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ABSTRACT

The Paradox of Competence*

We examine a model in which the public is unsure about the competence of politicians, and whether they are concerned about the long-term consequences of their decisions (statesman) or about the public's opinion concerning their competence and preferences (populist). The main finding suggests that the public benefits by disregarding the competence of candidates and by re-electing candidates based on their beliefs about whether a politician is a statesman. This paradox of competence might explain why politicians are so concerned about being perceived as statesmen. We also provide a rationale as to why governing by polls can be detrimental for society. Moreover, our model illustrates in general that delaying irreversible project decisions is a bad signal.

JEL Classification: D72, D80 and D82
Keywords: double-sided asymmetric information, paradox of competence, polls, populists and statesmen

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1 Introduction

In this paper, we examine a model in which the public is unsure about the competence of a politician, and whether he is concerned about the long–term consequences of his decisions (statesman) or about the public's opinion concerning his competence and his preferences (populist). The main finding suggests that the public benefits by disregarding the competence of candidates, and by reelecting candidates based on their beliefs about whether a politician is a statesman. This is called a paradox of competence.

Our model combines the option value of waiting for more information with career concerns. This paper's major innovation is the discussion of the interplay between the public's uncertainty of the politician's preferences and the uncertainty of the agent's competence.

We feel that both of these are important sources of uncertainty in politics. For instance, there is still an ongoing debate as to whether President Clinton made his policy decisions based on his own policy ideas, or rather did so in an attempt to gain favor in the polls. Uncertainty about the competence of politicians has been introduced into political-economic analyses before by Rogoff (1990). We show that the two-dimensional informational asymmetry about the preferences and competence of politicians leads to the paradox of competence.

We consider a model in which the public is unsure about the competence of an agent and whether the agent is a statesman or a populist. A competent agent can judge the consequences of a public investment project, and should invest either immediately or never. An incompetent agent should wait for more information. A statesman is solely motivated by the policies he implements, and will therefore exactly mimic the socially efficient solution. Depending on his competence and the information he receives, he will then either invest immediately, never, or wait for more information in order to make an informed decision. A populist is solely concerned about his reelection chances.

We first show that, depending on the reelection chances, populists distort their decisions in order to avoid being recognized as incompetent or as populists. If the public values competency, competent and incompetent populists will immediately invest to mimic a competent statesman in order to gain public favor in the reelection. Policy decisions

of both a competent and an incompetent populist will be distorted. Since distortions are extreme in this case, the public faces a paradox called the paradox of competence. If the public uses its assessments of competence to reelect politicians, social welfare is minimal.

If the public's reelection decision is based solely on whether or not a politician is a statesman, populists will randomize between investment into a project and waiting in order to maximize their chances of being recognized as statesmen. The socially optimal solution would, however, require that a competent populist only invests if he has received favorable information, and that an incompetent populist should never invest. Nevertheless, welfare losses are often smaller when the public values competence. As a result, voters should reelect politicians mainly based on their beliefs as to whether a politician is a statesman. Time consistency considerations, however, make policy distortions worse, and the disadvantage of governing by polls increases.

The relationship between populists and democracy has been a prominent theme in political theory as surveyed recently by Canovan (1999). Populism is often seen as dangerous to democracy for which political theorists have given several reasons: For instance, populism may be illiberal or may widen the gap between democratic practices and the idea for an ideal democracy. As discussed in Canovan (1999), neither of these responses to populism is wholly satisfactory, since popular decisions are central to democracy and, in principle, populists could be acknowledged as true democrats. In this paper, we develop an economic argument as to why the presence of populists may lead to undesirable outcomes in a democracy. Populists distort their decisions in order to avoid either being recognized as incompetent or as populists.

Moreover, our model might explain why some politicians are so concerned about the public‘s assessment of whether or not they are statesmen. As suggested by political analysts, many public appearances by President Clinton were designed in order to give the perception that he is a statesman. Our analysis suggests that politicians invest more energy into appearing as statesmen than into their competence.

The paper is organized as follows. In the next section, we compare the paper to the literature. In section 3, we outline the model. The socially optimal solution will be characterized in section 4. In section 5, we identify the equilibria under linear reelection

schemes. In section 6, we discuss the optimal reelection strategy of the public. In section 7, we examine equilibria for general reelection schemes. In section 8, we discuss time-consistency issues. Section 9 concludes.

2 Relation to the Literature

In our model, we combine the desire to signal ability and preferences with the option of waiting for more information. Our work is related to different branches of literature.

First, our model is related to the work on career concerns that goes back to the seminal contribution by Holmström (1982). With career concerns, managers or politicians may mimic others in order to signal their own ability (see Scharfstein and Stein (1990), Prendergast and Stole (1996), Rogoff and Sibert (1988) and Rogoff (1990)). Rogoff (1990) has shown that a political budget cycle arises due to temporary information asymmetries about the incumbent leader's competence in administering the public goods production process.[1] In our model, we focus on the communication problem that arises when the public is unsure about the competence and preferences of politicians. Such a two-dimensional information asymmetry leads to a paradox of competence.

