landslide mainly because the electorate's assessment of their valence deteriorated. He offers an explanation based on moral hazard problems. When selecting a non-centrist platform a politician handicaps himself since his program is inferior from an ideological point of view. To retain a chance of winning, the program must be superior in a second dimension, e.g. quality. Since the electorate can observe the program's quality with some probability, non centrist platforms are a signal of effort exertion.¹⁶

Our theory is complementary as it stresses an adverse selection effect. Non centrist platforms are adopted predominantly by more competent candidates. Our focus on reputational concerns allows us also to relax ex ante observability and therefore voter sophistication requirements. For the reputational mechanism to operate it is sufficient if the electorate can (at least with some probability) assess the appropriateness of a policy *after* implementation.

¹⁴This is a direct consequence from state a being more likely and the good politicians receiving a signal correlated with the state.

¹⁵Again, in the following discussion I will treat policy a as a centrist platform.

¹⁶This kind of handicapping can also work within a party. If the party's leadership has preferences different from the rank and file, then the rank and file's support for the leadership may also signal competence to the voters. See Caillaud and Tirole (1999, 2002) for an exposition of that idea.

In spirit our signaling mechanism is also closely related to Kartik and McAfee (2007) and it might be interesting to draw a comparison. In Kartik and McAfee (2007) politicians stick to their platform in order to signal "character" which for exogenous reasons is valued by the electorate.¹⁷ The farther away an observed political program is from the median voter's position, the more likely the corresponding politician possesses character. Hence our model shares a central prediction with them: more extreme policy announcements are made by candidates who have a valence advantage.

There is some evidence that lends support to our modeling strategy as it suggests that voters do value competence over other personal characteristics which may be incorporated in the term "character". Greene (2001) and Newman (2003), for example, report that the electorate's assessment of competence is more important for approval rates than integrity.

The second dimension voters may care about is the likelihood that a correct policy is implemented. The respective probabilities are given by¹⁸

$$\begin{aligned}\text{Prob}(d = x|m = a) &= \lambda \left[1 - \frac{(1-p)(1-q)(1-\underline{\theta}\beta)\gamma_a}{\text{Prob}(m = a)} \right] \\ \text{Prob}(d = x|m = b) &= \lambda \left[1 - \frac{(1-p)q(1-\underline{\theta})\gamma_b}{\text{Prob}(m = b)} \right]\end{aligned}$$

Both expressions have a straightforward interpretation and illustrate nicely the main forces at work. A prerequisite for a successful outcome conditional on m is that the ex post correct decision is taken (the terms in squared brackets). This will always happen besides a bad agent (who occurs with probability $(1-p)$), who has chosen the wrong platform (which happens with probability $(1-q)(1-\underline{\theta}\beta)$ if $m = a$ and with probability $q(1-\underline{\theta})\beta$ if $m = b$ was selected) decides to gamble (respective probabilities γ_a and γ_b).

The two expressions point to three main effects. First of all, there is the *composition effect* which we have already derived in the lemma above. As bad agents shy away from the unexpected platform the chance of facing a good candidate is higher under $m = b$, i.e. $(1-\underline{\theta})\beta < (1-\underline{\theta}\beta)$. Although the average type selecting the non standard platform is better, the likelihood that this platform was wrongfully adopted is larger. This is a simple consequence from the fact that state a occurs with a higher probability (in general, $(1-q)(1-$

¹⁷A politician with character here is bound to reveal his policy intentions truthfully, i.e. he bears an infinite cost of lying.

¹⁸In order to make the interpretation more transparent I did not replace p and $\underline{\theta}$ with 0.5.

$\underline{\theta}\beta) < q(1 - \underline{\theta})\beta$ as we will see below). We call this effect the *error probability effect*. Lastly, even if a non standard program turns out to be wrong ex post, we can not conclude that an inappropriate policy will be implemented. This is because we already know that politicians are more inclined to gamble given that they have selected $m = a$ (*gambling effect*).

Unfortunately it turns out that the interaction of these effects is highly complex, so it is not possible to analytically derive conditions which pin down the probabilities of correct decision making. Instead we resort to numerical simulations of the model. In all tables I fixed the values of q and g and varied the observability parameter λ . The difference between tables 1 and 2 is that q increases from 0.6 (table 1) to 0.7 (table 2) while $\bar{\theta}$ is held constant at 0.8.

Before I turn to the success probabilities let me explain first the behavior of the endogenous variables β and γ_i dependent on parameter values. As one can directly see, β decreases in both the observability parameter λ and the prior q . This makes intuitive sense. As the bad agent is concerned about adopting the correct platform he will opt more often for $m = a$ if he assigns a higher probability to state a being true. If monitoring becomes better (λ goes up) this effect is amplified. Higher observability implies that the electorate attributes failures more strongly to a wrong policy choice instead of bad luck. Since the wrong policy is only implemented by bad candidates, preventing a failure becomes more important, hence β declines. A very similar intuition applies to the gambling decision. With a low degree of monitoring, revising one's platform and thereby confessing a wrong platform choice is rather unattractive since the electorate can not tell apart wrong policies from bad luck. Hence, gambling increases as observability deteriorates.

