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We explore the consequences of populism for bureaucrats' incentives by analyzing a model of delegated policy-making between politicians and bureaucrats. Populist leaders prefer loyalist bureaucrats over competent ones, and this leads competent bureaucrats to engage in strategic policy-making: they sometimes feign loyalty to the current incumbent; and they sometimes implement the correct policy even at the cost of being fired. We show that feigning loyalty becomes more likely as the probability of a populist-loyalist combination increases. We also show that bureaucratic turnover is higher under populists when the bureaucracy is strong and higher under non-populists when the bureaucracy is weak.

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Bureaucrats under Populism*

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March 8, 2020

Abstract

We explore the consequences of populism for bureaucrats' incentives by analyzing a model of delegated policy-making between politicians and bureaucrats. Populist leaders prefer loyalist bureaucrats over competent ones, and this leads competent bureaucrats to engage in strategic policy-making: they sometimes feign loyalty to the current incumbent; and they sometimes implement the correct policy even at the cost of being fired. We show that feigning loyalty becomes more likely as the probability of a populist-loyalist combination increases. We also show that bureaucratic turnover is higher under populists when the bureaucracy is strong and higher under non-populists when the bureaucracy is weak.

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Introduction

The rise of populist leaders has had serious effects on the performance and staffing of many bureaucratic agencies. As an example, consider the case of President Trump's Director of National Intelligence. In February 2020, Trump fired the acting director, Joseph Maguire, and installed a new acting director, Richard Grenell. One reason for the dismissal was that "there is little doubt that the president would prefer a partisan fighter in the post" (Barnes and Haberman 2020). Trump preferred Grenell even though Grenell had no prior intelligence experience and Maguire was a respected former Admiral. When talking about the hiring of Grenell, the former head of the National Counterterrorism Center, stated that "personal loyalty is prized above relevant experience and demonstrated competence" (Barnes and Haberman 2020).

This it not a United States-only phenomenon. In the United Kingdom, populist home secretary Piri Pattel treated the home office's chief civil servant Sir Philip Rutnam so badly that he quit (Walawalkar 2020). The Home Office has been accused of "putting ideology ahead of competence (Walawalkar 2020)".

Populists' rhetoric often includes criticism of the bureaucracy.[1] However, policymaking is a complex process and policy implementation requires use of the bureaucracy. Even when populists are in power, high-level agents can greatly affect policy. As a target of populist outrage, bureaucrats are often reluctant to serve in populist administrations, and populist leaders can struggle to fill vacancies (Rakich 2019).

The consequence of populist leaders turning to loyal agents as opposed to career civil servants needs to be analyzed and evaluated, because these loyalists are often less qualified than said career civil servants. The incompetence of the bureaucracy has serious effects for the implementa-

[1] Peters and Pierre (2019) emphasize this to the point of including this feature in the definition of populists itself: "political leaders and movements that emphasize the venality of political leaders (including the bureaucracy) and press for greater power for *the people*." The most widely used definition of populism by Mudde (2004), emphasizing the contrast between "the pure people" versus "the corrupt elite", did not explicitly contain the bureaucracy or any other element of the list of targets included in the elite, but the frequent observations justify the direct inclusion in Peters and Pierre's definition.

tion of policy.[2] Moreover, the higher rate of turnover among appointees (Tenpass 2018) is likely to have instability and incentive distortion effects.

In this paper, we characterize the equilibrium incentives of populist and non-populist politicians in terms of the choice of loyal vs competent bureaucrats, aiming to investigate the above intuitive inefficiency fears. In addition, we analyze how bureaucrats strategically respond to the threat of populist leaders. Finally, we also show how these equilibrium behaviors affect bureaucratic turnover rates.

We analyze the problem with a two period game where in each period there are just two players, namely the elected politician and a bureaucrat. The politician can be populist or not, and the bureaucrat can be competent or loyalist, and the bureaucrat's type is private information. In each period, the incumbent politician decides on whether to fire the incumbent bureaucrat; if the bureaucrat is fired a new one is randomly chosen. The bureaucrat in office then chooses a policy location. In between the first and second period there is an election, and a new politician type may take office for the second period.

Populists and non-populists differ on their optimal policy. Populists want one specific policy regardless of the state of the world.[3] For example, consider how the populists in charge of British Conservative Party have singularly pursued Brexit even in the face of mounting evidence that it will be a disaster for the British economy (Kierzenkowski et al. (2016), Portes and Forte (2017). Non-populists, on the other hand, want the policy that best matches the state of the world. This then leads populists to want loyal bureaucrats while non-populists want competent agents.

Expert bureaucrats know the state of the world while loyalists have no extra information. Besides this difference, both bureaucratic types are exactly the same. They care about office rents and also about correctly matching policy to the state of the world. However, only competent bu-

[2]The Trump administration for example has a far higher number of overturned policies than previous administrations (Barbash and Paul 2019).

[3]Morelli, Nicoló and Roberto (2020) provide a micro-foundation of the choice of simple unconditional platforms for a populist, whereas Levy, Razin and Young (2019) characterize conditions under which the demand for such simplistic policies emerges among voters. The common intuition to these two complementary microfoundations is that when the electorate has low trust in traditional parties or politicians the consequence can be a demand by some voters for unconditional promises that cannot be overturned by interest groups. The model presented here shows the consequences the strategic choice of populism has for policy implementation and bureaucratic behavior.

reaucrats can successfully implement the correct policy; the best loyalists can do is match policy in expectation.

This inability to fully implement the correct policy gives populists an opening to exploit. By conditioning office rents on implementation of the populist policy, populist politicians can entice bureaucrats away from pursuing the correct policy. Crucially, the necessary rents are lower for non-experts than for experts. Non-experts can only match policy with the state in expectation, and this gives them a lower expected policy payoff than expert bureaucrats. Therefore non-experts optimally choose to act as loyalists by always satisfying the populist politician and always receive office rents. Experts, on the other hand, sometimes choose the populist policy and sometimes choose the true state of the world. Populist leaders therefore have a strict preference for non-experts.

Therefore, we find that loyalty is *endogenous*. Non-experts are not necessarily loyalist by nature; they are just more easily bought off by the populist politician. Populists do not need ideologues to staff the bureaucracy; they just need employees willing to choose salary over policy. As compared to experts, non-experts are more easily convinced to follow the populist's lead. This suggests that a strong bureaucracy can act at least somewhat help counteract populist policy priorities. Because of this endogenous loyalty, we will use non-expert and loyalist interchangeably.

There are multiple strategies available to bureaucrats worried about populist politicians. For example, bureaucrats may decide to compromise on policy today to make sure they are around to handcuff populists in the future. The bureaucrat would have to act just as a loyalist would in order to fool the politicians. We refer to this outcome as *feigning loyalty*. On the other hand, the bureaucrat can act *sincerely* today, regardless of future consequences, and choose to implement the correct policy.[4]

These strategies are not limited just to when a populist is in charge. Feigning loyalty can be useful even when a non-populist is in power. If there is a high chance a populist will win the next election, a competent bureaucrat may act as loyalist today even though the non-populist would like her to act sincerely. She intentionally ignores her information about the state of the world today in

[4]There is anecdotal evidence of sincere policymaking in the Trump administration. While we call this sincere policymaking, politicians in power often refer to it as sabotage Heer (2019).

order to be in position to possibly stop bad populist policies tomorrow.[5]

The threat of a populist politician partnered with a loyalist bureaucrat in the future drives the competent bureaucrat's behavior today. This has important implications for thinking about bureaucratic behavior and the consequences of populism. Simply assuming that once today's populist leader is out of office policy-making will go back to normal is shortsighted. The threat of future populists may make policy implementation today distortionary even when a populist is not in office.