Second, there is a large amount of literature on the option value which provides an explanation as to why a decision-maker should delay decisions, even if the current net present value of the project is positive (see Pindyck (1991) and Dixit (1992)). Consider a project that costs a fixed and sunk amount in the present period and generates an uncertain benefit in the future. When a firm makes such an irreversible decision right away, it loses the value of new information which could have affected the investment decision. This lost option value is an opportunity cost that must be regarded as part of the cost of investment. Hence, traditional net present value rules must be modified to include the option value, i.e., the value to wait and hence the value of keeping the investment option alive.

In our model, a competent agent should either invest immediately or never, while an

[1] Rogoff and Sibert (1988) offer a nice generalization of a continuum type framework and allow for budget deficits. Borgne (1998) introduces public debt as a state variable. He shows that a political fiscal cycle emerges when a competent incumbent issues less debt and creates smaller ex post budget deficits.

incompetent agent should wait for more information.[2]

Often however, a delay occurs for political reasons. The literature exploring such a delay is relatively sparse, but rapidly increasing. The seminal paper by Alesina and Drazen (1991) explains the delay in macroeconomic stabilization with a model of attrition: any stabilization policy will harm some group, so each group wants to force a policy that protects its own interests.[3] In our paper, delay and rush occur because populists want to influence the beliefs of the public about competence and preferences.

Third, on a conceptual level, our focus on two-dimensional uncertainty in politics decision-making has parallels in Coate and Morris (1995). They show how a combination of asymmetric information about policies and politicians can explain the choice of inefficient methods of redistribution. In our paper such a two-dimensional uncertainty yields inefficient delay or rush in political decision-making.

Fourth, our model is related to work on the use of polls for politicians. While polls can be beneficial for eliciting information from the public [see McKelvey and Ordeshook (1985), Cukierman (1991) and the comprehensive survey by Piketty (1999)], we provide the argument that politicians who govern by polls introduce serious policy distortions.

[2]Delay has been examined in the literature in a variety of contexts from the viewpoint of economic efficiency. Therein, postponement may be justified when transition costs are high (see Feldstein (1976)). The effects of delay on transition costs and the investment decisions of firms are discussed by Kaplow (1986). Delay may be advisable when the investment for a project is lumpy, but demand for the services from a project grows over time (see Oum and Zhang (1990)).

[3]Delay has appeared in bargaining, as discussed in the seminal article by Rubinstein (1982). Baron (1989), Baron and Ferejohn (1989) and Harrington (1990) develop such models for legislatures. In different models, Admati and Perry (1987), Cho (1990) and Cramton (1992) show that a bargainer may delay with the goal of communicating his relative strength.

3 Model and Assumptions

We analyze a game of signaling and information gathering. There are two periods. For simplicity, we assume that the agent, whose decisions we analyze, is risk neutral. The costs and benefits of a policy are measured in dollars. The game is presented as follows:

3.1 Game Structure

Period 0: Nature determines two characteristics of politicians who have been elected for a first term. First, a politician can either be competent or incompetent. Their competency is denoted by η. η is either G (competent) or B (incompetent). The *a priori* probability that $\eta = G$ is g_0 and that $\eta = B$ is $1 - g_0$. Each agent knows his own type. Second, a politician can either be a statesman or a populist, as denoted by β. β is either S (statesman) or P (populist). The *a priori* probability that $\beta = S$ is h_0, and that $\beta = P$ is $1 - h_0$. η and β are assumed to be stochastically independent. Hence, the public faces four possible types of politicians, as denoted by SG, SB, PG and PB, depending on the combination of statesman/populist and competence/incompetence.

Period 1: At the beginning of the politicians term, the public decides on the reelection scheme, which is denoted by R. The politician must decide whether to invest in a given project with an expected return denoted by EV. The investment yields a net return beginning in the next period. Its present value is V_i, with i being either High (H) or Low (L). The *a priori* probability for value V_i is π_i. The agent, not the public, observes a noisy signal S_j about the return from the project. The signal is either high (S_H) or low (S_L). The probability that an agent of type η receives a correct signal is t_η. Hence, $t_\eta = \text{pr}\{S = S_H | V = V_H\} = \text{pr}\{S = S_L | V = V_L\}$.

The politician decides whether to invest immediately or to postpone the decision, as denoted by I and NI respectively. The public observes the agent's decision and forms a posterior estimate of the probabilities that the agent is

competent, and that he is a statesman. The public's belief that the agent is competent is denoted by g_1; with probability $1 - g_1$ he is not competent. Similarly, h_1 denotes the public's belief that the agent is a statesman, where with probability $1 - h_1$, the public thinks that he is a populist.

The public makes the reelection decision. The reelection probability is denoted by q,$(0 \leq q \leq 1)$.

Period 2: All remaining uncertainty about the project is resolved. If the agent has postponed the project, it has a second chance to be adopted. Net benefits of the project are discounted by the factor $\delta < 1$. If the investment is not made in either period, the net return is normalized to zero.