Comparing tables 1 and 2 one can see that the change in q has nearly no effect on the composition of agents. The higher error probability given platform b in table 2 can therefore almost fully be attributed to the smaller prior probability of state b occurring. However, turning to the success probabilities, the higher probability of having selected $m = a$ correctly is almost completely offset by the change in the gambling intensities. To understand this effect, remember that able candidates always report their signal in the campaign stage. As q increases, the likelihood that a good type has wrongfully adopted platform a , and therefore, the probability that a good type revises this platform, goes down. But this, in turn, makes incompetent candidates much more hesitant to revise their former positions, since the cost in terms of reputation goes up (e.g. for $\lambda = 0.7$, γ_a rises from 0.482 to 0.552 as q increases from 0.6 to 0.7). The reverse effect holds true for $m = b$. Note that here the probability of

Table 1: Numerical Simulations, $q = 0.6, \bar{\theta} = 0.8$

λ	β	Comp. Effect $\frac{1-\theta\beta}{\text{Prob}(m=a)}$	Error Prob. Effect $\frac{(1-\theta)\beta}{\text{Prob}(m=b)}$	$\frac{(1-q)(1-\theta\beta)}{\text{Prob}(m=a)}$	$\frac{q(1-\theta)\beta}{\text{Prob}(m=b)}$	Gambling γ_a	γ_b	Pr($d = x m = a$)	Pr($d = x m = b$)	Success Prob.
0.2	0.875	0.501	0.498	0.200	0.299	0.621	0.511	0.175	0.169	
0.3	0.876	0.502	0.497	0.201	0.298	0.606	0.488	0.264	0.256	
0.5	0.865	0.503	0.496	0.201	0.297	0.562	0.429	0.443	0.436	
0.7	0.857	0.505	0.493	0.202	0.296	0.482	0.333	0.632	0.631	
0.8	0.853	0.506	0.492	0.202	0.295	0.409	0.261	0.734	0.738	
0.9	0.851	0.506	0.491	0.203	0.295	0.281	0.158	0.849	0.858	

Table 2: Numerical Simulations, $q = 0.7, \bar{\theta} = 0.8$

λ	β	Comp. Effect $\frac{1-\theta\beta}{\text{Prob}(m=a)}$	Error Prob. Effect $\frac{(1-\theta)\beta}{\text{Prob}(m=b)}$	$\frac{(1-q)(1-\theta\beta)}{\text{Prob}(m=a)}$	$\frac{q(1-\theta)\beta}{\text{Prob}(m=b)}$	Gambling γ_a	γ_b	Pr($d = x m = a$)	Pr($d = x m = b$)	Success Prob.
0.2	0.751	0.502	0.497	0.151	0.348	0.661	0.434	0.180	0.170	
0.3	0.745	0.503	0.495	0.151	0.347	0.650	0.405	0.271	0.257	
0.5	0.733	0.505	0.491	0.151	0.344	0.617	0.346	0.453	0.440	
0.7	0.720	0.508	0.487	0.152	0.340	0.552	0.254	0.641	0.639	
0.8	0.714	0.509	0.485	0.153	0.339	0.488	0.191	0.740	0.748	
0.9	0.710	0.510	0.483	0.152	0.338	0.362	0.110	0.850	0.867	

correct decision making actually *increases* as q goes up, i.e. the higher error probability is more than compensated by lower gambling.

Comparing success probabilities across platforms we can see that given λ is high enough candidates which have chosen the ex ante unexpected program will implement the appropriate policy more often. For low values of observability, gambling is pervasive across all platforms, so the error probability effect dominates. As monitoring improves, two effects contribute to the higher success probabilities. First, β goes down, i.e. incompetent types choose better platforms. Second, the gambling incentive goes down, but it does so asymmetrically. While gambling is still rather common given $m = a$, it rapidly decreases under $m = b$ (e.g., if $q = 0.7$ and $\lambda = 0.9$ gambling is more than three times as likely under $m = a$ compared to $m = b$). As soon as λ passes some threshold value, the gambling effect drives the success probability given $m = a$ below the one given $m = b$.

To consider the robustness of these results, we can compare these findings with tables 3 and 4 which can be found in the appendix. Here I leave q constant at 0.6 and vary $\bar{\theta}$ from 0.7 in table 3 to 0.9 in table 4. As one can see immediately, the qualitative results are very similar. Again the composition and the error probability effect stay almost constant as $\bar{\theta}$ increases. However, a higher spread between types has dramatic consequences for the gambling propensities. The better the good agent becomes the less likely he runs on a wrong platform, which makes incompetent candidates much more reluctant to utilize new information if it is in conflict with their platform. As a consequence the success probabilities across all platforms decline. Again, for low values of observability, a standard platform is conducive to correct decision making ex post, while the reverse is true for higher values of λ .

We can summarize the consequences of the preceding discussion on the voting decision in the following proposition.

- PROPOSITION 3.3
1. *Voters will always vote for a candidate with platform b (if there is any) if λ is high enough.*
 2. *If λ is low **and** η is low enough, a candidate with a standard platform (if there is any) wins the election.*

Remember that η measures the importance of selecting an able politician. Candidates with $m = a$ are only preferred by the electorate if they implement the correct policy more often (i.e. λ must be low enough) and the voters are sufficiently concerned about correct decision

making (i.e. η is low enough). In all other circumstances the electorate will vote for politicians with program a , since we have seen that running on platform b contains favorable news about the agent’s type. Given that both candidates specified a standard program, the electorate is indifferent between them and votes for either of the two.

4 EXTENSIONS

In this section I will consider an alternative equilibrium structure and will extend the model to multiple policy dimensions.

4.1 *Candidate Ambiguity*

It is well known and often complained about that candidates in an election refuse to make clear statements but deliberately choose ambiguous positions. This insight goes back at least to Downs (1957) who noticed that at the “critical issues” the candidate’s incentive to “becloud their policies in a fog of ambiguity” is highest.

The model outlined here is a natural framework to study ambiguous platforms. Note that as ambiguity is best understood as a less than perfect correlation between platforms and implemented policies, all candidates in the equilibrium studied so far are to some extent ambiguous. In what follows I want to show that if the importance of correct decision making becomes sufficiently high, an even higher degree of ambiguity might be optimal for the citizens.