An increase in the probability of a loyalist bureaucrat makes feigning loyalty more important; an expert bureaucrat is better no matter which politician is in power in the second period. However, sacrificing policy today is only tenable if the policy loss is not too great. Therefore, we find if the incumbent is a populist, feigning loyalty occurs when the correct policy is close to the populist's ideal point. Similarly, when the incumbent is non-populist, feigning loyalty occurs when the correct policy is close to the non-populist's ideal point. Moderate policies can still give the effect of feigning loyalty when the current politician is non-populist.

Perhaps counter-intuitively, we also find that a strong bureaucracy coupled with a high likelihood of a non-populist in the second period can induce feigning loyalty in first period. The expert knows she will be fired if she acts sincerely in the first period. In addition, she knows she is guaranteed second period office rents if she is retained today and a non-populist takes over in the second period. Therefore she has a large incentive to compromise today, and try to stick-it-out through the populist's tenure. This *stick-it-out effect* shows how populists can distort policy implementation even when they are expected to be in power for a short time.

We also look at how bureaucratic turnover is affected by populism. When competent bureaucrats act sincerely, politicians can always tell the type of the bureaucrat. When they feign loyalty, however, politicians learn nothing. In equilibria where politicians retain all bureaucrats when they are unsure of the bureaucrat's type, we find that as the bureaucracy becomes weaker, turnover is more likely under non-populists than under populists. Similarly, strong bureaucracies result in more turnover under populists than under non-populists.

[5]This mechanism is similar to Morris (2001) where a sender may withhold truthful information from a receiver in order to appear unbiased.

Finally, we analyze an extension where expert bureaucrats are more policy motivated than non-experts. We find that as experts become more policy motivated, they are more likely to choose the correct policy today even at the cost of a possible loyal bureaucrat, populist politician combination tomorrow. This suggests that future office rents are an important driver in feigning loyalty in the baseline model.

Our paper is in the long tradition of modeling the politician-bureaucratic relationship as a principal-agent problem. As in the seminal contributions of McCubbins, Noll and Weingast (1987, 1989) and Epstein and O'Halloran (1994, 1999), we model the adverse selection problem facing the politician. Our spatial model of policy-making is also similar to Huber and Shipan (2002). The non-populist desire for a competent bureaucrat is similar to the politician's desire for bureaucratic expertise in Gailmard and Patty (2007). However, most of the literature assumes the principal remains constant throughout the entire game. In contrast, we show how differences in present and possible future politicians affects bureaucratic behavior today.[6] See Gailmard and Patty (2012) for a larger survey on the politician-bureaucrat relationship.

While we take the strength or capacity of a bureaucracy as given, Ting (2009) and Gratton et al. (2018) analyze how bureaucratic strength and capacity evolve. We assume that a bureaucrat's expertise is exogenously given. Gailmard and Patty (2007), Callander (2008) and Ting (2009), among others, look at the question of how bureaucrats and bureaucracies develop expertise and capacity.

A few papers try to connect bureaucratic accountability to political accountability (Fox and Jordan (2011), Ujhelyi (2014), Yazaki (2018), Vlaicu and Whalley (2016), Li (2019). In general, these papers show how the presence of a bureaucrat affects the voter's adverse selection problem.[7] We take a reduced form approach to the voter and do not model their behavior explicitly. Our focus is on the politician-bureaucratic relationship, but the model recognizes the politician faces political constraints and incentives.

[6] Sasso (2020) explores a similar dynamic when future politicians differ in partisanship, not populist tendencies

[7] A few other papers, notably Forand (2019) and Li, Sasso and Turner (2020) look at how hierarchical relationships affect the voter's moral hazard problem instead.

As far as the formal theory of populism is concerned, the thin literature focuses on the *causes* of populism, while we focus on one important category of *consequences*. As mentioned above, the simple commitment type policies preferred by populist politicians that we postulate in this paper are microfounded in Morelli, Nicoló and Roberto (2020), where ideology is not an essential component. Acemoglu, Egorov and Sonin (2013) takes an ideological position, where left wing politicians act as populists to prove to voters they are not captured by right wing special interests. We take a non-ideological stance, and don't see populism as necessarily right or left wing. This non-ideological approach is in line with the empirical evidence of Curini (2017) and Guiso, Herrera and Morelli (2018); Guiso et al. (2019). Prato and Wolton (2018) and Chesterley and Roberti (2018) use formal models to also analyze the causes of populism through a non-ideological lens.

The concept of feigning loyalty is related to the literature on pandering politicians (Maskin and Tirole (2004), Morelli and Van Weelden (2013), Ashworth and Shotts (2010)). In these models, bad types of politicians pander in order to be seen as good type and be reelected. In our model, the good type of bureaucrat (expert) pander to be seen as a bad type (loyalists) in order to remain in office.

Model

We analyze a two-period model. In each period there are two players: One bureaucrat, denoted $B_i, i \in \{c,l\}$ (*c*ompetent and *l*oyal) and one politician, denoted $P_k, k \in \{p,n\}$ (*p*opulist and *n*on-populist). At the beginning of each period, a state of the world $\omega^t \in [0,1]$ is realized. The interval $[0,1]$ is the set of feasible policies, hence the realization of the state of the world is simply the realization of what is the optimal policy in that period. Before policy-making, ω^t is observable only to competent bureaucrats ($i = c$).

The politician can fire or retain the bureaucrat both before and after policy-making. If he fires the bureaucrat, a new bureaucrat is randomly chosen. The bureaucrat in office at the policy-making stage implements policy $x^t \in [0,1]$.

After the first period, there is an election and the incumbent politician is replaced with some

positive probability. If the politician is replaced, the type of the new politician is chosen randomly at the beginning of the second period. The timing is summarized below:

1. Period 1
   (a) Nature draws ω^1 and the types of the period 1 bureaucrat and politician.
   (b) If the bureaucrat is competent, she observes ω^1.
   (c) The politician fires or retains the bureaucrat. If the bureaucrat is fired, Nature draws a new bureaucrat.[8]
   (d) The bureaucrat implements policy.
   (e) ω^1 is observed by politicians and non-expert bureaucrats.
   (f) The incumbent politician fires or retains the bureaucrat
   (g) Election
2. Period 2
   (a) Nature draws ω^2, the type of the period 2 politician, and the type of the period 2 bureaucrats if necessary.
   (b) If the bureaucrat is competent, she observes ω^2.
   (c) The politician fires or retains the bureaucrat. If the bureaucrat is fired, Nature draws a new bureaucrat.
   (d) The bureaucrat implements policy.
   (e) ω^2 is observed by all.
   (f) The incumbent politician fires or retains the bureaucrat

[8] We will ignore this action in our analysis as it has no effect on the future behavior of any player. We list it here for completeness.

Payoffs Bureaucrats care about office rents and about policy. Populist politicians do not care about the state of the world, but instead want a specific policy regardless of the outcome; non-populists want policy to match the state of the world. For any player j, we denote their ideal policy as $\hat{x}_j$. For $j \in \{B_c, B_l, P_p, P_n\}$, each player's per period policy utility is quadratic loss.

Populist politicians always want a policy of 1 regardless of the state of the world

$$U^t_{P_p}(x^t) = -\left(x^t - 1\right)^2.$$

Non-populist politicians want policy to match ω

$$U^t_{P_n}(x^t) = -\left(x^t - \omega^t\right)^2.$$

Bureaucrats want policy to match ω and also get a payoff of R when in office. Their total per period utility is

$$U^t_{B_c} = U^t_{B_l} - \left(x^t - \omega^t\right)^2 + I^t \cdot R$$

where $I^t = 1$ if the bureaucrat is in office at time t.

Total utility is the (undiscounted)[9] sum of the per-period utilities. Note that players care about policy utility in both periods even when they are not in office. Table 1 summarizes the per-period utilities.