The information an agent receives depends on his competence in judging situations and his ability to generate information about the consequences of the project. Hence, the probability of an agent receiving a correct signal (that is, observing S_j when the project has return j) depends on his type η. We interpret the term investment in a broad sense. It could be related to infrastructure projects, policy reforms (welfare, labor market etc.) or foreign involvement. To simplify notation, and for tractability reasons, we make the additional assumption:

$$1 = t_G > t_B \geq \frac{1}{2}. \tag{1}$$

Thus, we assume that a competent agent receives a correct signal with certainty: he is perfectly informed about the consequences of the project. In the following, we describe the project returns, preferences and the reelection schemes in more detail.

3.2 Project Returns

We assume that the investment should not be made if no further information is received. The expected investment return in this case is denoted by EV_0. Hence, we assume:

$$EV_0 = \pi_H V_H + (1 - \pi_H) V_L < 0. \tag{2}$$

Obviously, an economic problem exists only if the project should be adopted in the favorable state and rejected in the less favorable state. Hence, we assume

$$V_H > 0, V_L < 0. \tag{3}$$

Finally, we denote an agent's expected investment return from the project in period 1 by EV_{sj}^{η}, depending on the type η and the signal S_j he has observed.

3.3 Preferences

Next, we specify the preferences. At the beginning of period 1, when the politician decides whether to invest or not, the politician has an expected utility, denoted by U^A. Similarly, when the public decides about the reelection scheme in period 1, it has expected benefits of U^P. We assume that the public is solely concerned about the expected returns of the investment, i.e. $U^P = EV$. The public chooses a reelection scheme in order to maximize expected returns.

The politician's utility can depend on social welfare and the private benefits from holding office, which are denoted by W. The second element of a politician's utility reflects the desire of the agent to be reelected. If the public believes that the politician is of high competence or is a statesman, he may have a higher likelihood to be reelected, and thus he may enjoy holding office again.

We concentrate on the agent's expected utility when he faces the decision whether or not to invest. We assume that utility is additively separable, i.e.

$$U^A = m\, EV_{S_j}^{\eta} + (1-m) q\, W$$

The parameter m, with $0 \leq m \leq 1$, is the weight the agent assigns to the investment returns, and therefore to social welfare, compared to the weight $(1-m)$ he assigns to the expected value of holding office in period 2.

Utility increases with expected welfare and with the expected value of holding office which, in turn, depends on q, which increases monotonically with the assessments g_1 and h_1. We will focus on two opposite constellations, depending on whether a politician is of type S or P.

Statesman: A statesman's utility is given by $U_S = EV^{\eta}_{S_j}$

Populist: A populist's utility is given by $U_P = q\,W$

A statesman has a weight of m, which is equal to 1, meaning that he is solely motivated by the policies he implements. He has the same utility function as the public. A populist is characterized by $m = 0$ and, hence, he is only concerned about the public's beliefs, and thus about his chances of winning the election. As the value of office enters linearly in U_P, we can normalize the value of office, i.e. we set $W = 1$.

3.4 Reelection Schemes

Finally, we assume that the public chooses a reelection scheme in period 1, which will determine the reelection probability q, depending on the *a posteriori* assessment of the politician. The reelection scheme is given as:

$$R := q(g_1, h_1) \tag{4}$$

To provide an intuitive analytical solution, we will focus on linear reelection schemes, i.e. $q(g_1, h_1) = \alpha\, g_1 + (1-\alpha)h_1$. Note that $0 \leq q \leq 1$. The weight α $(0 \leq \alpha \leq 1)$ reflects the weight that the public attaches to the belief that the agent is competent. $1 - \alpha$ represents the weight of the public's beliefs that the agent is a statesman. Later, we will show that the solution under linear reelection schemes cannot be improved upon by any other type of reelection scheme. Hence, it will turn out that focusing on linear schemes is no loss of generality.

4 Socially optimal solution

We first characterize the socially optimal solution, assuming that the public has perfect information about the agent's competence and enforces socially efficient decisions by sufficiently punishing a politician who has made a wrong decision. Hence, it is irrelevant whether a politician is a statesman or a populist. Since type η is given, the agent's decision is reduced to maximizing expected net benefits from the project, given his information set. An agent who receives a signal in period 1 uses Bayes's theorem to

evaluate the probability that the project has a high return. Suppose that the agent observed signal S_H. Accordingly, the posterior probability that the project has a high return is

$$pr_\eta(V_H|S_H) = \frac{t_\eta \pi_H}{t_\eta \pi_H + (1-t_\eta)(1-\pi_H)} \tag{5}$$

$$pr_\eta(V_L|S_H) = \frac{(1-t_\eta)(1-\pi_H)}{t_\eta \pi_H + (1-t_\eta)(1-\pi_H)} \tag{6}$$

Note that $pr_\eta(V_H|S_H)$ is strictly monotonically increasing in t_η with

$$pr_G(V_H|S_H) = 1 \tag{7}$$

$$pr_B(V_H|S_H) = \pi_H \quad \text{for} \quad t_B = \frac{1}{2} \tag{8}$$

Similarly, the posterior probability $pr_\eta(V_H|S_L)$ is given by:

$$pr_\eta(V_H|S_L) = \frac{(1-t_\eta)\pi_H}{(1-t_\eta)\pi_H + (1-\pi_H)t_\eta} \tag{9}$$

Suppose that S_H has occurred. If the agent invests, then the expected value of social welfare is

$$EV^\eta_{S_H} = V_H \frac{t_\eta \pi_H}{t_\eta \pi_H + (1-t_\eta)(1-\pi_H)} + V_L \left(1 - \frac{t_\eta \pi_H}{t_\eta \pi_H + (1-t_\eta)(1-\pi_H)}\right) \tag{10}$$

Suppose, instead, that the agent delays the decision for one period. Since all uncertainty is resolved in period 2, the assumptions imply that if the project's returns turn out to be high, the agent who did not invest in period 1 will invest in period 2. In the appendix, we prove the following proposition.