To see this assume that policy platforms are completely unrelated to the politician’s information. If that is the case the candidates bear no reputational cost if they adapt their platform to new information, nor do they benefit from sticking to their positions. This is true, since the electorate (knowing that platforms are pure “babbling”) can not draw any inference about competence from platform choice and subsequently implemented policies, as these choices do not depend on the agent’s type.¹⁹ It is therefore optimal for both candidates to utilize all ex post available information. Moreover, if the electorate believes that platforms are unrelated to information, it should not pay any attention to them. This, in turn, makes it (weakly)

¹⁹Ex ante, platform choice does not depend on information while ex post both types of agents hold the same information.

optimal for the candidates to “babble” when specifying their platforms. We can summarize the preceding discussion in the following proposition.

PROPOSITION 4.1 *There exists an “babbling” equilibrium with the property of efficient decision making ex post which is optimal for the citizens as soon as correct decision making becomes important enough (i.e. for η sufficiently low).*

The downside of this kind of equilibrium is that it makes both types of candidates indistinguishable ex ante. Hence, the less information is contained in the platforms, the worse selection of candidates will be.

The explanation for ambiguity we offer differs from existing approaches which emphasize the policy maker’s endeavor to hide his true policy preferences from the electorate in order to increase his election probability.²⁰ In contrast to the theory outlined here, ambiguity there always harms voters and can therefore only be sustained in equilibrium if some degree of ambiguity is inevitable. Otherwise voters could (and had an incentive to) punish candidates by not electing them. We show instead that ambiguity can even be in the interest of the voters, if they care sufficiently about the implementation of the best policy measure. It may then well be optimal to exchange the screening of candidates for their higher propensity to utilize ex post available information.²¹

Coming back to the introductory quotation by Downs that candidates are especially prone to ambiguous platforms on the “critical” issues, we can speculate about the following rationale. It may well be an optimal social arrangement that political candidates are ambiguous in those dimensions where binding one’s hands is expensive (e.g. where correct decision making is important, i.e. the “critical” ones), while they try to differentiate themselves by signaling their type in the remaining dimensions. This discussion suggests already the importance a multidimensional specification of the model, a point, where we come to next.

4.2 *Multiple Policy Dimensions*

The main purpose of this section is to extend the model to multiple policy dimensions and to show that an equilibrium analogous to the one studied in the previous part of the paper still

²⁰See Alesina and Cukierman (1990) for an exposition of this idea.

²¹An explanation for ambiguity which also stresses the value of being unconstrained in decision making after the election, has also been offered by Glazer (1990) in a framework where candidates’ platforms are binding.

exists. Such an equilibrium has the interesting property that the candidates will renege on a *subset* of their campaign promises with positive probability. This is fully in line with the empirical evidence that has established that on average politicians break between 30% and 40% of their promises.²²

However, previous models that employ a repeated game logic to show how politicians can be restrained, have a difficult time establishing partial promise breaking. In these models, politicians are disciplined through the threat from being never elected again one they renege on their platform. From the theory of optimal penal codes in repeated games (see Abreu (1988)) we know that the citizens can achieve maximal deterrence by employing the harshest possible punishment, once a deviation took place. This implies that every politician who has reneged on only one of his promises is permanently expelled from office.²³ This clearly renders selective promise breaking suboptimal. We should either observe promise keeping in all dimensions or defections across (almost) all political issues.

In contrast to this kind of mechanism, the theory outlined here naturally generates partial promise keeping when extended to multiple policy dimensions. I show in Appendix B, that an equilibrium exists where candidates' gambling decision is independent across policy dimensions, so that with strictly positive probability selective promise breaking will occur.

PROPOSITION 4.2 In the multidimensional model it can be optimal for the agents to renege on a subset of their promises.

PROOF: See Appendix B.

5 CONCLUSION

In this paper I developed a model where the politician's main concern was the electorate's assessment of their competence. In contrast to the literature where agents are differentiated through different levels of valence which they can signal through platform choice, here candidates can influence the perception of their competence both before and after the elections. A central tension exists in the model between the agent's desire to uphold his reputation

²²See Harrington (1992), Ringquist and Dasse (2004), Budge and Hofferbert (1990), King and Laver (1993), and Poole and Rosenthal (1997).

²³See also Bernheim and Whinston (1990) who employ this logic to study collusion under multimarket contact.

and the adaption to new information. This set up enables us to study the incentives to keep or break campaign promises. We established that an equilibrium can be supported where agents distort their platform but where nevertheless a substantial amount of ex post available information is utilized. In this equilibrium agents who choose unexpected or non centrist platforms earn a higher reputation. For his reason those platforms are adopted inefficiently often.

We also examined which incentives govern the politician's policy implementation decision. In particular, we related the propensity to break campaign promises to the environment in which the politician operates, for example, the degree of uncertainty about candidate's competence, the amount of observability of policy consequences or the electorate's assessment capability of the appropriateness of a given policy measure, or the ex ante probability of a certain policy to be optimal. Moreover, the model additionally gives a rationale for the optimality of ambiguous platforms and the widely observed behavior of politicians to renege on a subset of their campaign promises.

A natural next step would be to integrate an ideological dimension into the model. This would allow us to study the interaction of the politician's desire to appear competent with the temptation to follow hos own most preferred agenda. Furthermore, it seems worthwhile to investigate multiple policy dimensions in more detail. Some issues we have only touched upon could then be analyzed more thoroughly. For example, it would be interesting to explore further on which issues candidates prefer to appear ambiguous. Moreover, there could be interesting interactions between the decision to revise one's platform across different dimensions, an issue we did not examine in the previous section.