Information At the beginning of the game or after a firing, the bureaucrat is loyal with probability l and competent with complementary probability. At the beginning of each period, the politician is populist with probability p and non-populist with complementary probability. Bureaucrat types are private knowledge, but everyone knows the type of the politician in power. ω^1 and ω^2 are drawn from independent uniform distributions. Distributions and probabilities are known to all players.

All players observe ω^1 before the next period; this allows the politician in period 2 to condition his retention decision on the policy and state of the world from the previous period.

[9] Behavior is the same with discounting

Player	Per-period Utility
B_c	$-\left(x^t-\omega^t\right)^2+I^t\cdot R$
B_l	$-\left(x^t-\omega^t\right)^2+I^t\cdot R$
P_p	$-\left(x^t-\hat{x}_p\right)^2$
P_n	$-\left(x^t-\omega^t\right)^2$

Table 1: Player Utilities

Equilibrium This is a dynamic game of incomplete information. The natural equilibrium concept to use is Perfect Bayesian Equilibrium (hereafter just *equilibrium*). There are different equilibria depending on the tie-breaking rule used. As a tie-breaking rule, we impose that when politicians are indifferent between retaining and firing the bureaucrat, they retain the bureaucrat.[10]

Discussion

A few comments on the modeling choices. First, we assume that the politician can fire the bureaucrat before or after policy-making. This seems like the most realistic assumption, as politicians both fire employees that do not follow their directions and also hire new agents when winning office.[11]

The two firing decisions also have different strategic implications. If politicians could only fire bureaucrats after policy-making, then this would depress the incentive to feign loyalty. If politicians could only fire bureaucrats before policy-making, then they would have control over bureaucratic behavior in the second period.

Second, we assume that the bureaucrat has no affect on the likelihood of a populist in the future. This is mostly for expositional and technical clarity. A model where the bureaucrat's policy choice affects the reelection chances of the incumbent has the same qualitative results.

[10]The opposite tie-breaking rule (that is, politicians firing the bureaucrat when indifferent) is a much less interesting strategic setting.

[11]Firing before the policy choice is not mentioned in the time line for period 1 because in that case the politician is indifferent between firing and retaining given that she has no information yet. The act of firing at the beginning of the period can make sense in equilibrium only in the second period.

Next, we assume that both bureaucratic type are exactly the same outside of their different expertise levels. This allows us to focus purely on the effects of expertise. However, Gailmard and Patty (2007) shows that experts are more likely to care more about policy than non-experts. In an extension, we analyze a model where experts care more than non-experts about policy. The results are qualitatively similar to the baseline model.

We use competency and expertise interchangeably. Competency as expertise is knowing enough about the world to choose the correct policy. However, this is not the only possible definition of competency. Another definition concerns not expertise, but ability to do a job successfully. One could consider modeling the bureaucrats as having two different costs of effort instead of different knowledge about the state of the world. A competent bureaucrat could also be someone who can better demonstrate to voters the costs of a populist fixed platform. In this case, the populist would still want loyal and incompetent bureaucrats, as they would not be able to communicate the problems with the populist platform. This suggests that this version of competence would not qualitatively change the results of our model.

We also assume that the state of the world for period 1 is always observed before the second period politician makes his retention decision. This means that the loyal bureaucrat cannot fake being competent, as her policy will be incorrect with probability one. If there was some probability that the state of the world was not observed until the end of the game, for example, the loyal bureaucrat may be able to seem competent. See Gratton et al. (2018) for analysis of such a model.

Finally, we assume that $\hat{x}_p = 1$ for two reasons. One, this makes the exposition clearer. Two, populist regimes tend to focus on more extreme policies.[12] The results are qualitatively the same for any $\hat{x}_p$ as they are for $\hat{x}_p = 1$.

[12]Looking at the CHES dataset for European countries and the time-varying categorization of populist parties in Van Kessel (2015), it is easy to see that the populist van Kessel dummy is significant in the determination of the probability that a party has a platform two standard deviations or more away from the mean platform on the left-right compounded dimension. Available upon request. See also Rovny (2013).

Analysis

Second Period

First, we analyze second period behavior. With the state of the world in the interval $[0,1]$ chosen by Nature with a uniform distribution, the loyalist cannot match policy to the state of the world; any policy chosen will be the same as ω^2 with probability 0. The only information she has is her prior; therefore if she tries to match policy to the state, the best she can do is $\frac{1}{2}$. She can always choose $\hat{x}_p$, as that does not depend on ω^1. The expert bureaucrat knows ω^2, and can therefore always match policy to the state. She is also free to choose any other policy she wishes.

We study equilibria where the populist politician fires any politician that does not implement $x = 1$. We focus on this equilibrium because it is the optimal equilibrium for the populist. It results in experts choosing the populist policy with the highest probability. [13] A fired bureaucrat does not receive the office benefit R. If a populist is in power, then the bureaucrat will choose the populist policy if the office benefit plus the expected policy payoff from the populist policy is greater than the expected policy payoff from their optimal policy:

$$R - E[\left(1-\omega^2\right)^2 \geq -E\left(x^* - \omega^2\right)^2 \tag{1}$$

We then have the following lemma:[14]

Lemma 1. *Let the politician be populist in the second period and let him fire any bureaucrat that does not implement $x = 1$. Then if the bureaucrat is loyal, she implements $x = 1$ if $R \geq \frac{1}{4}$. Otherwise she implements $x = \frac{1}{2}$. If the bureaucrat is competent, she implements $x = 1$ if $\omega^2 \geq 1 - \sqrt{R}$. Otherwise she implements $x = \omega^2$.*

For the non-expert, her optimal policy is $x_l^* = \frac{1}{2}$. Her expected policy utility when choosing

[13] This assumption would not be necessary if we wanted to add continuation equilibrium values for the future. Given that the game has only two periods we make this assumption about the end of period 2 populist behavior just for simplicity.

[14] All proofs in the appendix.

$\frac{1}{2}$ is $-\frac{1}{12}$. If she chooses the populist policy, $x = 1$, her expected utility is $-\frac{1}{3}$. For her to choose the populist policy, the salary must make up for her expected policy loss. The non-expert's policy loss from choosing 1 over $\frac{1}{2}$ is

$$-\frac{1}{3} - \frac{1}{12} = -\frac{1}{4}.$$

Therefore a salary of $\frac{1}{4}$ or higher will always induce her to choose the populist policy. The populist gets the non-expert to do what he wants even though the non-expert has the same policy preferences as the expert. All else equal, the non-expert wants policy to match the state of the world. However, she does not have the expertise to implement the correct policy; the non-expert can only choose the correct policy in expectation. The populist just needs to be able to condition office rents on the bureaucratic policy. This creates endogenous loyalty among non-experts.

The expert, on the other hand, can always guarantee herself a policy payoff of 0 by correctly matching the policy and state. Since she knows ω^2, she also knows the exact policy loss she would incur if she implemented the populist policy. Whether she implements the populist policy depends on the actual realization of ω^2. For example, say $\omega^2 = \frac{1}{3}$, then the policy loss from implementing $x = 1$ is

$$(1 - \frac{1}{3})^2 = -\frac{4}{9}.$$

The offered wage would have to be at least $\frac{4}{9}$ for the expert to choose 1. If $R = \frac{1}{4}$, the expert implements $x = 1$ whenever $\omega^2 \geq \frac{1}{2}$. As long as $R < 1$, there will always be some states of the world such that the expert bureaucrat acts sincerely and chooses the correct policy.

To focus on the interesting strategic scenario where non-experts implement the populist policy, we assume that $\frac{1}{4} \leq R < 1$ for the rest of the paper. Therefore, because the loyalist will always choose $x = 1$, a non-expert bureaucrat is always preferred to an expert by populist politicians. If the populist knows the bureaucrat is an expert at the beginning of the period, he will always fire her. If he is unsure, we assume that he retains the bureaucrat.