Proposition 1

If the agent observes S_L in period 1, neither a competent nor an incompetent agent should invest in period 1. If the agent observes S_H, a unique critical value t_B* exists, with

$$1/2 < t_B* < 1, \tag{11}$$

such that an incompetent agent should delay the project decision to period 2 if, and only if $t_B \leq t_B*$. A competent agent should immediately invest.

5 Equilibria under Linear Reelection Schemes

In this section, we examine the equilibria of the game, parameterized by the linear reelection schemes that the public commits to in period 0. For simplicity of presentation, we have assumed that the signals S_H and S_L are completely uninformative for the incompetent agent: $1/2 = t_B < t_B^*$.[4] Thus, from a social welfare perspective, an incompetent agent should delay the project decision until period 2. A competent agent should invest immediately if, and only if, he observes S_H.

We next solve the corresponding signaling game and determine the perfect Bayesian equilibria for the game.

We first consider the behavior of the statesman. Since the statesman's utility only depends on the expected returns, the solution to his problem is independent of the behavior of the populist and the public's belief. We obtain:

Proposition 2

In any equilibrium, the statesman plays his dominant strategy:

$$SG\text{: } I\ (S_H),\ NI(S_L)$$

$$SB\text{: } NI(S_H), NI(S_L)$$

$I(S_H)$, $I(S_L)$, $NI(S_H)$ and $NI(S_L)$ denote the strategy choices depending on the obtained signal. In order to determine the behavior of the populist, we observe that the decisions of the statesman put positive probability on both I and NI. Therefore, we do not face the problem that out–of–equilibrium beliefs are not pinned down by the Bayesian equilibrium notion. Next, we observe that a competent and an incompetent populist choose I and NI with the same probabilities. An incompetent populist can always mimic the decisions of a competent populist in terms of probabilities for I and NI, because the public cannot observe competence. Hence, if strategy choices for a competent populist are optimal, the same is true for a less competent populist. Let us denote the probability with which PG and PB select investment I by p^0. $1 - p^0$ is the probability with which NI will be chosen by both types of populists. Given some

[4] Our analysis is valid for all values $t_B < t_B^*$. The assumption $t_B < t_B^*$, however, is crucial for our results.

probability p^0 that the populist selects I, straightforward calculations show that the posterior probabilities of the public are as follows:

$$g_1(I, p^0) = \frac{h_0 g_0 \pi_H + (1 - h_0) g_0 p^0}{h_0 g_0 \pi_H + (1 - h_0) p^0} \tag{12}$$

$$g_1(NI, p^0) = \frac{h_0 g_0 (1 - \pi_H) + (1 - h_0) g_0 (1 - p^0)}{h_0 (1 - \pi_H g_0) + (1 - h_0)(1 - p^0)} \tag{13}$$

$$h_1(I, p^0) = \frac{h_0 g_0 \pi_H}{h_0 g_0 \pi_H + (1 - h_0) p^0} \tag{14}$$

$$h_1(NI, p^0) = \frac{h_0 (1 - g_0 \pi_H)}{h_0 (1 - \pi_H g_0) + (1 - h_0)(1 - p^0)} \tag{15}$$

Given that the public assumes that the populist plays I with some probability of p^0, the problem for both types of populists is given by:

$$\max_p \{p \left(\alpha g_1(I, p^0) + (1 - \alpha) h_1(I, p^0)\right) + (1 - p) \left(\alpha g_1(NI, p^0) + (1 - \alpha) h_1(NI, p^0)\right)\}$$

A Bayesian equilibrium exists if $argmax = p^0$, i.e. the strategy choice of a populist is optimal, given the beliefs of the public, and that these beliefs are determined by Bayes law. In the appendix, we show:

Proposition 3

(i) Suppose that $\alpha \geq \alpha^*$ with

$$\alpha^* := \frac{(1 - h_0)(1 - g_0 \pi_H)}{(1 - h_0) + g_0 \pi_H (h_0 - g_0)} \tag{16}$$

Then, a Bayesian equilibrium exists where populists choose

$$\textit{PG,PB: } I(S_H), I(S_L) \quad \textit{with probability } 1$$

(ii) Suppose that $0 \leq \alpha < \alpha^*$. Then, a Bayesian equilibrium exists where populists choose

$$\begin{aligned} &\textit{PG,PB: } I(S_H), I(S_L) && \textit{with probability } p^* \\ &&& NI(S_H), NI(S_L) \quad \textit{with probability } 1-p^* \end{aligned}$$