6.1 Appendix A: Proofs of Section 3

First of all we will define the reputational values attached to different outcomes (m, d, ω) , given the equilibrium structure laid out in the text.

$$\pi(b, b, 1) = \frac{p\bar{\theta}(1-q)\lambda}{p\bar{\theta}(1-q)\lambda + (1-p)[(1-q)\underline{\theta}\beta\lambda]}.$$

A good agent chooses $m = b$ if he receives a signal in favor of state b . He will stick to his announcement if it was correct, which happens with probability $\bar{\theta}(1-q)$. Given this a success will realize with probability λ . Therefore, $p\bar{\theta}(1-q)\lambda$ is the probability of facing a good agent given the electorate observes $(b, b, 1)$. Analogously, $(1-p)[(1-q)\underline{\theta}\beta\lambda]$ denotes the probability that a bad agent generates realization $(b, b, 1)$. Notice that this expression does not depend on γ_b , since given that a policy proves to be successful, the electorate knows with certainty, that the agent has not gambled.

The remaining probabilities can be interpreted in a complete analogous way.

$$\pi(b, b, 0) = \frac{p\bar{\theta}(1-q)(1-\lambda)}{p\bar{\theta}(1-q)(1-\lambda) + (1-p)[(1-q)\underline{\theta}\beta(1-\lambda) + q(1-\underline{\theta})\beta\gamma_b]}.$$

If the voters observe a failure they attribute this in part to bad luck, as the agent might still have chosen the right policy (the probability of this is given by all terms which are multiplied by $(1-\lambda)$). However, a failure might also be due to a bad agent whose policy platform was wrong and who decided to gamble (the last term in the denominator). Note that $\pi(a, a, 0)$ is strictly smaller than $\pi(a, a, 1)$ if $\lambda > \frac{1}{2}$.

$$\pi(b, a, \omega) = \frac{p(1-\bar{\theta})}{p(1-\bar{\theta}) + (1-p)(1-\underline{\theta})\beta(1-\gamma_b)}$$

It is important to observe that as soon as the agent revises his electoral platform, his reputation no longer depends on the realization of ω . When changing his policy, the agent admits that he has received a wrong signal. In this case the realization of a success or failure does not contain any additional information about the agent's type anymore.

The same explanations given above hold also true for the reputation obtained under $m = a$.

$$\begin{aligned} \pi(a, a, 1) &= \frac{p\bar{\theta}q\lambda}{p\bar{\theta}q\lambda + (1-p)q(1-(1-\underline{\theta})\beta)\lambda}, \\ \pi(a, a, 0) &= \frac{pq\bar{\theta}(1-\lambda)}{pq\bar{\theta}(1-\lambda) + (1-p)[q(1-\beta(1-\underline{\theta}))](1-\lambda) + (1-q)(1-\underline{\theta})\beta\gamma_a}, \end{aligned}$$

$$\pi(a, b, \omega) = \frac{p(1 - \bar{\theta})}{p(1 - \bar{\theta}) + (1 - p)(1 - \underline{\theta}\beta)(1 - \gamma_a)}.$$

Next, we will show that the strategies specified in the text constitute an equilibrium. I will start with a proof of the existence of γ_a^* and γ_b^* .

The bad agent will gamble with a positive probability if he is exactly indifferent between revising and sticking to his platform, after having learned that his policy announcement was wrong. Since he knows that gambling can not produce a success the incentive constraint is given by

$$\pi(b, a, \omega) = \pi(b, b, 0),$$

in case of $m = b$. Note that $\pi(a, b, \omega)$ is strictly increasing while $\pi(b, b, 0)$ is strictly decreasing in γ_b . Setting $\gamma_b = 1$ can not be an equilibrium as retracing one's platform would reveal to be a good type. If $\gamma_b = 0$, $\pi(b, b, 0) = \frac{p\bar{\theta}}{p\bar{\theta} + (1-p)\underline{\theta}\beta}$ which is strictly larger than $\pi(b, a, \omega)$ under $\gamma_b = 0$. By the intermediate value theorem there must exist a $\gamma_b^* \in (0, 1)$, such that $\pi(b, a, \omega) = \pi(b, b, 0)$.

Analogously we show the existence of γ_a^* . The incentive constraint here is given by

$$\pi(a, b, \omega) = \pi(a, a, 0).$$

By the same argument as above, $\gamma_a = 1$ can not be an equilibrium. If γ_a goes to zero, we obtain

$$\pi(a, a, 0) = \frac{p\bar{\theta}}{p\bar{\theta} + (1-p)(1 - \underline{\theta}\beta)} > \frac{p(1 - \bar{\theta})}{p(1 - \bar{\theta}) + (1 - p)(1 - \underline{\theta}\beta)} = \pi(a, b, \omega).$$

Again the by the intermediate value theorem the existence of $\gamma_a^* \in (0, 1)$ is guaranteed.

If the incentive constraints above are satisfied, both types of agents will find it optimal to stick to their policy platform if it is correct as

$$\pi(b, a, \omega) < \lambda\pi(b, b, 1) + (1 - \lambda)\pi(b, b, 0),$$

where the right hand side denotes the politician's expected reputation by sticking to his campaign promise. The same argument holds if $m = a$.