The story changes when the politician is non-populist. The non-populist wants the correct policy. Luckily for him, so do both types of bureaucrats.

Lemma 2. *Let the politician be non-populist in the second period and let him fire any bureaucrat that does not implement $x = \omega^2$. Then if the bureaucrat is loyal, she implements $x = \frac{1}{2}$. If the bureaucrat is competent, she implements $x = \omega^2$.*

The non-populist clearly prefers an expert bureaucrat; the expert always implements the correct policy. Non-experts try their best since they too want to match the state, but they can only do so in expectation. Therefore, the non-populist always fires a known loyalist at the beginning of the second period. The non-populist politician can't incentivize them to match the state; the non-expert simply lacks the capacity and no amount of office rents can change that fact. The populist could successfully get the non-expert to choose the populist's preferred policy because his optimal policy was independent of the true state. For politicians with state-independent preferences (populists), non-experts are always best; for politicians with state-dependent preferences (non-populists), however, experts are always optimal.

First Period

We start the first period analysis by showing that the loyalist's first period behavior is identical to her second period behavior.

Lemma 3. *Assume $R \geq \frac{1}{4}$. Then the loyalist bureaucrat's first period policy choices are $x = 1$ if the politician is populist and $x = \frac{1}{2}$ if the politician is non-populist.*

When a populist is in power, the loyal bureaucrat chooses the populist policy, $x = 1$. When a non-populist is in power, she chooses $x = \frac{1}{2}$. The intuition for the first period policy choice is the same as for the second period policy choice. The wage offered by the populist is high enough to offset the policy loss of implementing the populist policy. Therefore implementing the populist policy is better for the non-expert than trying to implement the correct policy. The best a non-expert can do when trying to match policy to the state for the non-populist is to choose $x = \frac{1}{2}$.

Expert bureaucrats, however, have another option. The competent bureaucrat can fake being a loyalist by choosing $\hat{x}_p$ with a populist incumbent or $\frac{1}{2}$ with a non-populist incumbent. Remember

that the politician observes the state of the world after policymaking but before the retention decision. Therefore if the state of the world is one that in equilibrium induces the competent bureaucrat to pool with the loyalist, the incumbent politician has no extra information about the bureaucrat's type. He is then indifferent between firing and retaining the bureaucrat. With our tie-breaking rule, if the competent bureaucrat fakes being a loyalist she will be retained by all politicians at both the end of the first period and at the beginning of the second period. The competent bureaucrat's key strategic decision is whether to feign loyalty in hopes of counteracting a populist tomorrow over implementing the correct policy for today's state of the world.

Intuitively, if the competent bureaucrat is concerned enough about bad second period policy outcomes, she should feign being a loyalist today. Importantly, the competent bureaucrat may have an incentive to act as a loyalist even when a non-populist is in power in the first period; the threat of a populist next period may be enough to distort policy in the current period even when the populist does not currently hold office. As the first proposition shows, this happens with positive probability:

Proposition 1. *Let there be a populist in office in the first period. Then if the bureaucrat is loyal, she implements* $x^1 = \hat{x}_p$. *If the bureaucrat is competent she feigns loyalty and implements* $x^1 = \hat{x}_p$ *if and only if*

$$\omega^1 \geq 1 - \frac{\sqrt{l + lp(3 - 4R^{\frac{3}{2}} + 24R - 12pR(1-\sqrt{R}))}}{2\sqrt{3}}$$

otherwise she acts sincerely and implements $x^1 = \omega^1$.

Let there be a non-populist in office in the first period. Then if the bureaucrat is loyal, she implements $x^1 = \frac{1}{2}$. *If the bureaucrat is competent she feigns loyalty and implements* $x^1 = \frac{1}{2}$ *if and only if*

$$\omega^1 \in \left[\frac{1}{2} - \frac{\sqrt{p(l + R(\frac{3}{2}(3-l)))}}{\sqrt{6}}, \frac{1}{2} + \frac{\sqrt{p(l + R(\frac{3}{2}(3-l)))}}{\sqrt{6}} \right]$$

otherwise she acts sincerely and implements $x^1 = \omega^1$.

Denote $1-\frac{\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}{2\sqrt{3}}$ as $\underline{\omega}_p^1$ and $\left[\frac{1}{2}-\frac{\sqrt{p(l+R(\frac{3}{2}(3-l)))}}{\sqrt{6}},\frac{1}{2}+\frac{\sqrt{p(l+R(\frac{3}{2}(3-l)))}}{\sqrt{6}}\right]$ as $\left[\underline{\omega}_n^1,\overline{\omega}_n^1\right]$.

The bureaucrat is sometimes willing to trade off policy today in order to protect against bad policy outcomes tomorrow. As long as the policy loss is not too great, expert bureaucrat's will act as loyalists for two reasons: One, to receive the first period rents from a populist politician and two, to stay in office to make second period policy.

Notice that for feigning loyalty, the necessary first period state of the world is different between populist and non-populists. When populists are in power, extreme states of the world push the bureaucrat to feign loyalty; however moderate states push the bureaucrat to feign loyalty when a non-populist is in power. Even though the effect of being seen as loyal is the same, the policy outcomes are not.

We can now see which institutional features of the bureaucratic and electoral environment make acting sincerely more or less likely (more or less likely in the sense that the range of values for ω^1 that will lead to the loyalist policy in the first period grows or shrinks). We consider the likelihood of another populist, the strength of the bureaucracy and the reelection chances of the incumbent. Note that the comparative statics for both populists and non-populist go the same way, with one exception.

Proposition 2. *The probability of Feigning Loyalty is*

1. *Increasing in l.*
2. *Increasing in p when a non-populist is in power.*
3. *Increasing in p when a populist is in power and $l \geq \bar{l}$.*[15]
4. *Increasing in R.*

The competent bureaucrat is most concerned with a populist-loyalist combination in the second period; any change that makes that combination more likely will push the competent bureaucrat

[15] $\bar{l}$ is formally defined in the appendix

to feign loyalty for more states of the world. If a populist wins the election, but the bureaucrat is competent, there is nothing to worry about. If a non-populist wins the election, but the bureaucrat is loyal, it is not ideal, but the loyalist will choose $x^2 = \frac{1}{2}$ which limits the policy downsides. A populist with a loyalist, however, always chooses $x^2 = 1$. This is the worst possible policy choice in expectation.

If there is a populist incumbent and there is a decently high chance of a loyalist, the competent bureaucrat is more willing to feign loyalty for more realizations of ω^1. The office rents gained from choosing the populist policy help somewhat offset the policy loss, and let the competent bureaucrat stay in office to protect against a populist-loyalist combination.

There is a subtlety here, however. When the incumbent is a populist and the bureaucracy is strong, an increase in the probability of a future populist actually makes feigning loyalty *less* likely. As an example, consider $l = 0$ such that there is no possibility of a non-expert bureaucrat. Then the first period bureaucrat is guaranteed the same second period policy outcome regardless of whether she is the second period bureaucrat or not. All expert bureaucrat implement the same policy. The question is whether losing out on policy today is worth the office rents today and tomorrow. Note that the expert is not guaranteed office rents in the second period; ω^2 may be such that she acts sincerely. She is guaranteed office rents in the next period if the politician is non-populist. This makes staying in office more valuable to bureaucrat when the chance of a second period populist is low. Strong bureaucracies with high chances of a non-populist induce a *stick-it-out* effect. When bureaucracies are weak, however, the second period policy loss from a non-expert is more likely and this induces the expert to feign loyalty.