The probability p^* is given by

$$p^* = \frac{g_0 \pi_H \left[\alpha(h_0 - g_0) + (1 - h_0)\right]}{(1-\alpha)(1-h_0)} \tag{17}$$

This proposition has intuitive implications. Suppose for example that $\alpha = 1$, i.e., the public only considers the competence of a politician when it decides whether or not to reelect him. Only a competent statesman chooses investment I upon observing S_H, thus, both types of populists choose I with probability 1 in order to maximize the public's beliefs about the populist's competence. For $p = 1$, the *a posteriori* beliefs of the public are

$$g_1(I) = \frac{h_0 g_0 \pi_H + (1-h_0) g_0}{h_0 g_0 \pi_H + (1-h_0)} > g_0 \tag{18}$$

$$g_1(NI) = \frac{g_0(1-\pi_H)}{(1-\pi_H g_0)} < g_0 \tag{19}$$

We obtain $g_1(I) > g_1(NI)$ as only an incompetent statesman or a competent statesman upon observing S_L chooses NI. In order to interpret the case of $\alpha = 0$, we obtain from proposition 3

Corollary 1

Suppose $\alpha = 0$. Then an equilibrium exists in which populists play

$$\begin{aligned} &\textit{PG,PB: } I(S_H),\ I(S_L) && \textit{with probability } p^* = \pi_H g_0 \\ &&& NI(S_H), NI(S_L) \ \textit{with probability } 1-p^* = 1-\pi_H g_0 \end{aligned}$$

For $\alpha = 0$, populists mimic exactly the behavior of statesmen by choosing I with probability $p^* = \pi_H g_0$, as this guarantees that the *a posteriori* beliefs h_1 are the same

for both I and NI. Note that no configuration other than $p^* = \pi_H g_0$ can be an equilibrium in the case of $\alpha = 0$. Suppose, for example, that the populist always chooses NI. The probability $h_1(NI)$ would be low, whereas $h_1(I) = 1$. In this case, however, NI is the worst choice, given the beliefs of the public.[5]

Proposition 3 indicates two sources of inefficiencies from the presence of populists. First, an incompetent populist should always choose NI. No matter which value of α is considered by the public, this never occurs in equilibrium. Second, a competent populist should choose I upon S_H. If, however, p^* differs from π_H, this is impossible. In the next section, we examine these inefficiencies in more detail.

6 Optimal Linear Reelection Strategy Under Commitment

In this section, we complete our discussion by considering the appropriate choice of α for the public in order to minimize welfare distortions. For this purpose, we follow the standard convention that a competent populist acts in the interest of the public as long as he is indifferent between choosing NI or I. Hence, if he plays I with probability p^*, we assume that

$$
\begin{array}{ll}
\text{if } p^* \geq \pi_H\text{:} & \text{PG plays } I \text{ upon } S_H \\
& \text{PG plays } I \text{ upon } S_L\text{, with prob. } \frac{p^*-\pi_H}{1-\pi_H} \\
& \text{PG plays } NI \text{ upon } S_L\text{, with prob. } \frac{1-p^*}{1-\pi_H} \\
\text{if } p^* < \pi_H\text{:} & PG \text{ plays } I \text{ upon } S_H\text{, with prob. } \frac{p^*}{\pi_H} \\
& PG \text{ plays } NI \text{ upon } S_H\text{, with prob. } \frac{\pi_H-p^*}{\pi_H} \\
& PG \text{ plays } NI \text{ upon } S_L
\end{array}
$$

Given this tie-breaking rule, we can now state the optimal voting strategy of the public, as denoted by α^0. In the appendix, we prove:

[5]Note, however, that further equilibria may occur with $\alpha = 0$, since PG and PB might use different mixing strategies such that their joint behavior is in line with $p^* = \pi_H\, g_0$. Such equilibria tend to reinforce our conclusion that the public should reelect politicians based only on the assessments of their preferences.

Proposition 4

The optimal reelection strategy of the public is given by:

(i) If $K < 0$, the public chooses $\alpha^0 = 0$

(ii) If $K \geq 0$, the public chooses

$$\alpha^0 = \frac{(1-h_0)(1-g_0)}{(1-h_0)+g_0\,(h_0-g_0)}\ , \tag{20}$$

where K is a constant given by:

$$K = V_H\left[g_0\,(1-\delta)+\pi_H(1-g_0)(1-\delta)\right]+V_L\left[(1-\pi_H)(1-g_0)\right]$$

The constant represents a "reduced" expected value of the investment. K can only be positive if V_H is sufficiently large. Moreover, a reelection strategy of $\alpha^0 > 0$ can only occur if the future is much less important than the present (δ low). In all other cases, the distortions introduced by populists attempting to show competence are larger than those given by attempts to mimic statesmen.

The following corollary is an immediate consequence.

Corollary 2

Suppose that $\delta = 1$. Then $\alpha^0 = 0$.

We conclude from this corollary that the public should only use its assessments of the preferences of the candidates for its reelection decision when discounting is irrelevant. Moreover, since the constant K is linear in the discount factor, $\alpha^0 = 0$ is optimal if the discount factor is sufficiently high. The evaluation of competence should be neglected in order to minimize the distortions of the policy decisions.