Next I will focus on the existence of β^* . To determine the bad agent's incentives to manipulate his platform one has to consider the following incentive constraint which must hold in case the agent has received $s = b$:

$$(1 - q)\underline{\theta}[\lambda\pi(b, b, 1) + (1 - \lambda)\pi(b, b, 0)] + q(1 - \underline{\theta})\pi(a, b, \omega) = \\ q(1 - \underline{\theta})[\lambda\pi(a, a, 1) + (1 - \lambda)\pi(a, a, 0)] + (1 - q)\underline{\theta}\pi(a, b, \omega).$$

The left hand side denotes the expected utility of the agent if he decides to follow his signal. Given that $s = b$ state b will realize with probability $\text{Prob}(x = b|s = b) = \frac{(1-q)\underline{\theta}}{(1-q)\underline{\theta}+q(1-\underline{\theta})}$. In that case the agent will stick to his platform and receives either the payoff attached to a success $\pi(b, b, 1)$ with probability λ or the reputation associated with a failure. With probability $\text{Prob}(x = a|s = b) = \frac{(1-\underline{\theta})q}{(1-q)\underline{\theta}+q(1-\underline{\theta})}$ the signal was wrong and the agent receives $\pi(a, b, \omega)$. The right hand side of the equation in turn is the expected payoff under policy a . We will prove the existence of β^* by using the intermediate value theorem again. For this note first that all reputational payoffs associated with action b are increasing in β while the reverse is true for the payoffs under $m = a$. Moreover, both sides are continuous functions of β .

It is straightforward to see that $\beta = 0$ can never be an equilibrium, since then $m = b$ would only be chosen by the more competent agent. Consider now the case of $\beta = 1$. Then $\pi(b, b, 1) = \pi(a, a, 1)$. For the incentive constraint to be satisfied, $\pi(b, a, \omega)$ must be larger than $\pi(a, b, \omega)$ since the payoff in case of a successful policy accrues with a smaller probability if $d = b$. For this to be true, $\gamma_a < \gamma_b$ must hold. But straightforward calculations reveal that under $\gamma_a < \gamma_b$ we obtain $\pi(b, b, 0) > \pi(a, a, 0)$ holds, a contradiction given the equilibrium condition for the γ_i . Hence given equilibrium values γ_i^* , the right hand side exceeds the left hand side under $\beta = 1$. Hence, the constraint must be satisfied for some intermediate value $\beta^* \in (0, 1)$.

Lastly, note that given that the agent is indifferent between choosing $m = a$ or $m = b$ after he has received a signal in favor of state b , he will strictly prefer $m = a$ after $s = a$. One can also directly see that given indifference of the bad type, a good type with superior information will always find it optimal to follow his signal. ||

PROOF OF PROPOSITION 3.2 The fact that $\pi(b, b, 1) > \pi(a, a, 1)$ follows directly from the fact that $\beta^* < 1$.

In equilibrium the incentive constraint for the γ_i must be satisfied. Setting $\pi(a, b, \omega) = \pi(a, a, 0)$ and $\pi(b, a, \omega) = \pi(b, b, 0)$ one can solve for the equilibrium values of γ_i as a function of β . One obtains

$$\begin{aligned}\gamma_a &= \frac{q(1-\lambda)(2\bar{\theta}-1)}{(1-q)(1-\bar{\theta})+q(1-\lambda)\bar{\theta}} \\ \gamma_b &= \frac{(1-\lambda)(1-q)(\bar{\theta}-\underline{\theta})}{(1-\underline{\theta})[(1-\bar{\theta})q+\bar{\theta}(1-\lambda)(1-q)]}\end{aligned}$$

Note that both γ_a and γ_b do not depend on β . It is now easy to see that $\gamma_a \geq \gamma_b$ as

$$\gamma_a - \gamma_b = (\bar{\theta} - \underline{\theta})(1 - \bar{\theta})(2q - 1) \geq 0.$$

Substituting the equilibrium values back in the expressions for $\pi(a, b, \omega)$ and $\pi(b, a, \omega)$ respectively yields

$$\begin{aligned}\pi(a, b, \omega) &= \frac{(1 - q)(1 - \bar{\theta}) + q(1 - \lambda)\bar{\theta}}{(1 - q)(1 - \bar{\theta}) + q(1 - \lambda)\bar{\theta} + (1 - q)(1 - \underline{\theta}\beta) + q(1 - \lambda)(1 - \beta(1 - \underline{\theta}))} \\ \pi(b, a, \omega) &= \frac{q(1 - \bar{\theta}) + (1 - q)(1 - \lambda)\bar{\theta}}{q(1 - \bar{\theta}) + (1 - q)(1 - \lambda)\bar{\theta} + \beta[(1 - \underline{\theta})q + (1 - q)(1 - \lambda)\underline{\theta}]}\end{aligned}$$

I will now show that there exists an upper bound $\hat{\beta} = 2[q(1 - \bar{\theta}) + (1 - q)\bar{\theta}]$, such that for all parameter constellations the equilibrium value of β is weakly smaller than $\hat{\beta}$. In the next step it will be proven that given this upper bound the equilibrium reputational payoffs satisfy the relations stated in the proposition.

Tedious calculations show that the equilibrium value of β is decreasing in λ . Intuitively, as monitoring becomes better, making the correct decision becomes more important for the agent. Hence, more likely he will switch away from $m = b$. To derive the upper bound on β it is therefore sufficient to consider the case $\lambda = 0$. Under this circumstances, and plugging in the upper bound of β , we arrive at the following payoffs.

$$\begin{aligned}\pi(a, a, 1) &= \frac{\bar{\theta}}{\bar{\theta}(1 + q) + (1 - q)(1 - \bar{\theta})}, \quad \pi(a, b, \omega) = \frac{1}{2} \\ \pi(b, b, 1) &= \frac{\bar{\theta}}{2\bar{\theta}(1 - q) + q}, \quad \pi(b, a, \omega) = \frac{1}{2}\end{aligned}$$

Consider now the equilibrium condition for β .

$$\lambda \left[\frac{\bar{\theta}}{2\bar{\theta}(1 - q) + q} - \frac{\bar{\theta}}{\bar{\theta}(1 + q) + (1 - q)(1 - \bar{\theta})} \right] \leq \frac{1}{2}\lambda(1 - 2q)$$

We know that the left hand side is increasing in β while the right hand side decreases. Hence, if at $\hat{\beta}$ the left hand side is smaller than the right hand side, we have established that $\hat{\beta}$ indeed is an upper bound. Multiplying out gives

$$\begin{aligned}\frac{1}{2}\bar{\theta}(1 - 2q) &\leq (1 - 2q)\left(\frac{1}{2}\bar{\theta}(q^2 + (1 - q)^2) + (1 - q)q(\bar{\theta}^2 + \frac{1}{4})\right) \\ &\iff \\ (\bar{\theta} - \frac{1}{2})^2 &\geq 0,\end{aligned}$$

which is always satisfied.

