The Partisan Paradox*

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Abstract

The paper provides an explanation for why officeholders persistently pursue partisan policies even though voters express preferences for non-partisan behaviour, and evidence suggests to officeholders that voters would benefit from non-partisan policies. We develop a dynamic model where officeholders have private information about the benefits of the policies they can implement. The policy issue itself is non-partisan—everyone has the same policy preferences—but candidates differ in their expertise at implementing different policies. To secure re-election by convincing voters that future circumstances favour their expertise, incumbents have an incentive to implement their partisan policy, even when they know it to be wrong. Importantly, incumbents pursue non-partisan policies only when circumstances suggest that pursuing partisan policies are particularly damaging. Thus, officeholders pursue non-partisan policies precisely when it matters most to voters. Paradoxically, though, by doing so an officeholder reveals the value of a rival’s expertise, ensuring his subsequent electoral defeat.

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1 Introduction

It is widely reported that partisanship in the United States Congress is at an historic high.\(^1\) Yet, there is strong evidence that voters do not like partisan politics. A 2011 Gallup poll, for instance, found that 8 in 10 Americans prefer parties in Congress to seek common ground, even if the enacted legislation may not reflect their own political views. This finding mirrors previous Gallup polls and Congressional approval ratings, which generally indicate that the U.S. public does not look favourable upon politicians who insist on their positions and firmly hold onto their beliefs. Partisan policies are frequently named the number one reason for Congressional disapproval in the monthly Gallup “Mood of the Nation” polls.\(^2\) Similar sentiments are expressed in broader contexts as well. In a 2005 Harris poll, for example, 85 percent of respondents stated that the U.S. “needs more elected politicians who will vote independently, rather than vote on party lines” and 67 percent favoured (rather than opposed) independent candidates.\(^3\)

Nonetheless, partisan politics often prevail. As Poole and Rosenthal (2007), McCarty et al. (2006) and others document, voting by representatives in Congress is well described by a single dimension, their ‘ideology’, which mirrors party affiliation: with just the label “conservative” (Republican), for example, one can accurately predict a politician’s stance on issues as disparate as taxes, gun control, affirmative action, health care, education and foreign policy. Roll call voting records reveal that once elected to Congress, members maintain stable ideological positions throughout their careers, even when economic or political conditions evolve.

But why does an officeholder consistently choose the same policy approach, even in the face of changing circumstances, especially when voters indicate such strong preferences for compromise and flexibility in their representatives? To get at such a question, we build a dynamic model that ties party affiliation to voters’ expectations about policy competence for different policies, which, in turn, determine re-election prospects. We start with the observation that electorate is often uncertain about how policy instruments map into policy outcomes. Since they do not know whether the policy was

\(^1\)For instance, Andris et al. (2015) show that Congressional partisanship has been increasing exponentially for over 60 years, and has had negative effects on Congressional productivity.

\(^2\)For details, see http://www.gallup.com/poll/politics. The 2011 poll can be found at http://www.gallup.com/poll/145679/americans-strongly-desire-political-leaders-work-together.aspx.

\(^3\)For this and further evidence on bipartisan preferences, see (PIPA) and the Chicago Council on Foreign Relations (CCFR) found that Americans share common views on many foreign policy issues, and would prefer that Democrats and Republicans seek common ground [http://www.psaonline.org/].
appropriate given the circumstances, voters make inferences from payoffs, which noisily convey information about whether a policy was the “right one”. Officeholders, in contrast, have better information on optimal policy choice due to their greater expertise, access to resources and greater incentives to become informed.4 Although politicians may be better informed across the board, they differ in their abilities to implement any particular policy. Specifically, we assume that a representative has a (possibly small) advantage at delivering policies close to his or her own ideology; reflecting that in practice, legislators focus efforts to mastering policies that they like. Thus, a conservative politician is more likely to successfully implement the right-wing policy when the occasion demands, while a liberal politician is better able to implement successfully the left-wing policy. Concretely, a liberal may enjoy a comparative advantage in crafting employment policies, or regulating banks to reduce moral hazard; while a conservative may be better at implementing policies that favour business, or reducing red tape. Importantly, empirical evidence on voter beliefs supports this view: polls reveal that voters believe that Democrats have a comparative advantage at implementing state provision of health care and education, or employment-oriented policies; whereas Republicans are better at market-based health care or education solutions and policies that favour business.5 When party affiliation/ideology is linked to policy alternatives via competence, sometimes an incumbent’s rival will have the expertise best suited to dealing with a current policy problem, and with persistence in policy problems, with future problems. We show that, as a result, an incumbent may seek to conceal which policy should be pursued, else voters conclude that the opponent would be more effective in office. Consequently, re-election motivated incumbents may adopt a policy they know to be wrong, hoping that it works out, in which case voters conclude that it is best to re-elect the incumbent.

To focus on our core argument, we disregard partisan preferences and instead assume for simplicity that “doing the right thing” always generates higher voter utilities than partisan politics, even if this means a left-wing candidate implements a right-wing policy. That is, circumstance always dominates expertise. Moreover, the issue itself is a valence issue on which everyone agrees. Nevertheless, we show that in equilibrium officeholders have a bias toward adopting the policy that reflects their expertise and

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4See, e.g., Cukierman and Tommasi (1998) or Maskin and Tirole (2004). For a model of endogenous policy expertise, see Callander et al. (2008).

5According to a recent Washington Post/ABC News poll, for instance, voters were significantly more likely to trust the Republican Party to better handle the economy (44 % versus 37 %) and the federal budget deficit (44 % versus 34%), while they were more likely to trust the Democratic Party on better handling Health Care (44% versus 35%) and “helping the middle class” (46% versus 35 %). These figures are very stable over time. See http://apps.washingtonpost.com/g/page/politics/washington-post-abc-news-poll-january-20-23-2014/766/ for the full poll results as well as historical trends.
ideology, and to maintain it over time. By implementing his partisan policy, an office-motivated incumbent demonstrate confidence in ‘his’ policies. As even inefficient policies may succeed, this behaviour potentially allows them to maintain voters’ beliefs that the circumstances warrant those policies. Since there is persistence in those circumstances, voters then have an incentive to re-elect the incumbent.

Elected officials only adopt non-partisan policies—the policy of their rivals’ expertise—when their policy expertise is particularly ill-suited for the task at hand, and hence is especially likely to fail. That is, elected officials act in a non-partisan way precisely when it is most important to voters for them to do so. Paradoxically, however, by adopting a non-partisan policy—by doing what is best for voters—a representative sows the seeds for his own demise, ensuring a loss in the next election by revealing to voters that his rival is more likely to have the right skills to deal with the issues.

Thus, we predict that politicians tend to try to conceal a current state that is unfavourable to their ‘own’ ideology by acting partisanly, denying conflicting evidence about optimal policy choices to forestall certain defeat at the polls, risking defeat only if and when voters learn that their policy choices fail. The result is political failure in the sense that the equilibrium partisan policy outcomes are Pareto dominated. The policy bias comes from an (expert) advantage in implementing certain policies over others, and efforts to manipulate voter beliefs about which policy is best. The result is an endogenous incumbency advantage and policy persistence,\(^6\) and delivers divergence of policy choices according to an officeholder’s party label.

The present work builds on a companion paper Bühler and Kessler (2016) who show that partisanship can arise in a pure ‘sunspot’ type of environment where equilibrium policy choice is partisan only because voters expect it to be partisan, and thus voters’s expectations on ideological policy choices are self fulfilling. In this framework, officeholders are indistinguishable except for their political affiliation; in particular, all candidates are identical in their competence and (non-partisan) policy preferences. Thus, there is no association of partisanship and policy choice other than the one existing in the mind of the electorate. As in the present paper, partisan behaviour may arise over prolonged periods of time, but the equilibrium is fragile in the sense that deviations from partisan behaviour, if they result in changes in voter’s expectations regarding partisanship, can trigger a switch to a stable to a

\(^6\)Coate and Morris (1999) study the resilience of economic policies that benefit specific groups of voters. In their dynamic model, implementation of a policy can raise the political effectiveness of its beneficiaries in lobbying, leading to policy persistence. As in our paper, this gives rise to political failure: equilibrium policy sequences can be Pareto dominated. Unlike Coate and Morris (1999), we focus on non-partisan issues that do not target specific groups.
Pareto superior outcome without any partisanship. In contrast, the present paper ties partisanship
to a politician’s competence, and politicians will deviate to a non-partisan policy choice with positive
probability, although the later is always punished by subsequent defeat.