Our model illustrates that the presence of populists causes policy distortions. It is straightforward to show that the expected welfare of the public is monotonically increasing in h_0. That is, the higher the probability that a politician is a populist, the larger the expected policy distortions are and the lower welfare is. Populists introduce three kinds of distortions. Competent populists who have observed S_h (S_L) may choose NI (I). Incompetent populists choose I with positive probability.

7 Robustness

Our results have been derived for linear reelection schemes which allow for analytical solutions. However, as we will show shortly, there are no other reelection schemes that would perform better than linear schemes. Hence, our restriction to linear schemes turns out to be no loss of generality.

To develop this robustness argument, we assume that the public uses a general scheme $q = f(g_1, h_1)$. The mapping from beliefs to voting behavior could be non-linear, or even discontinuous. In the appendix we show:

Proposition 5

There are no other reelection schemes that would lead to higher welfare than the linear scheme with α^0, as determined in proposition 4.

The intuition for this robustness result is a consequence of the proof of proposition 4. The expected welfare of the public in general is a function of the equilibrium probability p^* that populists choose I. The optimal welfare probabilities are either $p^* = \pi_H$ or $p^* = g_0\pi_H$.[6] In the first case, the distortions of the competent populists are minimized. In the second case, welfare is maximized by choosing the minimum probability of selecting I that populists can have in equilibrium. Which case is indeed welfare optimal depends on the parameters captured by the constant K. Since in both cases the welfare optimal probabilities can be implemented under the linear scheme, no other scheme can perform better, and our results are robust.

8 Discussion

Our analysis has so far identified the paradox of competence as a consequence of a welfare optimal reelection scheme. In this section, we discuss extensions. Most importantly, suppose that the public can revise their reelection strategy at the end of period 1, immediately before the reelection takes place. In such a setting, the public could

[6] In principle, the public might also try to commit not to reelect the agent at all in order to limit distortions. Then, the behavior of populists is indeterminate, and hence cannot improve beyond the linear scheme. Moreover, if the evaluation of competence in other activities than the current office is of an arbitrarily small value for populists, they will choose I with probability one, inducing more distortions than in the optimal case.

face a time-consistency problem regarding their optimal reelection scheme.

For instance, if $\alpha^0 = 0$ populists randomize between I and NI with probability $p^* = \pi_H\, g_0$. Hence, the *a posteriori* probabilities about competence amount to:

$$g_1(I,\, \pi_H\, g_0) = h_0 + g_0(1 - h_0)$$
$$g_1(NI,\, \pi_H\, g_0) = \frac{g_0\big(1 - \pi_H(g_0 + h_0 - g_0\, h_0)\big)}{1 - \pi_H\, g_0}$$

As in the general case, $g_1(I, \pi_H\, g_0) > g_0 > g_1(NI, \pi_H\, g_0)$, since competent and incompetent populists always choose the same strategies in equilibrium. Since

$$h_1(I,\, \pi_H\, g_0) = h_0$$
$$h_1(NI,\, \pi_H\, g_0) = h_0$$

the public's optimal reelection strategy is time-inconsistent. Given the choice $p^* = \pi_H\, g_0$ of both types of populists for $\alpha^0 = 0$, the public notices that politicians who choose NI reveal themselves as less competent than the pool of candidates. Hence, the revised reelection strategy in this case would be to reject politicians who have selected NI, and to reelect politicians only when I is chosen. This would improve the competence of the incumbent relative to the pool of candidates. Obviously politicians, who recognize reelection behavior at the end of each period, will adjust their behavior and hence policy distortions would increase further, since populists would choose I with probability 1 in order to avoid being turned down under the above reelection scheme.

A fully fledged analysis of all possible subgame perfect Bayesian equilibria in a dynamic game framework with an infinite horizon is well beyond the scope of this paper.[7] But we can derive two important observations which may help to put our results into a broader perspective.

Stationary equilibria of the dynamic game can be derived by using the following reelection strategy:[8]

- An incumbent will be reelected if, and only if

$$\beta\, g_1 + (1 - \beta) h_1 \geq \beta\, g_0 + (1 - \beta) h_0,$$

  where $\beta\, (0 \leq \beta \leq 1)$ is a parameter chosen by the public.

[7] Repeated election frameworks have been developed by Reed (1994) and Duggan (2000).

[8] This logic of optimal reelection scheme for repeated political games has also been developed by Smart and Sturm (2003).

Intuitively, such a scheme requires that, with an optimal choice of β, the current incumbent is reelected only if he can deliver at least the same welfare as a new candidate in the next period.

From our discussion above, we can conclude that $\beta = 0$ is no subgame perfect equilibrium. Anticipating $\beta = 0$, populists would choose the equilibrium value p^*. This would imply that the public is better off by rejecting a politician who has chosen NI, since welfare under a new candidate is higher in the next period. Hence, it is better for populists to deviate from p^* and to select I with probability 1 in order to avoid rejection.