$\pi(a, b, \omega) < \pi(b, a, \omega)$ follows directly as the difference $\pi(a, b, \omega) - \pi(b, a, \omega)$ decreases in λ and both expressions are equal at $\hat{\beta}$ for $\lambda = 0$. ||

PROOF THAT AGENTS MAXIMIZE EXPECTED REPUTATION

Given that the agent has the possibility to gamble once in office, one might argue that winning office increases expected reputation and must so be taken into account in the agent's maximization problem. Now that we derived the equilibrium values of $\pi(a, b, \omega)$ and $\pi(b, a, \omega)$ we can prove the opposite. Consider an agent who has received a signal in favor of a . His expected payoff under $m = a$ is given by

$$\frac{q\lambda(1-\theta)}{q(1-\underline{\theta}) + (1-q)\underline{\theta}}\pi(a, a, 1) + \frac{q(1-\theta)(1-\lambda) + (1-q)\theta}{q(1-\underline{\theta}) + (1-q)\underline{\theta}}$$

$$\frac{(1-q)(1-\bar{\theta}) + q(1-\lambda)\bar{\theta}}{(1-q)(1-\bar{\theta}) + q(1-\lambda)\bar{\theta} + (1-q)(1-\underline{\theta}\beta) + q(1-\lambda)(1-\beta(1-\underline{\theta}))}, \quad \theta \in \{\underline{\theta}, \bar{\theta}\}.$$

Conditional on $s = a$ the probability of a success is given by the probability of having received a correct signal (which happens with $q(1-\theta)$) times the probability that a successful policy is revealed to the public. The payoff in this case is given by $\pi(a, a, 1)$. With the complementary probability $\omega = 0$. The electorate then computes the agent's reputation in the following way. The probability of observing $m = a$ and $\omega = 0$ conditional on the agent being good, is given by the probability that the good agent has received a correct signal but nevertheless a failure realized (probability $q\bar{\theta}(1-\lambda)$), plus the probability that the agent got the wrong signal (which happens with probability $(1-q)(1-\bar{\theta})$). The denominator comprises additionally the probability of observing $m = a$ and $\omega = 1$ conditional on facing a bad agent.

Since the last term is equal to $\pi(a, b, \omega)$ the agent's expected reputation is independent of gaining office. The same analysis holds true if the politician sends $m = b$. ||

PROOF OF PROPOSITION 3.1

If the sole information of the electorate is given by the political platform, the voters assign the following probabilities to the agent being good.

$$\text{Prob}(\bar{\theta}|m = a) = \frac{q\bar{\theta} + (1-q)(1-\bar{\theta})}{[q\bar{\theta} + (1-q)(1-\bar{\theta})] + [q(1-\beta(1-\underline{\theta})) + (1-q)(1-\beta\underline{\theta})]},$$

$$\text{Prob}(\bar{\theta}|m = b) = \frac{(1-q)\bar{\theta} + q(1-\bar{\theta})}{[(1-q)\bar{\theta} + q(1-\bar{\theta})] + \beta[(1-q)\underline{\theta} + q(1-\underline{\theta})]}.$$

The expected type conditional on having announced $m = b$ is better if the likelihood ratio of

$\text{Prob}(\bar{\theta}|m = a)$ is smaller than the likelihood ratio of $\text{Prob}(\bar{\theta}|m = b)$, i.e.

$$\frac{q\bar{\theta} + (1 - q)(1 - \bar{\theta})}{q(1 - \beta(1 - \underline{\theta})) + (1 - q)(1 - \beta\underline{\theta})} < \frac{(1 - q)\bar{\theta} + q(1 - \bar{\theta})}{\beta[(1 - q)\underline{\theta} + q(1 - \underline{\theta})]}.$$

Solving this equation for β we obtain that

$$\text{Prob}(\bar{\theta}|m = a) < \text{Prob}(\bar{\theta}|m = b) \iff \beta \leq 2[q(1 - \bar{\theta}) + (1 - q)\bar{\theta}].$$

From the proof of proposition 3.2, we know that this is always satisfied. ||

6.2 Appendix B: Outline of the Multidimensional Model

I extend the model to two dimensions $j = 1, 2$. Both dimensions are identical to the one dimensional model, i.e. there are respectively, two possible states $x_j \in \{a_j, b_j\}$, two possible signals $s_j \in \{a_j, b_j\}$, two possible platform announcements $m_j = \{a_j, b_j\}$, two possible decisions $d_j \in \{a_j, b_j\}$ and the outcomes $\omega_j \in \{0, 1\}$. I assume furthermore that $\lambda_j := \lambda$, $j = 1, 2$ denotes the probability of success ($\omega_j = 1$) given $d_j = x_j$. I take the realizations of ω_j to be independent variables.

We look for the existence of an equilibrium where good agents set $m = (m_1, m_2) = (s_1, s_2)$ and $d = (d_1, d_2) = (x_1, x_2)$. The bad agent will choose $m_j = a_j$ whenever $s_j = a_j$ and also with probability $(1 - \beta_j)$ if $s_j = b_j$, $j = 1, 2$. Hence, if $s_j = b_j$ he will set $m_j = b_j$ with probability $\beta_j \in (0, 1)$. Ex post bad agents will gamble with probability γ_a^j and γ_b^j , $j = 1, 2$ respectively. Importantly, I assume that β_1 and β_2 and also the choices of the γ_m^j , $j = 1, 2$ are set independently from each other. This implies that after having learned that $m_1 \neq x_1$ and $m_2 \neq x_2$ the agent will break his promises partially, e.g. in the first dimension with probability $(1 - \gamma_m^1)\gamma_m^2 > 0$.