Another closely related paper is Pollak (2013). Similar to our starting point, he assumes that
Democrats are better at economic policy, while Republicans are better at defense. Somewhat dif-
ferently, he assumes that the “magnitude” of each problem evolves stochastically over time, and the
President chooses how to allocate resources to reduce the stock of each problem. He shows that a
President has incentives to distort resources towards the problem that his opponent is better at, in
order to raise the likelihood that the most serious problem continues to the one that the President is
best at fixing—in essence, he predicts the opposite of partisan behaviour in terms of problem focus.

We also contribute to the literature on political failure. Harrington (1993), Canes-Wrone et al.
(2001), and Maskin and Tirole (2004) and Klumpp (2015) emphasize a negative incentive effect of
elections: if office-holding motives are strong enough, politicians may choose the most popular (rather
than the optimal) alternative, “pandering to public opinion”. In a similar vein, Stasavage (2007)
shows that if debates are held under the public eye, representatives may ignore their private information
about the true desirability of various policy measures and instead promote policies popular
among their constituents. Finally, our paper contributes to the vast literature on policy persis-
tence and divergence in dynamic settings. In particular, in the repeated elections literature (see
Duggan and Martinelli (2013) for a review) voters see what an incumbent did in office, but do not
know a challenger’s ideology, and hence what he will do in office. With risk-averse voters, this yields
an incumbency advantage, and allows an incumbent to win with a policy that is not too far from the
median voter’s preferred policy (closer to his own preferred policy). In the stationary environment,
this policy persists over time. In contrast to this literature, in our model voters and candidates share
the same policy preferences, and policies persist because the officeholder attempts to conceal new (and
conflicting) evidence about what is best for voters.

The paper is organized as follows. Section 2 presents the model, while Section 3 characterizes the
equilibrium. Section 4 concludes. All proofs are in an appendix.

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7Klumpp (2015) also shows that under these circumstances, partisan interest groups can be beneficial if their
funding influences susceptible voters in the ‘right’ direction and insulates politicians from public opinion.
2 A Dynamic Model of Partisanship

**Economic Environment.** We consider a discrete time, infinite-horizon economy with a risk-neutral representative citizen-voter whose period payoff stochastically depends on the state of the economy, the policy choice of an elected official to deal with the economy, and the office-holder’s expertise at dealing with the state. For simplicity, we assume that the state of the economy is binary, $s_t \in \{l, r\}$, and that it is best to deal with state $s_t = l$ with the ‘left-wing’ policy, $a_t = l$, and to deal with state $s_t = r$ with the ‘right-wing’ policy, $a_t = r$. Office-holders differ in their expertise: an office-holder has a comparative advantage—possibly small—at implementing policies closer to his own ideology. Specifically, let $J_t \in \{L, R\}$ denote the incumbent’s political ideology in period $t$. We assume that an incumbent with ideology $R$ has the expertise to better implement policy alternative $a_t = r$, while one with ideology $L$ is better at implementing $a_t = l$. This premise emerges naturally in a setting where officials endogenously acquire competence on issues that they care about and oversee, and specialize in policy formation (see e.g., Kessler (2005)). Indeed, polls indicate that voters believe that Democrats have a comparative advantage at implementing state provision of health care and education, and implementing employment-oriented policies; whereas Republicans are better at implementing market based health care or education solutions and policies that favour business. The underlying state $s_t$ then captures the relative efficacy of government versus private provision of health care and education, or whether ‘jobs’ or ‘business’ should be favored in policy. Over time, the state may evolve so that the focus of optimal government policy changes.

The ex ante optimal policy choice is to match the policy with the state: the likelihood that policy choice $a_t$ succeeds is always higher when it is the appropriate policy given the economic state, i.e., when $a_t = s_t$, than when it does not, i.e., when $a_t \neq s_t$. For simplicity, we assume that the appropriate policy always succeeds when it is implemented by an office holder with expertise in the policy; and it succeeds with probability $\rho < 1$ when the office holder lacks that expertise. We allow the consequences of taking the wrong policy to vary with the situation—sometimes implementing the wrong policy is more damaging than other times. We capture this via the probability $\pi_t < \rho$ that the inappropriate policy succeeds: we assume that $\pi_t$ is drawn i.i.d. from a density $f$ with support $(0, \rho)$ and associated
cdf $F$. Thus, the period policy payoffs that the representative citizen-voter realizes are

$$b(a_t = s_t = l, L) = b(a_t = s_t = r, R) = b$$ with probability 1

$$b(a_t = s_t = l, R) = b(a_t = s_t = r, L) = \begin{cases} b & \text{with probability } \rho < 1 \\ 0 & \text{with probability } 1 - \rho \end{cases}$$

$$b(a_t \neq s_t, J) = \begin{cases} b & \text{with probability } \pi_t < \rho \\ 0 & \text{with probability } 1 - \pi_t. \end{cases}$$ (1)

The preferences of office holders are partially aligned with voters: representatives derive the same utility from the policy $a$ given state $s$ as their constituents, regardless of their type $J$. However, office-holders also care about holding office, which we formalize by a rent $\phi > 0$ that politicians receive from being elected to office in period $t$. Thus, the period utility of an incumbent is

$$u^I_t = b(a_t, s_t) + \phi.$$ (2)

Once defeated, an incumbent never returns to office. When not in office, politicians receive a continuation utility of zero; our results remain qualitatively unchanged if, instead, an exiting incumbent receives period payoff $u^I_t = b(a_t, s_t)$ when out of office. The state of the economy evolves over time according to a stationary, persistent Markov process with $Pr(s_{t+1} = s_t) = \gamma > \frac{1}{2}$.

The problem for the representative citizen-voter is that while the office holder knows the state of the economy, and hence which action maximizes citizen welfare, the voter only observes the action that the office holder takes, and his period payoff. The representative citizen-voter then uses that information to forecast which state of the economy is most likely next period, and hence which office-holder is more likely to have the expertise to deal with the economic issues that will emerge. In turn, this creates a problem for an office-holder whose expertise is mis-matched with what is needed to boost the economy in that period—if he takes the ‘right’ action choice, he reveals that he is currently mis-matched, which makes him more likely to be mis-matched next period, impairing his chances of re-election. His alternative is to try to conceal the mis-match by taking the action that would maximize the likelihood of economic success were his expertise correctly matched with the economy, and then hope that it works out, fooling the representative citizen-voter about the state of the economy, thereby encouraging the voter to re-elect him.

The timing of the period $t$ stage game is as follows. First, an election is held in which the representative citizen voter decides whether to re-elect the incumbent or to replace him with a challenger
from the opposing party (a period defines a term of office), whose expertise hence differs from the incumbent’s. Then nature draws $s_t$ and $\pi_t$, which are immediately revealed to the office holder but not to ordinary citizens. In particular, an office holder knows which policy is appropriate, and how likely the inappropriate policy is to succeed. Next, the office holder chooses a policy alternative $a_t$ and payoffs are realized. Having seen whether the policy succeeded ($b_t = b$) or failed ($b_t = 0$), voters update their beliefs about the underlying state, and time moves on to period $t + 1$.

**Equilibrium.** We restrict attention to pure strategy, stationary and symmetric Markov perfect equilibria. The relevant information of the representative voter can be summarized by her belief $\mu_t$ at time $t$ that the current office holder’s ideology matches the state, that is, if the incumbent has ideology $J_t = L$ then $\mu_t = Pr(s_t = l)$, and if $J_t = R$, then $\mu_t = Pr(s_t = r)$. A period $t$ strategy for the representative voter is a function mapping $\mu_t$ into an indicator function $P_I$ which is one if the incumbent is re-elected, and is zero otherwise. Voters are forward looking, so $P_I$ only depends on the voter’s beliefs $\mu_t$ that the current office holder has the appropriate expertise, which in turn depend on last period’s beliefs $\mu_{t-1}$, the incumbent’s policy choice $a_{t-1}$, and the payoff realization $b_{t-1}$. We assume that if voters are indifferent between candidates, the incumbent is re-elected. A period strategy for a type-$J$ office-holder is a function $a^J(\mu_t, s_t, \pi_t)$ that maps voters’ beliefs $\mu_t$, the current state $s_t$ and the realization of $\pi_t$ into a policy choice $a_t \in \{l, r\}$. In equilibrium, strategies must be mutual best responses and beliefs evolve according to Bayes rule.

### 3 Equilibrium Analysis

We use the term *non-partisan* politics to characterize the Pareto-optimal policy choice, i.e., when the office holder implements $a_t = s_t$, regardless of her type $J$. *Partisan politics*, in contrast, involve politicians selecting the alternative that corresponds to their ideology rather than to what would be optimal given the state, i.e, $a_t = l$ in $s_t = r$ if $J = L$ and $a_t = r$ in $s_t = l$ if $J = R$.