When a non-populist is in power, the intuition is simpler. There is very little chance of feigning loyalty as p gets close to zero. Why bother losing out on policy today when the chance of being fired in the next period by a populist is small? An expert can get office rents and the optimal policy purely by acting sincerely. However, if the incumbent is non-populist but the chance of a second period populist is high, the expert feigns loyalty more often. She can still get office rents by acting like a loyalist and this also lessens the chance of a severe second period policy loss.

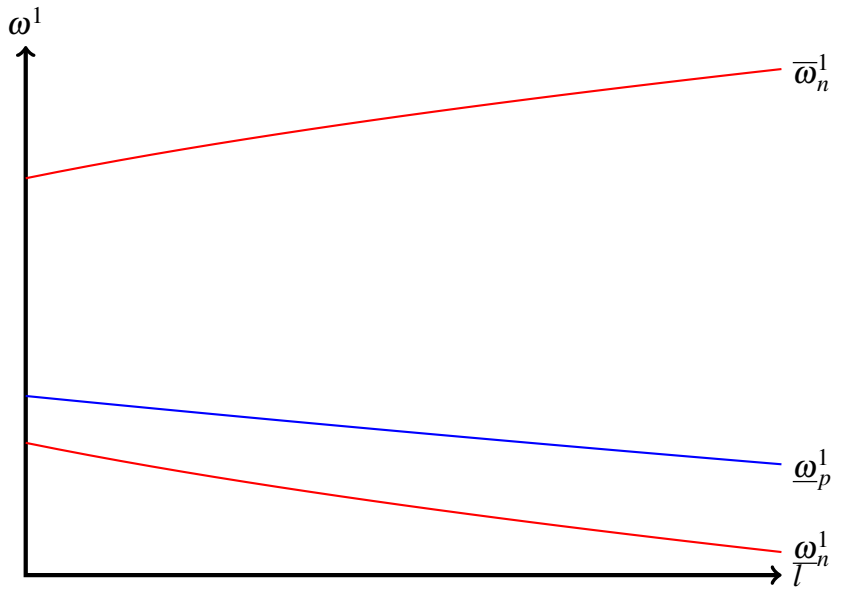

Figure 1: Cutoffs by l

To sum up, we should expect competent bureaucrats to act like loyal bureaucrats when bureaucracies are weak (high l). This is true no matter the type of the first period incumbent. Feigning loyalty then becomes even more likely, however, if bureaucracies are weak and probability of a second period populist is high (high p). The populist-loyalist combination entails the greatest expected policy loss for a first period competent bureaucrat, and she acts to make sure that expected policy loss does not happen.

Bureaucratic Turnover

We can now use the bureaucrats' equilibrium strategies to learn about expected bureaucratic turnover. Note that turnover happens with positive probability when the competent bureaucrat's equilibrium strategy is to implement the sincere policy. This is true even when the bureaucrat is loyal because this is the scenario where both types of politicians perfectly learn the bureaucrat's type. However, while changing parameters make it more likely the players are in a feigning loyalty or sincere equilibrium, that does not necessarily mean there will be more or less turnover. For example, if there is a low probability of populists and a low probability of loyalists, then competent bureaucrats will almost always implement the sincere policy. However, if the incumbent is non-populist there will

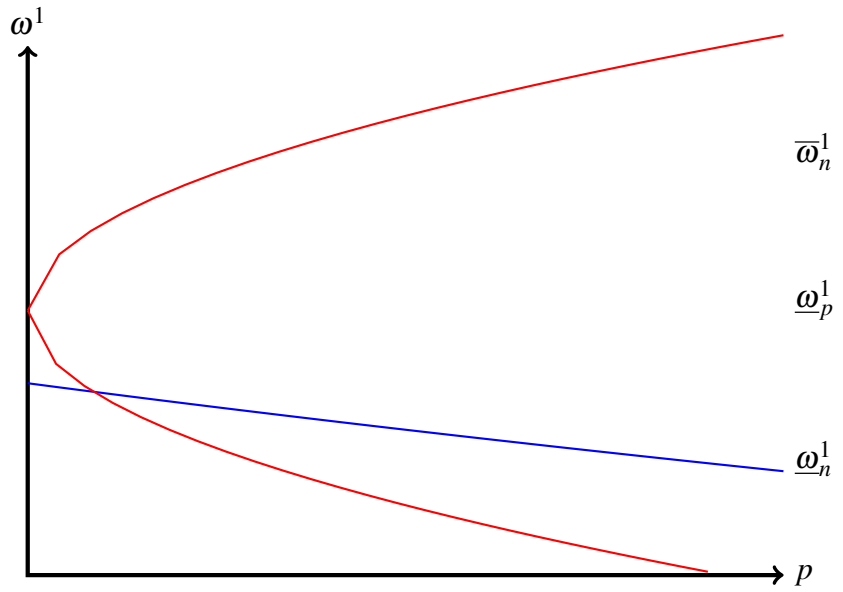

Figure 2: Cutoffs by p

be very little observed turnover, as she wants keep the competent bureaucrats in office.

We will consider the probability of first period turnover. The ex-ante probability we will observe turnover is the probability of sincere policy making with a competent bureaucrat when a populist wins the election plus the probability of sincere policy making with a loyal bureaucrat with an incumbent non-populist. The probability of sincere policy making is one minus the probability of feigning loyalty, or one minus the probability that $\omega^1 \in [\underline{\omega}_p^1, 1]$ under a populist and one minus the probability that $\omega^1 \in [\underline{\omega}_n^1, \overline{\omega}_n^1]$.

Lemma 4. *The ex-ante probability of bureaucratic turnover is*

$$p \cdot (1-l) \cdot \left(1 - \left(\frac{\sqrt{l + lp(3 - 4R^{\frac{3}{2}} + 24R - 12pR(1-\sqrt{R}))}}{2\sqrt{3}}\right)\right)$$
$$+ (1-p) \cdot l \cdot \left(1 - 2\frac{\sqrt{p(l + R(\frac{3}{2}(3-l)))}}{\sqrt{6}}\right)$$

We will take each part of the probability function in turn. Focusing on the first line, there is a probability p a populist is in power in the first election. That is then multiplied by the probability of

a sincere equilibrium given that a populist is in power. The second line is the probability of turnover given that a non-populist is in office in the first period. Added together, that is the total probability of turnover.

Perhaps more useful is decomposing the ex-ante probability into the conditional probability of turnover given a populist in office and the conditional probability of turnover given a non-populist in office. The two probabilities are

$$\tau_p = (1-l)\cdot\left(1-\left(\frac{\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}{2\sqrt{3}}\right)\right)$$

$$\tau_n = l\cdot\left(1-2\frac{\sqrt{p(l+R(\frac{3}{2}(3-l)))}}{\sqrt{6}}\right)$$

With these probabilities, we can now show when we expect to see more turnover under populists and when we expect to see more turnover under non-populists:

Proposition 3. *τ_p is*

- *Decreasing in l.*
- *Decreasing in p when $l \geq \bar{l}$ and increasing otherwise.*

τ_n is

- *Decreasing in l if $p \leq \bar{p}$[16], increasing otherwise.*
- *Decreasing in p.*

The consequences of an increase in l differs depending on which politician is in power. Regardless of the incumbent politician, a higher probability of a loyalist makes it more likely the competent bureaucrat would feign loyalty. This makes turnover less likely. If the incumbent is a populist, it also means that conditional on a realization of ω^1 that induces sincere policy-making,

[16] $\bar{p}$ is defined in the appendix

there is a lower chance of turnover because populists retain non-experts. However, if the incumbent is a non-populist this force pushes in the opposite direction; conditional on sincere policy-making, a non-populist is more likely to fire the bureaucrat as l increases.