However, it is not difficult to show that choosing $\beta = 1$ can be supported as an equilibrium[9] where populists choose I with probability 1. With $p = 1$ and $\beta = 1$, politicians selecting I will always be reelected, since $g_1(I, 1) > g_0$. The latter fact arises since only competent statesmen choose I.[10] Hence, we can conclude that in a dynamic setting, neglecting competence completely over time by the public might not be possible. Nevertheless, the paradox of competence would remain present in such richer frameworks.

9 Conclusion

In this paper, we have discussed the policy distortions present when a pool of political candidates consists of populists whose primary concern is the public's opinion. Policy distortions are maximal if the public bases its reelection decision on its evaluation of competence. The paradox of competence implies that the public should reelect politicians based on its own assessments of their preferences.

[9]For the equilibrium to exist, it is required that π_H is not too low. Examples are available upon request.

[10]Note that under the proposed reelection scheme, the probability that a politician is a statesman declines over time.

10 Appendix

Proof of proposition 1:

Notice that if S_L was observed, then

$$EV^G_{S_L} = V_L < 0$$

$$EV^B_{S_L} \leq \pi_H V_H + (1-\pi_H)V_L < 0$$

and neither type of agent would invest immediately.

If S_H was observed, we obtain

$$EV^G_{S_H} = V_H > \delta V_H > 0 \tag{21}$$

Hence, a competent agent should invest immediately.

For an incompetent agent, we obtain

$$EV^B_{S_H} = V_H \frac{t_B \pi_H}{t_B \pi_H + (1-t_B)(1-\pi_H)} + V_L \left(\frac{(1-t_B)(1-\pi_H)}{t_B \pi_H + (1-t_B)(1-\pi_H)} \right) \tag{22}$$

If an incompetent agent waits, his expected benefits are

$$\frac{t_B \pi_H}{t_B \pi_H + (1-t_B)(1-\pi_H)} \delta V_H > 0 \tag{23}$$

For $t_B = 1$, $EV^B_{S_H}$ equals V_H; waiting yields only δV_H. For $t_B = 1/2$, $EV^B_{S_H}$ equals $EV_0 < 0$ and waiting is preferred. As the difference between $EV^B_{S_H}$ and the expected profits from waiting increases strictly monotonically in t_B, the existence of t^*_B is established via the mean value theorem. t^*_B is given by:

$$t^*_B = \frac{1}{1 - (1-\delta)\frac{\pi_H V_H}{(1-\pi_H)V_L}}$$

■

Proof of proposition 3:

There are three possibilities. The populist prefers I over NI, NI over I or is indifferent between I and NI. We begin with the last case. The populist is indifferent if, and only if

$$\alpha g_1(I, p^0) + (1-\alpha)h_1(I, p^0) = \alpha g_1(NI, p^0) + (1-\alpha)h_1(NI, p^0) \tag{24}$$

Inserting the expressions from equations 12, 13, 14 and 15, and using the simplification

$$q := h_0 g_0 \pi_H + (1-h_0)p^0$$
$$1 - q = h_0(1 - \pi_H g_0) + (1-h_0)(1-p^0)$$

yields:

$$\begin{aligned} &\alpha\, g_0(1-h_0)p^0 + h_0 g_0 \pi_H - q\left(\alpha\, g_0(1-h_0)p^0 + h_0 g_0 \pi_H\right) \\ &= q\big[\alpha\left(h_0 g_0 + g_0(1-h_0) - g_0(1-h_0)p^0\right) + h_0 - h_0 g_0 \pi_H - \alpha h_0\big] \end{aligned} \tag{25}$$

Rearranging terms and simplifying yields

$$p^0 = \frac{g_0 \pi_H \left[\alpha(h_0 - g_0) + (1-h_0)\right]}{(1-h_0)(1-\alpha)} \tag{26}$$

In equilibrium, we must have $p^* = p^0$, where p^* is the probability that the populist chooses I. Let us consider the boundary conditions for p^*.

Since $\alpha \leq 1$, we have $\alpha(h_0 - g_0) + (1-h_0) > 0$, and therefore $p^* \geq 0$ for any value of α. The other boundary condition $p^* \leq 1$ requires

$$\alpha\big[g_0 \pi_H (h_0 - g_0) + (1-h_0)\big] \leq g_0 \pi_H (h_0 - 1) + 1 - h_0$$

which implies

$$\alpha \leq \frac{(1-h_0)(1-g_0\,\pi_H)}{(1-h_0) + g_0 \pi_H (h_0 - g_0)} =: \alpha^*$$

Hence, for $\alpha \leq \alpha^*$ and $p^0 = p^*$ as derived in equation (26), the populist is indifferent between I and NI. Therefore, given p^* and associated *a posteriori* beliefs of the public and $\alpha \leq \alpha^*$, a mixed strategy for the populist is optimal. The rationality of the public's beliefs require that the populist plays I with probability p^*.

In the next step, we consider the case $\alpha > \alpha^*$. According to equation (26), p^* would become larger than 1. Straightforward calculations show that the populists are better off by selecting I over NI. Therefore, a populist will choose I when $\alpha > \alpha^*$ with certainty.