Consider first voter behaviour and assume for the moment that (as will true in equilibrium) that politicians are more likely to choose policies in which they have expertise, ceteris paribus. Due to the symmetric nature of the economy, voters will want a left-wing politician in office if they believe that the state is more likely to be ‘left’ and they prefer right-wing politicians if they believe the state is more likely to be ‘right’.
Assume without loss of generality that an \( L \)-type incumbent was in office in period \( t - 1 \). If her policy choice in previous period matched her political affiliation (\( a_{t-1} = L \)) but the policy failed (\( b_{t-1} = 0 \)), voters can be certain that last period’s state was \( s_{t-1} = r \) and should rationally update their beliefs to \( \mu_t = \text{Prob}\{s_{t+1} = l\} = 1 - \gamma < 1/2 \). In this case, they are better off electing the right-wing challenger. The same is true if the office holder chose a policy that did not match her affiliation (\( a_{t-1} = r \)) as this also reveals the previous state to have been \( s_{t-1} = r \) with certainty. Conversely, if the \( L \)-type office holder chose \( a_{t-1} = l \) and the policy was a success (\( b_{t-1} = b \)), we must have \( \mu_t > 1/2 \) since an elected left-wing office holder requires previous beliefs to have been \( \mu_{t-1} \geq 1/2 \) and a successful left-wing policy will strictly increase beliefs of an \( l \)-state. Thus, along the equilibrium path, an incumbent is re-elected in period \( t \) if and only if her policy in the previous period matched her ideology and that policy was successful.\(^8\)

Next we turn to candidates. Given the voter behaviour described above, it is obvious that an incumbent will always implement the efficient policy, \( a_t = s_t \) whenever she has expertise in that policy. There are only benefits and no costs, as this results in certain re-election (more generally, if success is only “most likely” and not certain, it is still optimal). If the incumbent’s party does not match the state, the incumbent can either implement the more desirable (non-partisan) policy, which leads to sure defeat in the next election, or choose the partisan policy, which has a lower expected payoff but secures re-election whenever the policy doesn’t fail. Clearly, this trade-off hinges on the realization of the probability that the latter strategy succeeds, \( \pi_t = \text{Prob}\{b_t = b|a_t \neq s_t\} \). To fix ideas, let \( \pi^* \) be the cut-off value of \( \pi \) above which politicians take the partisan action. Then, if \( \pi_t > \pi^* \), they take the action that matches their party/expertise and if \( \pi_t < \pi^* \), they take the non-partisan action that matches the state. At \( \pi^* \) they are indifferent between the two actions.\(^9\) Since the distribution \( F \) over \( \pi_t \) has full support on \([0, \rho]\), we must have \( 0 < \pi^* < \rho \). Thus, voters will observe both the efficient policy choice, and the partisan policy choice in equilibrium.\(^10\)

To see this formally, let \( V(M) \) and \( V(m) \) be an incumbent’s value function for holding office, where

\(^8\)Off equilibrium, it is possible that \( \mu_t < 1/2 \) if voters elected the ‘wrong’ candidate in the previous period. See the Appendix for a full characterization of off-equilibrium strategies.

\(^9\)We show in the Appendix that \( \pi^* \) is unique.

\(^10\)The sufficiently large support for \( \pi \) smoothes payoffs and delivers beliefs \( \mu_t \) that are well-defined for all possible histories of the game. One could alternatively assume that the weight that politicians give to voters’ payoffs relative to perks from office varies, i.e., \( u(a_t, s_t) = b_t(a_t, s_t, J) + (1 - \alpha_t)/\alpha_t \phi \), where \( \alpha_t \) is drawn i.i.d. from \([0, 1]\). Uncertainty over \( \alpha \) would interact with a given \( \pi \) in a natural way; in particular, there would now be a cutoff value \( \pi^*(\alpha) \) that is increasing in \( \alpha \). That is, when doing the ‘right’ thing matters more, \( \pi \) has to be higher before incumbents switch to doing the ‘wrong’ thing.
\( M \) indicates that the incumbent’s party matches the state (i.e., \( L \) and \( l \) or \( R \) and \( r \)), and \( m \) indicates that the incumbent’s party does not match the state. Exploiting stationarity, and using (2), we have for an elected office holder whose party matches the state and who is always re-elected given the strategy of the voters,

\[
V(M) = b + \phi + \beta [\gamma V(M) + (1 - \gamma)V(m)]
\]

\[
= \frac{b + \phi + \beta(1 - \gamma)V(m)}{1 - \beta \gamma}.
\]  

(3)

Similarly, the value function for an incumbent whose party does not match the state is

\[
V(m) = \phi + F(\pi^*) \rho b + (1 - F(\pi^*)) E[\pi|\pi \geq \pi^*] [b + \beta ((1 - \gamma)V(M) + \gamma V(m))].
\]  

(4)

where we have used the fact the politician will take the non-partisan action for \( \pi \leq \pi^* \) (and won’t be re-elected) and will take the partisan action for \( \pi > \pi^* \), which results in re-election only with probability \( \pi \). Using (3) and (4) and re-arranging, we obtain

\[
V(M) - V(m) = \left[ 1 - \rho - (1 - F(\pi^*)) (E[\pi|\pi \geq \pi^*] - \rho) \right] b + \beta (1 - (1 - F(\pi^*)) [\gamma V(M) + (1 - \gamma)V(m)]
\]

\[
(1 - \beta (1 - F(\pi^*)) (2\gamma - 1)).
\]

The right-hand side is strictly positive: \( V(M) - V(m) > 0 \). Moreover, indifference at \( \pi^* \) requires (for \( \pi^* > 0 \)),

\[
\rho b = \pi^* [b + \beta ((1 - \gamma)V(M) + \gamma V(m))]
\]

\[
\Leftrightarrow (\rho - \pi^*) b = \pi^* \beta ((1 - \gamma)V(M) + \gamma V(m))
\]  

(5)

Because \( (1 - \gamma)V(M) + \gamma V(m) > 0 \), it must be that \( (\rho - \pi^*) > 0 \). That is, \( \pi^* < \rho \): there must always be some partisan behaviour in equilibrium because acting partisan raises the probability of being reelected by a discrete amount. Intuitively, even if voters know that office holders will always act non-partisanly, heterogeneity in incumbent’s competence regarding policies from different ends of the ideological spectrum (\( \rho < 1 \)) prompts them to prefer politicians whose party affiliation matches whichever state they believe is more likely. In turn, this gives politicians strict incentives to conceal a current state that is unfavourable to their ‘own’ ideology by acting partisanly, thus avoiding certain defeat at the polls. It is also straightforward to show that \( \pi^* > 0 \). The intuition is simple: at \( \pi = 0 \), candidates have a strict incentive not to act partisanly, as they will not be re-elected either way and the efficient policy increases their payoff in the current period. In the Appendix, we prove that there is always a value \( \pi^* \in (0, \rho) \) that satisfies (5), and that this value is unique. Given the monotonicity of payoffs, it is then easy to
see that there can be no other stationary Markov perfect equilibrium with any other structure; indeed, the equilibrium is the unique stationary limit of the finite horizon economy. We can thus conclude:

**Proposition 1.** There exists a stationary and symmetric Markov perfect equilibrium of the infinite-horizon game characterized by a cut-off value $\pi^* \in (0, \rho)$ such that elected office holders enact partisan policies if $\pi_t \geq \pi^*$ and implement efficient policies otherwise. In this equilibrium, politicians are re-elected with probability one if their implemented policy succeeds and face certain defeat if it fails. Moreover, this equilibrium is the limit of the unique Bayesian Perfect equilibrium of a finite horizon $t = 1, \ldots, T$ economy as $T \to \infty$.

The above result is robust to a number of natural variations in our basic model structure. For instance, we could accommodate the possibility that voters sometimes learn the state of the world by introducing a small probability that $s_t$ is commonly observed. This would make partisan behavior less attractive, ceteris paribus. The threshold value $\pi^* \in (0, \rho)$ above which partisan play emerges would increase, but the qualitative result still holds. So, too, one could contemplate a probabilistic voting model in which heterogeneous voters differ in their idiosyncratic preferences for the incumbent or the challenger (e.g., for reasons of ideology). Then partisan preferences of voters would sometimes swamp expertise in voter choice, rendering voting outcomes uncertain, softening the competition between incumbent and challenger. This would make nonpartisan play relatively more attractive, as revealing the state to be more appropriate for the challenger’s expertise would not result in certain defeat.

Allowing incumbents to derive utility from the policy when out of office would have similar consequences. If ousted politicians continue to care about policy, then they benefit from the appropriate candidate in office, which diminishes the relative benefit from partisan play and potentially staying in office (as the wrong type incumbent). This might be reinforced if inappropriate policies that do not fail immediately, may subsequently “fail” delivering future losses that can be attributed to the past inappropriate policies. That is, the adverse consequences of policy choices may be stochastically realized in the distant future (e.g., the consequences of government debt, pension/spending obligations, under-investment in education or infrastructure). This serves to reduce the payoff from acting partisanly.