In what comes I will focus on the case where $m_1 = m_2 = b$, all other instances can be derived analogously.²⁴ First I derive the respective reputational payoffs $\pi((m, d, \omega)_1, (m, d, \omega)_2)$ if $(m_j, d_j, \omega_j) := (m, d, \omega)_j$, $j = 1, 2$ is observed.²⁵

$$\begin{aligned} \pi((b, a, \omega)_1, (b, b, 1)_2) &= \frac{q(1-q)\bar{\theta}\lambda(1-\bar{\theta})}{q(1-q)\bar{\theta}\lambda(1-\bar{\theta}) + q(1-q)\underline{\theta}\beta_2\lambda(1-\underline{\theta})\beta_2(1-\gamma_b^1)} \\ \pi((b, a, \omega)_1, (b, a, \omega)_2) &= \frac{(1-\bar{\theta})^2}{(1-\bar{\theta})^2 + (1-\underline{\theta})^2\beta_1\beta_2(1-\gamma_b^1)(1-\gamma_b^2)} \\ \pi((b, a, \omega)_1, (b, b, 0)_2) &= \frac{q(1-q)\bar{\theta}(1-\lambda)(1-\bar{\theta})}{q(1-q)\bar{\theta}(1-\lambda)(1-\bar{\theta}) + q(1-q)\underline{\theta}\beta_1(1-\gamma_b^1)[(1-q)\underline{\theta}\beta_2(1-\lambda) + q(1-\underline{\theta})\beta_2\gamma_b^2]} \\ \pi((b, b, 0)_1, (b, b, 1)_2) &= \frac{(1-q)^2\bar{\theta}^2\lambda(1-\lambda)}{(1-q)^2\bar{\theta}^2\lambda(1-\lambda) + (1-q)\underline{\theta}\beta_2\lambda[(1-q)\underline{\theta}\beta_1(1-\lambda) + q(1-\underline{\theta})\beta_1\gamma_b^1]} \end{aligned}$$

²⁴Note that $m_1 = m_2 = b$ will be played by the bad agent with strictly positive probability, since otherwise this platform configuration would immediately reveal a good type.

²⁵I will only derive those needed for the proof.

$$\pi((b, b, 0)_1, (b, b, 0)_2) = \frac{(1-q)^2 \bar{\theta}^2 (1-\lambda)^2}{(1-q)^2 \bar{\theta}^2 (1-\lambda)^2 + \left\{ \begin{array}{l} (1-q)^2 \underline{\theta}^2 \beta_1 \beta_2 (1-\lambda)^2 + (1-q) \underline{\theta} \beta_1 (1-\lambda) q (1-\underline{\theta}) \beta_2 \gamma_b^2 \\ + q (1-\underline{\theta}) \beta_1 \gamma_b^1 (1-q) \underline{\theta} \beta_2 (1-\lambda) + q^2 (1-\underline{\theta})^2 \beta_1 \beta_2 \gamma_b^1 \gamma_b^2 \end{array} \right\}}$$

It is clearly suboptimal to set one or both of the γ_b^j equal to one, as in this case a platform would only be revised by good types. Hence, in this case a reduction of γ_b^j would increase the agent's utility. Next, we will show that $\gamma_b^j = 0$ can not be optimal either as then an increase in γ_b^j would be optimal for the agent. We will then stress continuity and the intermediate value theorem again to argue that some intermediate values of the γ_b^j , $j = 1, 2$ constitute an equilibrium.

The incentives to gamble arise only if the agent learned that he has specified an incorrect platform. We have to distinguish between the case, where only one dimension is false and the situation with two wrongful specifications.

1. W.l.o.g consider first $m_1 \neq x_1$ and $m_2 = x_2$.

We will show that for all γ_2^b the value of γ_1^b must be larger than zero. Assume not. Then the reputational payoff from changing the platform (in the first dimension) must exceed the payoff obtained through gambling, i.e.

$$\lambda \pi((b, a, \omega)_1, (b, b, 1)_2) + (1-\lambda) \pi((b, a, \omega)_1, (b, b, 0)_2) \geq \lambda \pi((b, b, 0)_1, (b, b, 1)_2) + (1-\lambda) \pi((b, b, 0)_1, (b, b, 0)_2).$$

However, if $\gamma_b^1 = 0$ was an equilibrium, the electorate would correctly anticipate the behavior of the bad agent and we would obtain the following reputational payoffs.

$$\begin{aligned} \pi((b, b, 0)_1, (b, b, 1)_2) &= \frac{\bar{\theta}^2}{\bar{\theta}^2 + \underline{\theta}^2 \beta_1 \beta_2} \text{ and} \\ \pi((b, b, 0)_1, (b, b, 0)_2) &= \frac{\bar{\theta}^2 (1-q)(1-\lambda)}{\bar{\theta}^2 (1-q)(1-\lambda) + \underline{\theta} \beta_1 \beta_2 [(1-q)(1-\lambda) \underline{\theta} + q(1-\underline{\theta}) \gamma_b^2]}. \end{aligned}$$