In the last step, we observe that a pure strategy equilibrium does not exist when the populist selects NI. For the case of $\alpha > \alpha^*$, this follows from the considerations in

the last paragraph. When $\alpha \leq \alpha^*$, choosing NI with probability 1 would imply the following beliefs:

$$\begin{aligned} g_1(I,0) &= 1 \\ g_1(NI,0) &= \frac{h_0 g_0(1-\pi_H) + (1-h_0)g_0}{h_0(1-\pi_H g_0) + (1-h_0)} \\ h_1(I,0) &= 1 \\ h_1(NI,0) &= \frac{h_0(1-g_0\pi_H)}{h_0(1-\pi_H g_0) + (1-h_0)} \end{aligned}$$

Hence,

$$\begin{aligned} &\alpha g_1(I,0) + (1-\alpha)h_1(I,0) = 1 \\ &> \alpha g_1(NI,0) + (1-\alpha)h_1(NI,0), \end{aligned}$$

which implies that NI is not the populist's optimal choice. Indeed, it is the worst choice, given the beliefs associated with $p^0 = 0$.

■

Proof of Proposition 4:

We first derive the expected welfare of the public for different choices of α.

If $\alpha \geq \alpha^*$, populists play I with probability $p^* = 1$ according to proposition 3, and social welfare, denoted by W_{p*}, is given by:

$$W_{p^*=1} = h_0\Big(\pi_H\, V_H\big(g_0 + \delta\,(1-g_0)\big)\Big) + (1-h_0)\,\big(\pi_H\, V_H + (1-\pi_H)\, V_L\big)$$

Next, suppose populists play I with probability p^*, but $p^* \geq \pi_H$. Welfare in this case is given by:

$$\begin{aligned} W_{p^*\geq\pi_H} = h_0\Big(\pi_H\, V_H\big(g_0 + \delta\,(1-g_0)\big)\Big) + (1-h_0)\Big[g_0\big(\pi_H\, V_H + (1-\pi_H)\frac{p^*-\pi_H}{1-\pi_H}\, V_L\big) \\ + (1-g_0)\big(p^*(\pi_H\, V_H + (1-\pi_H)\, V_L) + (1-p^*)\,\delta\,\pi_H\, V_H\big)\Big] \end{aligned}$$

For $p^* \leq \pi_H$, we obtain:

$$\begin{aligned} W_{p^*\leq\pi_H} = h_0\Big(\pi_H\, V_H\big(g_0 + \delta\,(1-g_0)\big)\Big) + (1-h_0)\Big[g_0\,\pi_H\, V_H\,\Big(\frac{p^*}{\pi_H} + \frac{\pi_H - p^*}{\pi_H}\,\delta\Big) + (1-g_0) \\ \Big(p^*\big(\pi_H\, V_H + (1-\pi_H)\, V_L\big) + (1-p^*)\,\delta\,\pi_H\, V_H\Big)\Big] \end{aligned}$$

Since $W_{p^*\geq\pi_H}$ is monotonically decreasing in p^*, $W_{p^*>\pi_H} < W_{p^*=\pi_H}$, $W_{p^*\geq\pi_H} = W_{p^*\leq\pi_H}$ for $p^* = \pi_H$. Since $W_{p^*\leq\pi_H}$ is linear in p^*, the welfare optimal mixing probabilities are either $p^* = \pi_H$ or $p^* = g_0\,\pi_H$. $p^* = g_0\pi_H$ is the smallest possible value for p^* that occurs for $\alpha = 0$.

$W_{p^*=\pi_H} < W_{p^*=g_0\,\pi_H}$ if, and only if

$$g_0\,\pi_H\,V_H\big[1-g_0-(1-g_0)\,\delta\big]+(1-g_0)^2\,\pi_H\,\Big(\pi_H\,V_H\,(1-\delta)+(1-\pi_H)\,V_L\Big)<0$$

or equivalently $K := V_H\,\big[g_0\,(1-\delta)+(1-g_0)\,\pi_H(1-\delta)\big]+(1-\pi_H)\,V_L\,(1-g_0)<0$.

Hence, for $K \leq 0$, the optimal choice of the public is $\alpha^0 = 0$ in order to induce $p^* = g_0\,\pi_H$. For $K > 0$, the optimal choice for the public is

$$\alpha^0 = \frac{(1-h_0)(1-g_0)}{(1-h_0)+g_0(h_0-g_0)}$$

which, by using equation 17, implies that $p^* = \pi_H$.

This completes the proof.

■

Proof of proposition 5:

Any equilibrium with a reelection scheme $f(g_1, h_1)$ produces a probability of p^* that a populist plays I. The equilibrium probability is determined by

$$\underset{p}{\operatorname{argmax}}\Big\{p\Big(f\big(g_1(I,p^*),h_1(I_p^*)\big)\Big)+(1-p)\Big(f\big(g_1(NI,p^*),h_1(NI,p^*)\big)\Big)\Big\}=p^*$$

We next observe from the proof of proposition 4 that welfare is a linear function of p^*, which is the only effect of the reelection scheme on welfare. As shown in proposition 4, the welfare optimal mixing probabilities are either $p^* = \pi_H$ or $p^* = \pi_H g_0$. As the linear scheme can implement the welfare optimal p^* in both possible cases, no other scheme can perform better.

■

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