We conclude this section by observing that in the infinite horizon game, there exist non-Markov equilibria when agents are sufficiently patient. In particular, there may be equilibria that Pareto dominate the equilibrium characterized in Proposition 1. For example, for $\gamma$ close to $1/2$ (or if $\beta$ and
There is an equilibrium in which the incumbent is always re-elected, supported by voter beliefs that if they ever vote for the challenger, then the equilibrium will revert to the stationary Markov equilibrium.

To see this, observe that if the incumbent is always re-elected, her payoff-maximizing action maximizes her period payoff, and her interests are aligned with voters in this regard—she will always act nonpartisanly. The only relevant equilibrium condition is thus whether or not voters will re-elect a politician they know does not have the right expertise given the current state.\footnote{Recall that since the politician will act non-partisan in equilibrium, the state of the economy will be revealed to the voters ex post.} A representative voter thus compares the expected payoff from re-electing the incumbent, whose type does not match the current state with probability $\gamma > 1/2$, to the expected payoff if he instead elected the challenger to office, which would result in a temporary increase in expected payoffs at the cost of reverting to the Pareto inferior stationary equilibrium of Proposition 1 forever after. For $\gamma \to 1/2$, the state is no longer persistent and the expected benefit from selecting the correct-type politician on the basis of last-periods state therefore goes to zero. As a result, the difference in voter payoff between having an incumbent in office who always plays non-partisan, and the stationary Markov equilibrium must be strictly positive.\footnote{At $\gamma \to 1/2$, the probability of having the correct type in office is the same in both cases. If the incumbent’s type matches the state, they enact the same policies in both equilibria. If they do not match the state, the stationary Markov payoff is strictly lower on average due to $\pi^* < \rho$.} Hence, the voters’ strategy of always re-electing the incumbent is indeed subgame perfect. A similar argument applies if $\beta$ and $\rho$ are close to one.

**Equilibrium Properties**

The partisan policy choice is both inefficient and, in a dynamic sense, less responsive to current circumstances than it should be: the policy that maximizes voter welfare is the non-partisan policy choice $a_t = s_t$, regardless of the incumbent’s type. Furthermore, in a first-best scenario with full voter information, only politicians who match the current state would be re-elected due to $\rho < 1$ and $\gamma > 1/2$. From the voters point of view, non-partisan politics are thus desirable for two reasons. First, non-partisan policies are short-term optimal in the sense of stochastically improving current payoffs. Second, they are desirable from a long-run perspective as they allow voters to better infer the current state of the economy, and thus select the most suitable office holder for future periods. The latter se-
lection effect poses a potential conflict between voters and incumbent if the probability of success with a partisan policy is high enough. In this case, the short-term losses of acting partisan are sufficiently small, so that the long-term re-election issue dominates: revealing the state is not aligned with one’s expertise will result in certain defeat at the polls. Partisan behaviour emerges even though politician’s interests are partially aligned with those of citizen-voters and voters strictly prefer politicians to act non-partisan for a given (but arbitrary) ideology of the incumbent. Conversely, if the probability of success with a partisan policy is relatively low, the officeholder will—due to preference alignment—enact the policy that voters value most, as the gain from doing so is highest. Doing ‘the right thing’, however, has paradoxical consequences as it is precisely in this situation that the incumbent is punished by the voters at the polls as they (rationally) select the challenger as the more desirable office holder for the future.

Finally, the fact that, at any given time, there is a positive probability $1 - F(\pi^*)$ that the incumbent acts partisan, in which case voters will not oust her with probability $E[\pi|\pi \geq \pi^*]$ also implies that the incumbent will be re-elected more often than is efficient. Indeed, the incumbent enjoys an advantage over the challenger precisely because they can—and often will—choose to ‘stick to their political colours’ and enact inefficient partisan policies, thus enjoying higher re-election prospects than if they played non-partisan. These observations are summarized in

**Proposition 2.** In the stationary Markov perfect equilibrium,

a) Voters receive strictly less utility than if politicians were always to act non-partisanly; non-partisan behaviour emerges but is punished at the polls with certain defeat precisely in those citations where voters benefit most from non-partisan play (low values of $\pi^*$) [Partisan Paradox].

b) Policies are less likely to be responsive to underlying state changes than would be efficient [Policy Persistence].

c) The long run probability that an incumbent wins another term in office strictly exceeds one half [Incumbency Advantage].

These characteristics respond to varying underlying parameters in the obvious way. In particular, it is easy to show that $\pi^*$ is a strictly decreasing function of the ratio of office rent over successful policy payoff, $\phi/b$.\(^{13}\) The ratio $\phi/b$ captures in an intuitive way the trade-off that politicians face when

\(^{13}\)See the Appendix for a formal proof.
weighing the future re-election benefits of partisan behaviour against the importance of implementing the ‘right’ policy today. As the rent from holding office increases, or the gain from a successful policy enactment decreases, incumbents will be more inclined to implement partisan policies. As a result, voter welfare drops, policy persistence rises, and incumbency advantage becomes more pronounced.

Term Limits

Electoral rules in practice differ in an incumbent’s ability to stand for reelection. Most of the economics and political science literature has an unfavourable view of term limits as they are seen to impede electoral accountability on two fronts. First, term limits can restrict the usefulness of elections as a selection tool as they will prevent voters from selectively retaining competent, honest, or moderate incumbents. Second, they eliminate the disciplinary effect of elections as voters are no longer able to punish opportunistic behaviour by lame duck office holders at the polls. One notable exception is Smart and Sturm (2013) who argue that term limits can be ex ante welfare improving, even if they weaken the disciplinary effect of elections. In a model where politicians differ in the degree to which their preferences diverge from those of the voters, they show that by reducing the value of holding office, term limits reduce the incentives of unbiased politicians to pursue welfare-inferior actions for the sake of getting re-elected. This enables voters to selectively re-elect better politicians to a second term in office. The idea is akin to Maskin and Tirole (2004)’s point that the re-election motive can prompt incumbents to ‘pander to public opinion’. This phenomenon turns the accountability role of elections on its head – because the electorate is unable to evaluate the official’s actions directly, the desire to be (re-)elected may lead representatives to pursue the most popular, rather than the welfare maximizing, course of action.

A similar effect is present in our model where the re-election motive is unambiguously detrimental to equilibrium welfare. Clearly, without the prospect of re-election, lame duck incumbents will always act non-partisan which improves both current-period expected payoffs and enables voters to select the most suitable candidate for the following term. At the same time, reducing the value of holding office also improves the incentives to act non-partisan in any previous turn. We can conclude

**Proposition 3.** The game with a $T$-term limit to serving in office has a unique stationary Markov perfect equilibrium in which incumbents always play non-partisan in their last period of office are are

14 See, e.g., Besley and Case (2003) and Bernhardt et al. (2004) and the references therein.
also less likely to play partisan than in the game without term limits in any previous period in office.
Expected voter welfare is unambiguously higher with term limits than without term limits.

The contrast between the welfare-enhancing role of term limits in this economy versus the welfare-damaging effects of term limits in the standard repeated elections literature with adverse selection lies in the difference in alignment of interests of voters and officeholders when they are not subject to electoral accountability concerns. In our setting, their interests are aligned, so an officeholder who is not subject to re-election concerns (either because he is sure to stay in office, or is sure to leave office, for example due to the term limit) will do the “right thing” from the perspective of voters, taking the action that maximizes the probability of receiving $b$ and revealing the state to voters. In contrast, when officeholders want to implement ideological policies that diverge from the median voter’s preferred policy, when not subject to re-election concerns, he will do the “wrong thing”, and implement his own preferred policy.

4 Discussion and Conclusions

This paper proposes a theory of partisanship for public leaders in which elected officials enact policies close to their ideology or party affiliation, even though both voters and representatives preferences over policy choices are aligned, and the evidence suggests that another policy would maximize period payoffs. The problem emerges because competence on certain issues is linked to ideology or party affiliation. This prompts voters to elect the a representative whose perceived partisan policy corresponds to what they think is in their best interest based on their current information. By jamming a voters’ inference problem with a partisan policy, an incumbent can thus improve his re-election chances. The result is political failure in the sense that the equilibrium partisan policy outcomes are Pareto dominated. Moreover, such partisan politics are persistent in the sense that equilibrium polices are less volatile and less responsive to changes in the underlying state than efficient policies.