In fact, turnover may not be monotonic in l. As Figure 3 shows, turnover first increases and then decreases in the weakness of the bureaucracy under a non-populist. At first, the probability of a non-expert dominates the increase in feigning loyalty. Once the probability of a loyalist reaches a certain point, an increase in l increases the probability of feigning loyalty by a greater amount and the probability of turnover starts to decrease. Under a populist, however, turnover is strictly decreasing as l increases, reflecting that competent bureaucrats feign loyalty with higher probability as the bureaucracy weakens.

At some point, the probability of a populist-loyal team is high enough that feigning loyalty is more likely than acting sincerely. Any increase in the probability of either populists or loyalists just reinforces this scenario. Under a populist incumbent, turnover when both p and l are very high is minimal because of the strong incentives to feign loyalty. Under a non-populist, however, there is still a positive probability of turnover. Experts can guarantee themselves office rents in the first period, and therefore are always willing to implement a sincere policy for some values of ω^1. There are then always some values of ω^1 that result in a non-populist firing a loyalist.

Extension - Policy Motivation

We now allow the expert bureaucrat to care more about policy than the non-expert.[17] We keep the loyalist's per-period utility the same and let the expert's per-period utility function now be

$$U_c = R \cdot I - \alpha (x - \omega)^2$$

where $\alpha \geq 1$.

Note that it is not obvious ex-ante whether this should make the expert bureaucrat more or

[17] Gailmard and Patty (2007) provides a microfoundation for why we might expect experts to have higher policy motivation than non-experts

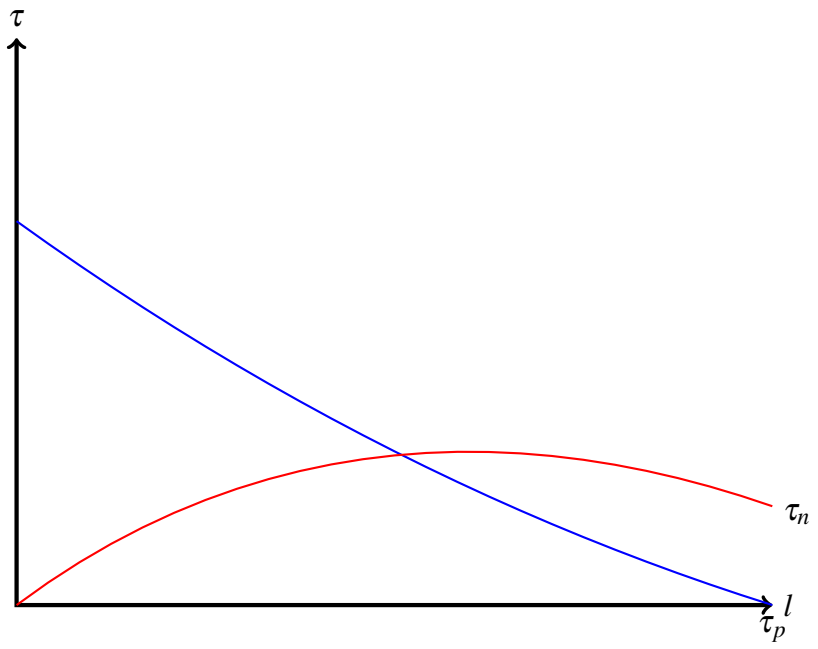

Figure 3: Turnover by l

less likely to feign loyalty. On the one hand, feigning loyalty is now worse from a policy perspective; it costs more today to not enact the sincere policy. However, it also makes a second period loyalist worse for the expert. Therefore there is a greater incentive for the first period expert to stay in office for the second period.

The second period proceeds exactly the same as in the original game. The only change is that cutoff for implementing the populist policy for the expert bureaucrat is now

$$\omega^2 \geq 1 - \sqrt{\frac{R}{\alpha}}$$

As long as $\alpha > 1$, this new cutoff is strictly greater than the cutoff in the baseline model. Strong policy motivation pushes experts to make second period policy sincerely with higher probability.

Let $\underline{\omega}_p^{1\alpha}$ and $\left[\underline{\omega}_n^{1\alpha}, \overline{\omega}_n^{1\alpha}\right]$ be the feigning loyalty cutoffs for the modified game. The next proposition shows that the second period result also holds in the first period:

Proposition 4. *$\underline{\omega}_p^{1\alpha} \geq \underline{\omega}_p^1$ and $\left[\underline{\omega}_n^{1\alpha}, \overline{\omega}_n^{1\alpha}\right] \subseteq \left[\underline{\omega}_n^1, \overline{\omega}_n^1\right]$.*

Further, the probability of feigning loyalty is decreasing in α.

This result shows that implementing the correct policy today is more important to experts than staying in office. When policy motivation is high, they are more willing to live with the possibility of a loyalist tomorrow in order to get today's policy right. If we think that more competent bureaucrats are also highly motivated by policy outcomes, then we should expect to see a lot of bureaucratic policy pushing against populist aims and a lot of turnover in countries with strong bureaucracies.

Concluding Remarks and Future Research

We have analyzed a model of bureaucratic policy making under populism. However, a very similar model can also be applied to a party's selection of its candidate. Parties may want a candidate to implement a certain policy (perhaps due to donor concerns, voter turnout effects, or other possible reasons). The same forces would apply; a non-expert politician would be easier to convince to implement the party's policy. The party would have a harder time controlling an expert candidate. It will be interesting to study in future research whether these distortions internal to parties and the distortions analyzed in this paper due to the strategic incentives of populist politicians and bureaucrats can be higher or lower in a system where either proportional representation electoral system is in place or there is separation of powers, since these two institutional variables induce greater need of compromise or divided government respectively.

Our model and results have implications for a discussion on control mechanisms that a populist leader can adopt to alter incentives: politicians can have two possible levers to influence bureaucratic behavior: they can change the salary (R) or invest in better screening and training of candidates (l). From a populist's perspective, both raising the salary and decreasing training will have the desired affect of more populist policy implementation. But raising bureaucratic salaries goes against anti-elite populist messaging. Reducing funding for training and screening, however, is in keeping with anti-elite campaign promises. If populists expect to stay in power, then we should observe a hollowing out of bureaucratic institutions. As our model shows, populist do not need to

fill the bureaucracy with populist ideologues; they simply need to make sure agencies are staffed with non-experts.

This also raises a possible downside to increasing salaries for bureaucrats. While increasing salaries may attract more qualified candidates, it may also make these candidates more susceptible to capture by populist politicians. This suggests that higher salaries should also be combined with screening for more policy-motivated bureaucrats.

An important consequence of this model is that competent and loyal bureaucrats often look the same in the first period. Therefore empirical projects must look at multiple time periods to understand the effects of populism on bureaucratic policy-making. Focusing only on the short term may give the mistaken impression that populists' are exerting a stronger influence over the bureaucracy than they really are. For example, it may look like most bureaucrats are implementing the populist policies, but that may be a short run strategic calculation that will not be uncovered without a longer-term empirical study.

The model's predictions for bureaucratic turnover are ripe for empirical examination. For example, there is heterogeneity in the strength of state bureaucracies in the United States. Looking at turnover patterns within state agencies would be one way to test some of the model's predictions. The same type of exercise could also be attempted within other countries or across countries.

The setup analyzed in this paper can be extended in multiple ways. For example, we have assumed that competent agents are unbiased. However, a biased, competent agent would allow us to ask additional questions. How biased would the agent have to be before the non-populist preferred a loyalist? What is the optimal discretion interval when the non-populists doesn't know if the bureaucrat is competent but biased or loyal?

Another natural avenue for future work would be to analyze civil service protections. Agencies in the U.S., for example, have heterogeneity in at-will dismissals. A parameter signifying how likely the politician would be to succeed in firing the bureaucrat.