These payoffs are larger than the values on the left hand side as

$$\pi((b, a, \omega)_1, (b, b, 1)_2) = \frac{\bar{\theta}(1-\bar{\theta})}{\bar{\theta}(1-\bar{\theta}) + \underline{\theta}(1-\underline{\theta}) \beta_1 \beta_2} < \frac{\bar{\theta}^2}{\bar{\theta}^2 + \underline{\theta}^2 \beta_1 \beta_2}$$

and

$$\pi((b, a, \omega)_1, (b, b, 0)_2) = \frac{\bar{\theta}(1-\bar{\theta})(1-q)(1-\lambda)}{\bar{\theta}(1-\bar{\theta})(1-q)(1-\lambda) + (1-\underline{\theta}) \beta_1 \beta_2 [(1-q)(1-\lambda) \underline{\theta} + q(1-\underline{\theta}) \gamma_b^2]} <$$

$$pi((b, b, 0)_1, (b, b, 0)_2) = \frac{\bar{\theta}^2 (1-q)(1-\lambda)}{\bar{\theta}^2 (1-q)(1-\lambda) + \underline{\theta} \beta_1 \beta_2 [(1-q)(1-\lambda) \underline{\theta} + q(1-\underline{\theta}) \gamma_b^2]}$$

Hence the optimality condition for $\gamma_b^1 = 0$ can not be satisfied. Note however that all terms on the left hand side increase in γ_b^1 while all terms on the right hand side decrease in γ_b^1 . We

can therefore find an intermediate value of γ_b^1 which exactly solves the condition. Given this value of γ_b^1 the bad agent is exactly indifferent between gambling and revising, hence this value is part of an equilibrium.

2. Take now the case of $m_1 \neq x_1$ and $m_2 \neq x_2$. For $\gamma_b^1 = 0$ to be optimal it must be true that

$$\pi((b, a, \omega)_1, (b, b, 0)_2) \geq \pi((b, b, 0)_1, (b, b, 0)_2)$$

if the agent does not revise his platform in the second dimension or

$$\pi((b, a, \omega)_1, (b, a, \omega)_2) \geq \pi((b, b, 0)_1, (b, a, \omega)_2)$$

if he does. We know already from case 1 that

$$\pi((b, a, \omega)_1, (b, b, 0)_2) < \pi((b, b, 0)_1, (b, b, 0)_2).$$

Given that $\gamma_b^1 = 0$ we can derive

$$\pi((b, b, 0)_1, (b, a, \omega)_2) = \frac{\bar{\theta}(1 - \bar{\theta})}{\bar{\theta}(1 - \bar{\theta}) + (1 - \gamma_b^2)(1 - \underline{\theta})\underline{\theta}\beta_1\beta_2},$$

which is obviously larger than $\pi((b, a, \omega)_1, (b, a, \omega)_2)$ under $\gamma_b^1 = 0$, so $\gamma_b^1 = 0$ can not be an equilibrium outcome under $m_1 \neq x_1$ and $m_2 \neq x_2$ either.

Note however that both $\pi((b, a, \omega)_1, (b, b, 1)_2)$ and $\pi((b, a, \omega)_1, (b, a, \omega)_2)$ are increasing in γ_b^1 while both $\pi((b, b, 0)_1, (b, b, 0)_2)$ and $\pi((b, b, 0)_1, (b, a, \omega)_2)$ are decreasing in γ_b^1 . Hence, by the intermediate value theorem there exist a γ_b^1 which solves the equations above with equality and therefore constitutes an equilibrium. Since we derived this for arbitrary γ_b^2 the same argument can be made for the gambling decision in the other dimension. ||

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Table 3: Numerical Simulations, $q = 0.6, \bar{\theta} = 0.7$

λ	β	Comp. Effect $\frac{1-\theta\beta}{\text{Prob}(m=a)}$	Error Prob. Effect $\frac{(1-\theta)\beta}{\text{Prob}(m=b)}$	$\frac{(1-q)(1-\theta\beta)}{\text{Prob}(m=a)}$	Error Prob. Effect $\frac{q(1-\theta)\beta}{\text{Prob}(m=b)}$	γ_a	γ_b	Pr($d = x m = a$)	Pr($d = x m = b$)	Success Prob.
0.2	0.918	0.500	0.499	0.200	0.300	0.421	0.317	0.183	0.181	
0.3	0.917	0.501	0.499	0.200	0.299	0.406	0.298	0.276	0.273	
0.5	0.914	0.501	0.498	0.201	0.299	0.364	0.250	0.464	0.462	
0.7	0.912	0.502	0.498	0.201	0.299	0.293	0.182	0.659	0.662	
0.8	0.911	0.502	0.498	0.201	0.299	0.235	0.136	0.762	0.768	
0.9	0.911	0.502	0.498	0.201	0.299	0.148	0.077	0.873	0.879	

Table 4: Numerical Simulations, $q = 0.6, \bar{\theta} = 0.9$

λ	β	Comp. Effect $\frac{1-\theta\beta}{\text{Prob}(m=a)}$	Error Prob. Effect $\frac{(1-\theta)\beta}{\text{Prob}(m=b)}$	$\frac{(1-q)(1-\theta\beta)}{\text{Prob}(m=a)}$	Error Prob. Effect $\frac{q(1-\theta)\beta}{\text{Prob}(m=b)}$	γ_a	γ_b	Pr($d = x m = a$)	Pr($d = x m = b$)	Success Prob.
0.2	0.830	0.502	0.497	0.201	0.298	0.814	0.736	0.167	0.156	
0.3	0.823	0.504	0.495	0.201	0.297	0.803	0.718	0.251	0.236	
0.5	0.808	0.507	0.490	0.203	0.294	0.774	0.667	0.422	0.401	
0.7	0.789	0.511	0.484	0.204	0.290	0.713	0.517	0.598	0.583	
0.8	0.775	0.514	0.480	0.205	0.288	0.649	0.485	0.693	0.688	
0.9	0.761	0.516	0.475	0.207	0.285	0.511	0.333	0.805	0.814	