It is important to distinguish the mechanism in our model from the widely-used adverse selection approach of reputation in repeated games, first formalized by Kreps et al. (1982) and Kreps and Wilson (1982). In these models, small amounts of imperfect information regarding payoffs can induce players to try to build a reputation for being of a certain type, to trigger favourable responses from others.\textsuperscript{15}

\textsuperscript{15}Morris (2001) applies this approach to a related question, assuming that political advisers can be either good or
Translated into our framework, this approach would assume that politicians can be of two unobservable (payoff) types, a “partisan” type and a “non-partisan” type, where the latter is strictly preferable to the electorate. In such a world, candidates with partisan preferences would be tempted to implement an efficient policy to appear non-partisan. Obviously, one cannot possibly explain ideologically tinted behaviour with this line of argument. In our model, implementing efficient (non-partisan) policies in the partisan equilibrium cannot serve as a signal for being an efficient (non-partisan) type. Rather, non-partisan actions are undesirable because they result in sure defeat. This is the opposite prediction of a signalling model, where non-partisanship would forsake short-term gains, but win re-election. One could possibly distinguish between these predictions empirically; however, this is beyond the scope of the present paper.

**References**


bad. A priori, both types of adviser would like to be perceived as good, which may prompt them to keep their advice “politically correct” (against better knowledge).


Appendix

A. Description of off-equilibrium path strategies

As argued in the main text, every possible action \(a_{t-1} \in \{l, r\}\) by the incumbent and associated policy outcome (success or failure) is observed by voters in equilibrium. Thus, voter beliefs and expected continuation payoffs are always pinned down by Bayes rule. The sole possible off-equilibrium path arises if voters mistakenly fail to elect the politician whose type corresponds to the state they consider most likely, so that \(\mu_t \in [1 - \gamma, 1/2)\). Note first that if \(\mu_t\) is sufficiently close to 1/2 (e.g., if \(\gamma\) is close enough to 1/2 or if it is very unlikely that playing partisan results in success, then conditional on a successful partisan action, beliefs \(\mu_{t+1}\) will exceed 0.5, and analysis is unchanged (that is, voters re-elect the incumbent if and only if her policy matches her party affiliation and it succeeds. Play thus returns to the equilibrium path after one period. If, instead, \(\mu_t\) is small, or if \(\pi\) is likely to be close to \(\rho\), however, then a successful partisan policy fails to raise beliefs to \(\mu_{t+1} > .5\). Specifically, denoting \(F(\pi^*_t)\) by \(F\) and \(\bar{\pi} = E(\pi|\pi \geq \pi^*), \mu_{t+1} \geq .5\) requires

\[
\mu_{t+1}(\mu_t) = \frac{\mu'_t}{\mu'_t + (1 - \mu'_t)(1 - F)\bar{\pi}} \geq 0.5 \iff \mu_t \geq \frac{(1 - F)\bar{\pi}}{(1 + (1 - F)\bar{\pi})} \equiv \bar{\mu}.
\]

where \(\mu_t\) is the belief at the beginning of period \(t\) that the office holder in \(t - 1\) (the incumbent) matched state in \(t - 1\) and \(\mu'_t = \mu_t\gamma + (1 - \gamma)(1 - \mu_t)\) is the probability that a re-elected incumbent matches the current (period \(t\)) state. If \(\mu_t < \bar{\mu}\), succeeding at the partisan policy is a necessary, but not sufficient, condition for re-election, and voters adopt a mixed re-election standard when they observe a successful partisan action. To see this, observe that if an officeholder is sure to be voted out of office, she will always take the non-partisan action. But, then, if the non-partisan action corresponds to her expertise, voters should update to \(\mu_{t+1} = \gamma > \frac{1}{2}\) and re-elect her, a contradiction. Hence, if an office holder finds herself elected for beliefs \(\mu_t < \bar{\mu}\) the only strategy compatible with equilibrium is to choose a higher cutoff \(\pi^{**} > \pi^*\), which ensures \(\mu_{t+1} = .5\) via Bayes rule. Voters are then indifferent between the incumbent and the challenger in \(t + 1\) and, in order to support the choice of \(\pi^{**}\) by the incumbent in \(t\), will choose a lower the equilibrium probability of re-election \(\alpha \in (0, 1)\) which makes the incumbent indifferent between the partisan and the non-partisan action in a state that her type doesn’t match. In turn, the equilibrium probability of re-election when the officeholder succeeds with the partisan action leaves her indifferent between actions when the partisan policy succeeds with probability. This off-equilibrium play only lasts one period after which we return to the equilibrium path.
as either $\mu_{t+1} = .5$ (following a successful partisan policy, re-election with probability $\alpha$) or $\mu_{t+1} = 0$ (challenger is elected) in following period.

B. No experimentation

The following lemma establishes that there is no ‘experimenting’ in equilibrium:

**Lemma.** The voter’s value function satisfies $\mu \gtrless \frac{1}{2} \Rightarrow U(\mu) \gtrless U(1 - \mu)$

**Proof.** Suppose first $\mu \geq \bar{\mu}$ so that candidates whose type matches the state always implement the efficient policy, and candidates whose type does not match the state play partisan whenever $\pi \geq \pi^*$. Then, the voter’s value function $U(\mu)$ is increasing in $\mu$. To see this, normalize $b$ to one, and write the voter’s value function (as a function of $\mu$) as

$$U(\mu) = (\mu \gamma + (1 - \gamma)(1 - \mu))W(M) + (\gamma(1 - \mu) + (1 - \gamma)\mu)W(m),$$

where $W(M)$ is the discounted lifetime value if we start out with an officeholder’s expertise matches the state, and $W(m)$ is the discounted lifetime value if it is mis-matched, and we are integrating over whether or not the officeholder is matched.

Defining $\mu' = (\mu \gamma + (1 - \gamma)(1 - \mu))$, we can alternatively write

$$U(\mu) = \mu'W(M) + (1 - \mu')W(m),$$

Since $\mu'$ is monotone in $\mu$, the result that $U$ is increasing in $\mu$ (i.e., that higher probabilities of being matched are better) follows from $W(M) > W(m)$.

Define $\bar{\pi} = E[\pi|\pi \geq \pi^*] \geq \pi^*$, and omit arguments where it does not cause confusion.

We have

$$W(M) = 1 + \delta[\gamma W(M) + (1 - \gamma)W(m)]$$

and

$$W(m) = (1 - F)\bar{\pi} + F\rho + \delta[(\gamma(1 - F)(1 - \bar{\pi}) + F\rho)W(M) + (1 - \gamma)[1 - (1 - F)(1 - \bar{\pi}) - F\rho]W(m)]$$

where $W(m)$ has the general functional form

$$W(m) = a + \delta[bW(M) + (1 - b)W(m)]$$
with $a < 1$ and $b < \gamma$. Solve the value function equations for
\[
W(M) = \frac{1 + \delta(1 - \gamma)W(m)}{1 - \delta \gamma} \quad \text{and} \quad W(m) = \frac{a + \delta(1 - b)W(M)}{1 - \delta b},
\]
and
\[
W(M) = \frac{1 + a\delta - \delta(a\gamma + b)}{1 - \delta(\delta + \gamma(1 - \delta) + b(1 - \delta))} \quad \text{and} \quad W(m) = \frac{a + \delta - \delta(a\gamma + b)}{1 - \delta(\delta + \gamma(1 - \delta) + b(1 - \delta))}.
\]
Hence,
\[
W(M) - W(m) = \frac{(1 - \delta)(1 - a)}{1 - \delta(\delta + \gamma(1 - \delta) + b(1 - \delta))} > 0.
\]
Thus, $U(\mu)$ is increasing in $\mu$ for $\mu \geq \bar{\mu}$. For those values, $\mu \geq .5 \Rightarrow U(\mu) \geq U(1 - \mu)$ with strict equality if $\mu = .5$ and $\bar{\mu} < \mu < .5 \Rightarrow U(\mu) < U(1 - \mu)$ follows. For values $\mu < \bar{\mu}$, the incumbent chooses $\pi^* > \pi^*$ if her type doesn’t match the state, which ensures $\mu_{t+1} = .5$ following a successful partisan policy. In this case, the electorate is strictly better off electing the challenger, for whom $\mu > .5$, instead [see part D. below for a detailed argument] and we again have $U(\mu) < U(1 - \mu)$. □