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A Proofs

Lemma 5 (Proof of Lemmas 1 and 2)**.** *Let the second period bureaucrat be a loyalist. Then if a populist is in power she implements $x^2 = \hat{x}_p$ and if a non-populist is in power she implements $x^2 = \frac{1}{2}$.*

Proof. A second period populist fires any bureaucrat who does not implement $x = 1$.

For the non-competent bureaucrat to choose $x = \hat{x}_{P_p} = 1$ over $x = \frac{1}{2}$, we need

$$\begin{aligned} R - E[(1-\omega)^2] &> -E[(\frac{1}{2} - \omega)^2] \\ R - \frac{1}{3} &\geq -\frac{1}{12} \\ R &\geq \frac{1}{4} \end{aligned}$$

A non-competent bureaucrat always implements $x = 1$ because $R > \frac{1}{4}$. A competent bureaucrat implements $x = 1$ if

$$\begin{aligned} R - (1-\omega)^2 &\geq 0 \\ R &\geq (1-\omega)^2 \\ \omega &\geq 1 - \sqrt{R} \end{aligned}$$

A second period non-populist fires any bureaucrat who does not implement $x = \omega^2$. The non-competent bureaucrat cannot implement $x = \omega^2$, and therefore knows she will not receive R no matter what. Therefore she maximizes her policy utility with $x = \frac{1}{2}$.

The expert bureaucrat maximizes her policy and office benefits by choosing $x = \omega^2$. ■

Proof of Lemma 3. The loyalist may have an incentive to choose $x = \frac{1}{2}$ when the politician is populist if the possible policy payoff from having a second period competent bureaucrat is high enough. We show that this is not the case. We illustrate it for $R = \frac{1}{4}$, noting that if it is true for $R = \frac{1}{4}$, it must also be true for $R > \frac{1}{4}$ because payoffs are strictly increasing in R. The loyal bureaucrat's payoff

from choosing $x^1 = 1$:

$$\begin{aligned} EU(1) &= 0 + p \cdot 0 + (1-p)\left[Pr(F)\left(-l \cdot \frac{1}{12} + (1-l)\cdot 0\right) + (1 - Pr(F)) \cdot (-\frac{1}{12})\right] \\ &= -(1-p)\frac{1}{12}\left[Pr(F)l + (1 - Pr(F))\right] \end{aligned}$$

where $Pr(F)$ is the probability the loyalist is fired by a second period non-populist.

The loyal bureaucrat's pay from choosing $x^1 = \frac{1}{2}$(her best possible deviation while getting fired for sure by the first period populist):

$$\begin{aligned} EU(\frac{1}{2}) &= -\frac{1}{12} + p \cdot l \cdot (-\frac{1}{3}) + p \cdot (1-l)\frac{1}{2}(-\frac{1}{12}) + p \cdot (1-l)\frac{1}{2}(0) + (1-p) \cdot l \cdot (-\frac{1}{12}) + (1-p)(1-l)0 \\ &= -\frac{1}{12} - p\left[l \cdot \frac{1}{3} + (1-l)\frac{1}{2} \cdot \frac{1}{12}\right] \end{aligned}$$

She will choose $x^1 = 1$ if

$$-(1-p)\frac{1}{12}\left[Pr(F)l + (1 - Pr(F))\right] \geq -\frac{1}{12} - p\left[l \cdot \frac{1}{3} + (1-l)\frac{1}{2} \cdot \frac{1}{12}\right]$$

This is always true because

$$-(1-p)\frac{1}{12}\left[Pr(F)l + (1 - Pr(F))\right] \geq -\frac{1}{12}$$

A similar calculation shows that no deviation from $x^1 = \frac{1}{2}$ is profitable when the first period politician is non-populist. ■

Proof of Proposition 1. We conjecture that there exists an equilibrium with the following properties:

1. Second Period
   - Behavior is as described in Lemmas 1 and 2
   - At the beginning of the period, populist politicians fire bureaucrats known to be expert and non-populists politicians fire bureaucrats known to be loyal

2. First Period

- If $P_i^1 = P_p^1$, loyal bureaucrats implement $x^1 = 1$.
- If $P_i^1 = P_n^1$, loyal bureaucrats implement $x^1 = \frac{1}{2}$.
- If $P_i^1 = P_p^1$, competent bureaucrats implement $x^1 = 1$ if $\omega^1 \geq 1 - \frac{\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}{2\sqrt{3}}$ and $x^1 = \omega^1$ otherwise.
- If $P_i^1 = P_n^1$, competent bureaucrats implement $x^1 = \hat{x}_P$ if $\omega^1 \in \left[\frac{1}{2} - \sqrt{\frac{l(1-\pi)p}{3}},\ \frac{1}{2} + \sqrt{\frac{l(1-\pi)p}{3}}\right]$ and $x^1 = \omega^1$ otherwise.
- Populists retain bureaucrats if they implement $x = 1$ and fire all others.
- Non-populists retain bureaucrats if they implement $x = \omega^1$ or $x = \frac{1}{2}$ and fire all others.

First we define off-path beliefs for the second period politicians. Let populist politicians believe that if $x^1 \neq \hat{x}_i$ or ω^1, then the bureaucrat is competent with probability 1. Let non-populist politicians believe that if $x^1 \neq \hat{x}_i$ or ω^1, then the bureaucrat is loyal with probability 1. These off-path beliefs imply that if a bureaucrat implements a non-equilibrium policy she will be fired in period two with certainty.

Equilibrium policy choices for loyal bureaucrats are exactly the same as in the second period.

Let there be a populist in the first period. Then the competent bureaucrat can choose the populist policy and be retained in the first period and the beginning of the second period (because which ever politician is in office in the 2nd period will not be able to tell if the bureaucrat is competent or loyal). Or she can choose the sincere policy and be fired in the first period.

Expected Utility from the populist policy

$$R - (1-\omega^1)^2 + p \cdot \left[\sqrt{R} \cdot \frac{2R}{3} + (1-\sqrt{R}) \cdot 0\right] + (1-p)\left[R - 0\right]$$
$$2R - pR - (1-\omega^1)^2 + p\sqrt{R} \cdot \frac{2R}{3}$$

Expected Utility from the sincere policy If the competent bureaucrat is fired, the next period bureaucrat may be competent or non-competent. If the new bureaucrat is competent, the old bureaucrat

will benefit from the policy expertise but will not (of course) get any office benefit

$$0 + p\left[l \cdot (-\frac{1}{3}) + (1-l)(\sqrt{R} \cdot -\frac{R}{3} + (1-\sqrt{R}) \cdot 0)\right] + (1-p)\left[l \cdot -\frac{1}{12} + (1-l) \cdot 0\right]$$
$$p\left[-\frac{l}{3} - (1-l)(\sqrt{R} \cdot \frac{R}{3})\right] - (1-p)\frac{l}{12}$$

Feigning Loyalty The competent bureaucrat chooses the populist policy if

$$2R - pR - (1-\omega^1)^2 + p\sqrt{R} \cdot \frac{2R}{3} \geq p\left[-\frac{l}{3} - (1-l)(\sqrt{R} \cdot \frac{R}{3})\right] - (1-p)\frac{l}{12}$$
$$2R - pR - + p\sqrt{R} \cdot \frac{2R}{3} - p\left[-\frac{l}{3} - (1-l)(\sqrt{R} \cdot \frac{R}{3})\right] + (1-p)\frac{l}{12} \geq (1-\omega^1)^2$$
$$\omega^1 \geq 1 - \frac{\sqrt{l + lp(3 - 4R^{\frac{3}{2}} + 24R - 12pR(1-\sqrt{R})}}{2\sqrt{3}}$$

Let there be a non-populist and competent bureaucrat in office in the first period. Then the expected utility for acting sincere today is

Expected Utility from the loyalist policy By implementing the loyalist policy, the competent bureaucrat will be retained in the first period and the beginning of the second period.