C. Proof of Proposition 1

Substituting (5) into (4) yields (recall $\pi = E[\pi|\pi \geq \pi^*]$)
\[
V(m) = \phi + \rho b + (1 - F(\pi^*)) \left[ \frac{\rho b}{\pi^*} - \rho b \right] = \phi + \left[ 1 + (1 - F(\pi^*)) \left( \frac{\bar{\pi} - \pi^*}{\pi^*} \right) \right] \rho b. \quad (7)
\]
Similarly, from (3),
\[
V(M) = b + \phi + \beta(1 - \gamma) \left[ \phi + \left[ 1 + (1 - F(\pi^*)) \left( \frac{\bar{\pi} - \pi^*}{\pi^*} \right) \right] \rho b \right].
\]
We can also write (3) as:
\[
V(M) = b + \phi + \frac{\beta(1 - \gamma)}{\gamma} \left[ \left( \frac{2\gamma - 1}{1 - \gamma} + (1 - \gamma) \right) V(M) + \gamma V(m) \right] = \frac{\gamma (b + \phi) + (1 - \gamma) (\rho - \pi^*) b}{\gamma - \beta(2\gamma - 1)}. \quad (8)
\]
Using (7) and (8) in (5), we obtain
\[
\frac{(\rho - \pi^*) b}{\pi^*} = \beta(1 - \gamma) \left\{ b + \phi + \beta(1 - \gamma) \left[ \phi + \left[ 1 + (1 - F(\pi^*)) \left( \frac{\bar{\pi} - \pi^*}{\pi^*} \right) \right] \rho b \right] \right\},
\]

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which after some further manipulation can be written as

\[
(\rho - \pi^*) = \pi^* \frac{\beta (1 - \beta (2\gamma - 1))}{1 - \beta \gamma} \phi + \pi^* \beta \left[\frac{1}{1 - \beta \gamma} \left(1 - \gamma + (\beta (1 - 2\gamma) + \gamma) \rho\right)\right] \\
+ \beta \rho \left[\frac{\beta (1 - 2\gamma) + \gamma}{1 - \beta \gamma}\right] \left[\left(1 - F(\pi^*)\right) (\bar{\pi} - \pi^*)\right].
\]

(a) **Existence.** To establish existence, we show that there is a value \(\rho > \pi^* > 0\) solving (9). First, let \(\pi^* \to 0\) and note that the first and second terms of the right-hand side (RHS) of (9) go to 0 and the term on the left-hand side (LHS) goes to \(\rho\). Hence it remains to show that the third term, \(\rho \beta \left[\frac{\beta (1 - 2\gamma) + \gamma}{1 - \beta \gamma}\right] (1 - F(\pi^*)) E[\pi|\pi \geq \pi^*]\), approaches some value smaller than \(\rho\) as \(\pi^* \to 0\). Due to \(\pi^* \to 0\), \((1 - F(\pi^*)) \bar{\pi} \to E[\pi] < 1\), it remains to show \(\beta \left[\frac{\beta (1 - 2\gamma) + \gamma}{1 - \beta \gamma}\right] < 1\). We have

\[
\beta^2 (1 - 2\gamma) + \beta \gamma < 1 - \beta \gamma \Rightarrow \beta (\beta + 2\gamma (1 - \beta)) < 1.
\]

The LHS increases in \(\gamma\) and is equal to \(\beta (2 - \beta)\) for \(\gamma \to 1\). But since for \(\beta = 1\), \(\beta (2 - \beta) = 1\) and \(\frac{\partial}{\partial \beta} \beta (2 - \beta) = (2 - \beta) - \beta = 2(1 - \beta) > 0\), the inequality holds for \(\beta < 1\). Hence, \(\rho \beta \left[\frac{\beta (1 - 2\gamma) + \gamma}{1 - \beta \gamma}\right] (1 - F(\pi^*)) E[\pi|\pi \geq \pi^*] < \rho E(\pi) < \rho\) and LHS > RHS as \(\pi^* \to 0\).

For \(\pi^* \to \rho\), the LHS of (9) goes to zero, as does the third term on the RHS, since \((1 - F(\rho)) = 0\) and \(E[\pi|\pi \geq \pi^*] - \pi^* \to 0\). The first and second term of the right hand side, in contrast, remain strictly positive. Thus, for \(\pi^* \to \rho\), we have RHS > LHS. The existence of a value \(\pi^* \in (0, \rho)\) solving (9) then follows from continuity and the intermediate value theorem. \(\Box\)

(b) **Uniqueness.** Equation (9) can be rewritten as

\[
\frac{(\rho - \pi^*) b}{\pi^*} = \frac{\beta (1 - \beta (2\gamma - 1))}{1 - \beta \gamma} \phi + \beta \left[\frac{1}{1 - \beta \gamma} \left(1 - \gamma\right)\right] b \\
+ \beta A \left[\pi^* + (1 - F(\pi^*)) (\bar{\pi} - \pi^*)\right] b
\]

where \(A \equiv \rho \left[\frac{\beta (1 - 2\gamma) + \gamma}{1 - \beta \gamma}\right]\).

We proceed to show that the right-hand side of (10) is strictly increasing in \(\pi^*\). Since the left hand side is strictly decreasing in \(\pi^*\), the result follows. Note that \(\frac{\beta (1 - 2\gamma - 1)}{1 - \beta \gamma} > 0\) and \(\frac{\beta (1 - 2\gamma)}{1 - \beta \gamma} > \)
0. We also have
\[\frac{\partial}{\partial \pi^*} [\pi^* + (1 - F(\pi^*)) (\bar{\pi} - \pi^*)] = \frac{\partial}{\partial \pi^*} \left( \pi^* + \int_{\pi^*}^{\rho} \pi f(\pi) d\pi - (1 - F(\pi^*)) \pi^* \right)\]
\[= 1 - \pi^* f(\pi^*) - (1 - F(\pi^*)) + \pi^* f(\pi^*)\]
\[= 1 - (1 - F(\pi^*)) \geq 0. \quad \square\]

c) Limit of the finite horizon game

We begin with the optimal strategies of the politicians. Let \(V_O(M), V_O(m), V_I(M)\) and \(V_I(m)\) be the candidate’s value function where the subscript \(I\) and \(O\) indicates whether the candidate is IN office or OUT, while \(M\) indicates that the incumbent matches the state and \(m\) indicates that incumbent does not match the state. Furthermore, denote by a subscript \(k \in \{0, 1, 2, \cdots\}\) the value functions \(k\) further periods are played before the game ends. For example, \(V_I^0(M)\) denotes the value of being in office if the current period is the final period. Let \(\pi^{k,*}\) denote the cutoff that determines which action the incumbent takes if there are \(k\) further periods.

We have
\[V_I^0(M) = \phi + b\]
\[V_I^0(m) = \phi + \rho b\]
\[V_O^0(M), V_O^0(m) = 0\]

since the incumbent will always implement the efficient policy, that is, \(\pi^{0,*} = \rho\). Obviously, for \(k = 0\), the incumbent’s strategy is optimal. It follows that, given the incumbent’s strategy, for \(k = 1\), the electorate obviously reelects the incumbent if \(\mu_t > 0.5\) and elects the challenger for \(\mu_t < 0.5\).

Using backward induction,
\[V_I^k(M) = \phi + b + \beta \left[ \gamma V_I^{k-1}(M) + (1 - \gamma) V_I^{k-1}(m) \right],\]
\[V_I^k(m) = \phi + F(\pi^{k,*}) \rho b + (1 - F(\pi^{k,*})) \mathbb{E}[\pi | \pi \geq \pi^{k,*}] \left[ b + \beta \left( (1 - \gamma) V_I^{k-1}(M) + \gamma V_I^{k-1}(m) \right) \right],\]
and \(V_O^k(M), V_O^k(m) = 0\).

Assuming for the moment (this will be shown below) that the electorate reelects the incumbent if \(\mu_t > 0.5\), the cutoff \(\pi^{k,*}\) that governs the incumbent’s actions in each period is implicitly defined by
\[\rho b = \pi^{k,*} \left[ b + \beta \left( (1 - \gamma) V_I^{k-1}(M) + \gamma V_I^{k-1}(m) \right) \right].\]
We prove that $V_i^k(M)$ and $V_i^k(m)$ approach the unique $(V_i(M), V_i(m))$ arbitrarily close as $k$ increases by use of the Contraction Mapping Theorem [see e.g. Stokey and Lucas (1989)]. Define the operator $T : ([0, V_i(M)] \times [0, V_i(m)]) \mapsto ([0, V_i(M)] \times [0, V_i(m)])$ as follows:

$$T \left( \begin{array}{c} V_1 \\ V_2 \end{array} \right) = \left( \begin{array}{c} \phi + b + \beta \gamma V_1 + (1 - \gamma)V_2 \\ \phi + F(\pi^*) \rho b + (1 - F(\pi^*))E[\pi|\pi \geq \hat{\pi}] [b + \beta ((1 - \gamma)V_1 + \gamma V_2)] \end{array} \right)$$

where $\pi^*(V_1, V_2)$ is uniquely defined by $\pi^* = \frac{\rho b}{b + \beta ((1 - \gamma)V_1 + \gamma V_2)}$ (see arguments above). Further define $X \equiv ([0, V_i(M)] \times [0, V_i(m)])$ and the norm $\| (\hat{V}_1, \hat{V}_2) \| = \max (|V_1|, |V_2|)$. We will show that the operator $T$ is a contraction on under the metric defined by $\sigma \left( \left( \begin{array}{c} \hat{V}_1 \\ \hat{V}_2 \end{array} \right) \right) = \left( \left( \begin{array}{c} \hat{V}_1 \\ \hat{V}_2 \end{array} \right) - \left( \begin{array}{c} \hat{V}_1 \\ \hat{V}_2 \end{array} \right) \right)$ for $(V_1, \hat{V}_2), (\hat{V}_1, \hat{V}_2) \in X$. First, it is straightforward to show that the following two Blackwell conditions are sufficient for $T$ to be a contraction:

16 (i) if $\bol{f} \leq \bol{g}$ for $\bol{f}, \bol{g} \in X$ implies $T(\bol{f}) \preceq T(\bol{g})$ (monotonicity) and (ii) there exists some $\beta \in (0, 1)$ such that $T(\bol{f} + \alpha \bol{1}) \leq T(\bol{f}) + \beta \alpha \bol{1}$ for all $\alpha \geq 0$ (discounting). Monotonicity holds since $\partial T_1 / \partial V_j > 0$ for $i, j \in \{1, 2\}$.\17 Discounting holds because

$$T \left( \begin{array}{c} V_1 + a \\ V_2 + a \end{array} \right) = \left( \begin{array}{c} \phi + b + \beta \gamma V_1 + (1 - \gamma)V_2 + \beta a \\ \phi + F(\pi^*) \rho b + (1 - F(\pi^*))E[\pi|\pi \geq \hat{\pi}] [b + \beta ((1 - \gamma)V_1 + \gamma V_2) + \beta a] \end{array} \right)$$

$$\leq \left( \begin{array}{c} \phi + b + \beta \gamma V_1 + (1 - \gamma)V_2 + a \\ \phi + F(\pi^*) \rho b + (1 - F(\pi^*))E[\pi|\pi \geq \hat{\pi}] [b + \beta ((1 - \gamma)V_1 + \gamma V_2)] + (1 - F(\pi^*))E[\pi|\pi \geq \hat{\pi}] \beta a \end{array} \right)$$

$$\leq T \left( \begin{array}{c} V_1 \\ V_2 \end{array} \right) + \beta \left( \begin{array}{c} a \\ a \end{array} \right)$$

where $\hat{\pi}^* = \pi^*(V_1 + a, V_2 + a)$ and $\pi^* = \pi^*(V_1, V_2)$ and where the first inequality holds because $\phi + F(\pi^*) \rho b + (1 - F(\pi^*))E[\pi|\pi \geq \hat{\pi}] [b + \beta ((1 - \gamma)V_1 + \gamma V_2)] \leq \phi + F(\pi^*) \rho b + (1 - F(\pi^*))E[\pi|\pi \geq \hat{\pi}] [b + \beta ((1 - \gamma)V_1 + \gamma V_2)]$ by definition of $\pi^*(\cdot, \cdot)$ and the second inequality is due to $(1 - F(\pi^*))E[\pi|\pi \geq \hat{\pi}] \leq 1$. Therefore, $T$ is a contraction with modulus $\beta$. Since $T$ is a contraction and as $X$ together with the norm $\mu$ is a complete metric space, the Contraction Mapping Theorem applies and there exists a unique fixed point for $T$ which must be $(V_i(M), V_i(m))$. Furthermore, by definition of $T$, $(V_i^k(M), V_i^k(m)) \to (V_i(M), V_i(m))$ as $k \to \infty$.

Turning to the voters’ optimal strategy, denote by $W_k(M)$ the discounted utility if the current officeholder’s expertise matches the state and there are $k$ periods left in the game. Similarly, let $W_k(m)$ be the discounted utility if the period $t$ officeholder is mis-matched [see part B.]. Write the voter’s
utility from re-electing the incumbent as

\[ U_k(\mu_k) = \mu'_k W_k(M) + (1 - \mu'_k)W(m). \]

where \( \mu_k \) is the belief at the beginning of period \( k \) that the office holder in \( k + 1 \) (the incumbent) matched state in \( k + 1 \) and \( \mu'_k = \mu_k \gamma + (1 - \gamma)(1 - \mu_k) \) is the probability that a re-elected incumbent matches the current (period \( k \)) state. We proceed to show that the electorate reelects the incumbent if \( \mu_k > .5 \) and elects the challenger if \( \mu_k < .5 \).

**Step 1.** In the terminal period, any incumbent, regardless of \( \mu_0 \), will always implement the efficient policy, i.e., \( \pi^*_0 = \rho \). We thus have \( W_0(M) > W_0(m) \) and it optimal to re-elect the incumbent if \( \mu_0 > .5 \). Note that if \( \mu = .5 \), voters are indifferent, but the office holder will still act as if she was re-elected with \( \mu_0 > .5 \).

**Step 2.** In the second to last period (\( k = 1 \)), the incumbent knows that a successful policy will get her re-elected with certainty if beliefs in the next period are \( \mu_0 > 1/2 \). Clearly, for an incumbent who matches the state, the efficient policy choice is strictly optimal irrespective of current voter beliefs, \( \mu_1 \). For an incumbent who doesn’t match the state, choosing the partisan policy whenever \( \pi \geq \pi_1^* \) is optimal whenever the beliefs \( \mu_1 \) are sufficiently high that a success will induce \( \mu_0 \geq 1/2 \) and, hence, ensure re-election. Specifically, denoting \( F(\pi_1^*) \) by \( F_1 \) and \( \bar{\pi}_1 = E(\pi|\pi \geq \pi_1^*) \), \( \mu_0 \geq 1/2 \) requires

\[
\mu_0(\mu_1^*) = \frac{\mu_1^*}{\mu_1^* + (1 - \mu_1^*)(1 - F_1)\bar{\pi}_1} \geq 0.5 \quad \Leftrightarrow \quad \mu_1^* \geq \frac{(1 - F_1)\bar{\pi}_1}{1 + (1 - F_1)\bar{\pi}_1} \equiv \bar{\mu}_1. \tag{11}
\]

If \( \mu_1^* < \bar{\mu}_1 \), the only strategy combination compatible with equilibrium is one where incumbents choose a higher-cutoff value \( \pi_1^{**} \geq \pi_1^* \) such that \( \mu_0(\mu_1^{**}, \bar{\pi}_1) = .5 \), i.e., where voters are indifferent whether to re-elect the incumbent next period or not, and thus adopt a mixed re-election standard [see part A. of the Appendix].

First consider \( \mu_1^* \geq \bar{\mu}_1 \). Used the continuation strategy of voters in the final period (which, due to \( \mu_0(\mu_1, \pi^*) > .5 \), calls for re-electing the incumbent whenever her partisan policy was successful), their expected utility \( U_1 \) from re-electing the incumbent in period \( k = 1 \) can be written has

\[
U(\mu_1) = \mu_1^* [1 + \beta (\gamma W_0(M) + (1 - \gamma)W_0(m))] \\
+ (1 - \mu_1^*) \left\{ (1 - F_1) [\bar{\pi}_1 [1 + \beta ((1 - \gamma)W_0(M) + \gamma W_0(m))] + (1 - \bar{\pi}_1)\beta (\gamma W_0(M) + (1 - \gamma)W_0(m))] \\
+ F_1 [\rho + \beta (\gamma W_0(M) + (1 - \gamma)W_0(m))] \right\},
\]

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where have again normalized $b \equiv 1$ for simplicity. Gathering terms, we obtain:

$$U(\mu_1) = \mu'_1 \left[ 1 + \beta (\gamma W_0(M) + (1 - \gamma) W_0(m)) \right]$$

$$+ (1 - \mu'_1) \left[ (1 - F_1) \tilde{\pi}_1 + F_1 \gamma + \beta (\gamma' W_0(M) + (1 - \gamma') W_0(m)) \right],$$

where $\gamma' = \gamma - (2\gamma - 1)(1 - F_1) \tilde{\pi}_1$. Due to $(1 - F_1) \tilde{\pi}_1 + F_1 \gamma < 1$, $\gamma' < \gamma$ and $W_0(M) > W_0(m)$, we must have $W_1(M) > W_0(m)$ and voters’ utility $U_1(\mu_1)$ is increasing in $\mu_1$ (respectively, $\mu'_1$). It follows that $U(\mu_1) > U(1 - \mu_1)$ and voters re-elect the incumbent only if $\mu_1 > .5$.