$$R - (\frac{1}{2} - \omega^1)^2 + p \cdot \left[\sqrt{R} \cdot \frac{2R}{3} + (1-\sqrt{R}) \cdot 0\right] + (1-p)\left[R - 0\right]$$
$$2R - pR - (\frac{1}{2} - \omega^1)^2 + p\sqrt{R} \cdot \frac{2R}{3}$$

Expected Utility from the sincere policy If the competent bureaucrat implements $x = \omega$, she will be fired with probability p in the next period. However, she will be retained in period 1.

$$R-0+p\left[l\cdot(-\frac{1}{3})+(1-l)(\sqrt{R}\cdot-\frac{R}{3}+(1-\sqrt{R})\cdot 0)\right]+(1-p)(R-0)$$
$$2R-pR-p\left[\frac{l}{3}+(1-l)(\sqrt{R}\cdot\frac{R}{3})\right]$$

Feigning Loyalty The competent bureaucrat chooses the loyalist policy if

$$2R-pR-(\frac{1}{2}-\omega^1)^2+p\sqrt{R}\cdot\frac{2R}{3}\geq 2R-pR-p\left[\frac{l}{3}+(1-l)(\sqrt{R}\cdot\frac{R}{3})\right]$$
$$-(\frac{1}{2}-\omega^1)^2+p\sqrt{R}\cdot\frac{2R}{3}\geq -p\left[\frac{l}{3}+(1-l)(\sqrt{R}\cdot\frac{R}{3})\right]$$
$$\omega^1\in\left[\frac{1}{2}-\frac{\sqrt{p(l+R(\frac{3}{2}(3-l)))}}{\sqrt{6}},\frac{1}{2}+\frac{\sqrt{p(l+R(\frac{3}{2}(3-l)))}}{\sqrt{6}}\right]$$

■

Proof of Proposition 2. We take the partial derivatives with respect to all parameters. Note that as $\underline{\omega}_p^1$ and $\underline{\omega}_n^1$ decrease, there is a wider ranger of ω^1 such that the bureaucrat feigns loyalty.

$$\frac{\partial\underline{\omega}_p^1}{\partial l}=\frac{1-p(3-4R^{\frac{3}{2}})}{4\sqrt{3}\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}<0$$

$$\frac{\partial\underline{\omega}_p^1}{\partial p}=-\frac{12(\sqrt{R}-1)+l(3-4R^{\frac{3}{2}})}{4\sqrt{3}\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}<0$$

if $l\geq 12\frac{3-rR^2}{9-16R^3}\left(R-R^{\frac{3}{2}}\right)$ and positive other wise.

$$\frac{\partial\underline{\omega}_p^1}{\partial R}=\frac{\sqrt{3}(-4+p(2-3\sqrt{R+l\sqrt{R}}))}{2\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}<0$$

$$\frac{\partial \underline{\omega}_n^1}{\partial l} = -\frac{p(1-R^{\frac{3}{2}})}{2\sqrt{3p(l+3R^{\frac{3}{2}}-lR^{\frac{3}{2}})}} < 0$$

$$\frac{\partial \underline{\omega}_n^1}{\partial p} = -\frac{l+3R^{\frac{3}{2}}-lR^{\frac{3}{2}}}{2\sqrt{3p(l+3R^{\frac{3}{2}}-lR^{\frac{3}{2}})}} < 0$$

$$\frac{\partial \underline{\omega}_n^1}{\partial R} = -\frac{p\sqrt{3R}(l-3)}{2\sqrt{3p(l+3R^{\frac{3}{2}}-lR^{\frac{3}{2}})}} < 0$$

as required. ■

Lemma 6. *The ex-ante probability of a feigning loyalty equilibrium is* $p\cdot\left(\left(\frac{\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}{2\sqrt{3}}\right)\right)+(1-p)\left(2\frac{\sqrt{p(l+R^{(\frac{3}{2}}(3-l)))}}{\sqrt{6}}\right)$. *The ex-ante probability of a sincere equilibrium is the complementary probability*

Proof. Because ω is distributed uniformly on the unit interval, the probability ω^1 is greater than $\underline{\omega}^1$ is simply $1-\underline{\omega}^1$. Similarly, the probability $\omega^1 \in [\underline{\omega}_n^1,\ \overline{\omega}_n^1]$ is just $\overline{\omega}_n^1 - \underline{\omega}_n^1$. Ex-ante, the probability that a populist or non-populist is in power is p and $1-p$. Putting these together, we get $p\cdot(1-\left(\left(\frac{\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}{2\sqrt{3}}\right)\right)+(1-p)\left(1-2\frac{\sqrt{p(l+R^{(\frac{3}{2}}(3-l)))}}{\sqrt{6}}\right)$. By definition, the probability of a sincere equilibrium is the complementary probability. ■

Proof of Lemma 4. First, note that turnover only happens in a sincere equilibrium. From Lemma 6, the probability of a sincere equilibrium with a populist in power in the first period is $1-\left(\frac{\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-}}{2\sqrt{3}}\right.$ and the probability the probability of a sincere equilibrium with a non-populist in power in the first period is $1-2\frac{\sqrt{p(l+R^{\frac{3}{2}}(3-l)))}}{\sqrt{6}}$.

Given a sincere equilibrium, turnover occurs when there is an expert pair with a populist and a loyalist paired with a non-populist:

$$p\cdot(1-l)\cdot\left(1-\left(\frac{\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}{2\sqrt{3}}\right)\right)$$
$$+(1-p)\cdot l\cdot\left(1-2\frac{\sqrt{p(l+R^{\frac{3}{2}}(3-l)))}}{\sqrt{6}}\right)$$

■

Proof of Proposition 3. We take the partial derivatives with respect to all parameters.

$$\frac{\partial\tau_p}{\partial l}=-1+\frac{-1+48R+p(-3-24R+28R^{\frac{3}{2}}+l(3+9p+12pR^{\frac{3}{2}}))}{4\sqrt{3}\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}<0$$

$$\frac{\partial\tau_p}{\partial p}=-\frac{(1-l)(12(\sqrt{R}-1)+l(3-R^{\frac{3}{2}}))}{4\sqrt{3}\sqrt{l+lp(3-4R^{\frac{3}{2}}+24R-12pR(1-\sqrt{R}))}}<0$$

if $l\geq 12\frac{3-rR^2}{9-16R^3}\left(R-R^{\frac{3}{2}}\right)$ and positive otherwise.

$$\frac{\partial\tau_n}{\partial l}=1-\frac{lp(1-R^{\frac{3}{2}})+2p\left(l+R^{\frac{3}{2}}(3-l)\right)}{\sqrt{3p(l+R^{\frac{3}{2}}(3-l))}}<0$$

when $p\geq\frac{l-R^{\frac{3}{2}}(3-l)}{3(l-R^{\frac{3}{2}}(2-l))^2}$ and positive other wise.

$$\frac{\partial\tau_n}{\partial p}=-\frac{l(l+R^{\frac{3}{2}}(3-l))}{\sqrt{3p(l+R^{\frac{3}{2}}(3-l))}}<0$$

as required. ■

Proof of Proposition 4. $\underline{\omega}_p^{1\alpha}$ and $\left[\underline{\omega}_n^{1\alpha},\overline{\omega}_n^{1\alpha}\right]$ are the same as in the baseline model, except we substitute $\frac{R}{\alpha}$ for all R.

Then we have that $\underline{\omega}_p^{1\alpha} \geq \underline{\omega}_p^1$ and $\left[\underline{\omega}_n^{1\alpha}, \overline{\omega}_n^{1\alpha}\right] \subseteq \left[\underline{\omega}_n^1, \overline{\omega}_n^1\right]$. ■