Next, suppose $\mu'_1 < \tilde{\mu}_1 < .5$, which implies a new cutoff $\hat{\pi}_1^{**} = E > \pi_1^*$, a probability of re-election $\alpha_1 \in (0, 1)$ that makes the incumbent indifferent between playing partisan and non-partisan at $\pi_1^{**}$, and $\mu_0 = .5$. Denoting $\hat{\pi}_1 = E[\pi|\pi \geq \pi^{**}]$ and $\hat{F}_1 = 1 - F(\pi^{**})$, we have

$$\hat{U}(\mu_1) = \mu'_1 \left[ 1 + \beta \left[ (1 - \gamma + \alpha (2\gamma - 1)) W_0(M) + (\gamma - \alpha (2\gamma - 1)) W_0(m) \right] \right]$$

$$+ (1 - \mu'_1) \left[ (1 - \hat{F}_1) \left[ \tilde{\pi}_1 [1 + \beta ((\gamma - \alpha (2\gamma - 1)) W_0(M) + (1 - \gamma + \alpha (2\gamma - 1)) W_0(m))] \right] \right]$$

$$+ (1 - \tilde{\pi}_1) \beta (\gamma W_0(M) + (1 - \gamma) W_0(m)) \right] + \hat{F}_1 \left[ \beta (\gamma W_0(M) + (1 - \gamma) W_0(m)) \right] \right].$$

Note that

$$\frac{\partial \hat{U}(\mu_1)}{\partial \alpha} = \beta (W_0(M) - W_0(m)) \left[ \mu'_1 (2\gamma - 1) + (1 - \mu'_1) (1 - \hat{F}_1) \tilde{\pi}_1 \right] = 0$$

where the last equality follows from $\mu_0(\mu'_1, \tilde{\pi}_1^{**}) = .5$, consistent with the fact that voters must be indifferent between all re-election probabilities $\alpha \in [0, 1]$ in a mixed strategy equilibrium. Hence, we can w.l.o.g. set $\alpha = 1$ in which case $\hat{U}(\mu_1)$ can be written in the same form as (12). But since $\mu_1 < .5$, and since the first term in (12) is larger than the second term in (12), the voters would be better off if they elected the challenger, for which $\mu^C = 1 - \mu_1 > .5$. Hence, $U(\mu_1) < U(1 - \mu_1)$ and voters will elect the challenger in $k = 1$.

**Step 3.** Repeat the argument in Step 2 for all periods $k = 2, \ldots$. Note that following a deviation from equilibrium in $k$, we may have $\mu_k < \tilde{\mu}_k$ and in such a case, we cannot conclude that voters’ utility from re-electing the (wrongly elected) incumbent $U_k(\mu_k)$ is increasing in $\mu_k$ everywhere since $W_k(m) > W_k(M)$ cannot be ruled out. However, we still must have that electing the challenger in this case is strictly optimal. To summarize, $\mu_k > .5$ implies that the incumbent is re-elected, while the challenger is elected for $\mu_k < .5$. This strategy is identical to the strategy in the infinite horizon game. \[\Box\]
D. Comparative Statics

Comparative static in $\phi$:

From (9), $\pi^*$ is implicitly characterized by

$$\pi^* - \rho + \beta \pi^* \left[ \frac{B}{b} + \frac{(1-\gamma)}{1-\beta\gamma} + A \right] + \beta A (1 - F(\pi^*)) (E[\pi|\pi \geq \pi^*] - \pi^*) = 0,$$

where $B \equiv \frac{(1-\beta(2\gamma-1))}{1-\beta\gamma} > 0$.

Taking derivatives gives

$$\frac{d\pi^*}{d\phi} = -\frac{B\pi^*}{1/\beta + \frac{B}{b} + \frac{(1-\gamma)}{1-\beta\gamma} + A} - A (1 - F(\pi^*)) = -\frac{B\pi^*}{1/\beta + \frac{B}{b} + \frac{(1-\gamma)}{1-\beta\gamma} + AF(\pi^*)} < 0$$

as expected. An increase in the office holding motive (rent) decreases $\pi^*$ and hence increases the chance $1 - F(\pi^*)$ for the inefficient partisan policy being implemented.

Comparative static in $\gamma$:

$$\frac{d\pi^*}{d\gamma} = -\frac{\pi^* \left[ \frac{dB}{d\gamma} \phi \frac{B}{b} + \frac{1+\beta}{(1-\beta\gamma)^2} \right] + \frac{dA}{d\gamma} [\pi^* + (1 - F(\pi^*)) (E[\pi|\pi \geq \pi^*] - \pi^*)]}{1/\beta + \frac{B}{b} + \frac{(1-\gamma)}{1-\beta\gamma} + AF(\pi^*)}$$

$$= -\frac{\pi^* \left[ -\frac{(1-\beta)\phi}{(1-\beta\gamma)^2} \pi^* + \frac{1+\beta}{(1-\beta\gamma)^2} \right] + \frac{(1-\beta)^2}{(1-\beta\gamma)^2} [F(\pi^*)\pi^* + (1 - F(\pi^*)) E[\pi|\pi \geq \pi^*]]}{1/\beta + \frac{B}{b} + \frac{(1-\gamma)}{1-\beta\gamma} + AF(\pi^*)}$$

with $\frac{dB}{d\gamma} = \frac{-(1-\beta)\phi}{(1-\beta\gamma)^3} < 0$ and $\frac{dA}{d\gamma} = \frac{(1-\beta)^2}{(1-\beta\gamma)^2} > 0$.

Note that $[F(\pi^*)\pi^* + (1 - F(\pi^*)) E[\pi|\pi \geq \pi^*]] < 0$. However, it seems difficult to tell any comparative statics since the first term on the numerator is negative and the second part positive.

There is some intuition that larger $\gamma$ should give rise to less partisan behavior because chances are less that state flips back to good match and thus increases future payoff.

E. Proof of Proposition 3.

Consider first a one-term limit, i.e. $T = 1$. In the absence of a re-election motive, the incumbent will maximize short-term utility (2) and always choose the non-partisan action regardless of the state of
the world in equilibrium. Hence, voters learn the state of the economy perfectly ex post, which in turn implies that they optimally select a (new) incumbent whose type matches the state in the previous period, due to state persistence $\gamma > 1/2$. Clearly, this equilibrium yields the highest expected payoff for the voters.

Next, assume a two-term limit with $T = 2$. Working backwards, lame ducks again always enact non-partisan policies regardless of the state, $a_2 = s_2$. The first-period behaviour of an incumbent politician whose type matches the state is unaffected by term limits: choosing $a_1 = s_1$ is still short-term beneficial and also results in re-election with probability one, making the right action strictly optimal. Now consider an incumbent whose type does not match the state. As in the game without term limits, she will face a trade off between the non-partisan action $a_1 = s_1$ today, resulting in certain defeat tomorrow, and a partisan polity today $a_1 \neq s_1$ improving re-election prospects. Denoting by $\bar{\pi}$ the cut-off value for $\pi$ above which the latter is strictly optimal, we can write her ex ante expected utility as

$$U(m) = F(\bar{\pi})\rho b + \phi + (1 - F(\bar{\pi})) E[\pi|\pi \geq \bar{\pi}] (b + \beta \gamma (\rho b + \phi) + \beta (1 - \gamma)(b + \phi))$$

The difference to the corresponding value function in the game without term limits [see (4)] are the final two terms on the right hand side, which represent the continuation value of remaining in office, discounted by $\beta$. In equilibrium, the incumbent must be indifferent between the partisan and the non-partisan action at $\bar{\pi}$:

$$\rho b = \bar{\pi} [b + \beta \gamma (\rho b + \phi) + \beta (1 - \gamma)(b + \phi)]$$

(13)

Comparing (5) with (13), we see for $\bar{\pi} > \pi^*$, it suffices that $b + \phi < V(M)$ and $\rho b + \phi < V(m)$. The condition $V(M) > b + \phi$ trivially holds since $\beta > 0$ and incumbents who match the state are re-elected in the game without term limits. We also must have $V(m) > \rho b + \phi$ since the incumbent always has the option to choose the non-partisan action in state $m$ and by optimizing will do strictly better. Note that an analogous argument applies for games with term limits $T > 2$. Hence, for any term limit $T << \infty$, the corresponding cut-off value $\bar{\pi}_T$ above which incumbents play partisan must satisfy $\bar{\pi} > \pi^*$. As a result, voters’ expected welfare unambiguously increases in every period for any given belief $\mu_t$. To see this, note that incumbents enact the same policy in equilibrium, regardless of term limits (and voters will have the same beliefs the following period) either if their type happens to match the state, or if $\pi \notin [\bar{\pi}_T, \pi^*]$. For any $\pi \notin [\bar{\pi}_T, \pi^*], incumbents will enact non-partisan policies in the game with term limits, but partisan policies in the game without term limits. This strictly decreases current voter payoffs as well as future payoffs as the state of the world is not revealed to the voters. □