Energy Versus Safety

Unilateral Action, Voter Welfare, and Executive Accountability

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Abstract

Americans have always been skeptical of executive power. Yet many see a role for the president in overcoming Congressional gridlock and polarization. Will increasing executive power necessarily decrease accountability? To answer this question, I develop a game theoretic model comparing voter welfare under two separation-of-powers regimes. Two agents, an executive and unitary legislature, each either congruent with the voter or divergent from her interests, must jointly make policy. In one regime, the president can only change policy by working with Congress; in the other, he may choose between the legislative or unilateral action. Then, an election is held and the voter may independently reelect or replace her agents. I find that unilateral action creates conditions for costly signaling, allowing the executive to reveal both his own and the legislature's type. I characterize broad conditions under which increasing executive power enables voters to select more congruent representatives and achieve higher welfare—despite the downstream risks of adverse policy implementation.

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1 Introduction

> "The ingredients which constitute energy in the executive, are, unity; duration; an adequate provision for its support; competent powers. The ingredients which constitute safety in the republican sense, are, a due dependence on the people; a due responsibility."
>
> —Alexander Hamilton, *The Federalist*, *No. 70*

At a 2016 town hall in South Carolina, then-Candidate Trump attacked President Obama for his reliance on unilateral action, arguing, "The country wasn't based on executive orders. Right now, Obama goes around signing executive orders. He can't even get along with the Democrats, and he goes around signing all these executive orders. It's a basic disaster. You can't do it."[1] In office, however, President Trump saw things differently. Not only did he sign more than 30 executive orders in his first 100 days, he did so publicly as part of a deliberate strategy to highlight the administration's commitment to action.[2]

President Trump's conflicting views on presidential power are not unique. American concerns about executive power date back before the nation's founding but are captured succinctly in Schlesinger's late-twentieth century description of a president "accountable only through impeachment," who, "would govern, as much as he could, by decree" (1986, 377). Even in the modern, presidency-driven era, the public remains skeptical of executive policymaking (Reeves and Rogowski 2016). A Pew Research survey conducted in July 2019 found that 66% of Americans agreed with the statement that it was "too risky" to give U.S. presidents more power to deal with the nation's problems.[3] Yet, Americans increasingly see a role for the president in tackling the nation's challenges (Howell 2015;

[1] Jonathan Lemire and Jill Colvin, "Trump Touts Executive Orders He Once Lambasted," AP News, April 25, 2017. https://apnews.com/e9f75e03bb7a41c1a44e9512d4990832 (accessed April 26, 2019).

[2] Gregory Korte, "Trump's Executive Actions Come Faster and in Different Forms Than Before," USA Today, January 30, 2017. http://www.usatoday.com/story/news/politics/2017/01/30/trumps-executive-actions-come-faster-and-different-forms-than-before/97255592/ (accessed July 11, 2019).

[3] "Republicans Now Are More Open to the Idea of Expanding Presidential Power", Pew Research Center, August 7, 2019. https://www.people-press.org/2019/08/07/republicans-now-are-more-open-to-the-idea-of-expanding-presidential-power/ (accessed August 9, 2019).

Neustadt 1991). Congressional approval hovers below 30%,[4] and 53% of Americans believe members of Congress do an inadequate job of advocating good public policy.[5] One recent argument goes so far as to suggest that the president be given permanent "fast-track" authority to overcome Congressional polarization and gridlock (Howell and Moe 2016). Given these conflicting perspectives, it is not clear whether the public would fare better, in the aggregate, with a stronger president who could bypass Congressional gridlock, or with one who is constrained by a robust system of legislative checks and balances.

This tension—between what Alexander Hamilton (2001, 363) called "executive energy" and "republican safety"—is ingrained in the American system of separated powers. The checks that constrain a malevolent president unduly burden a publicly-minded one. But voters cannot know an executive's type *ex ante*, which necessitated the separation of powers in the first place. In what follows, I question whether voter welfare is higher under a system of a stronger or weaker separation of powers. I move beyond the familiar "fast-track" proposal (Howell and Moe 2016; Judd and Rothenberg 2019) and develop a two-period, principle-agent model of policymaking in which an executive and unitary legislature make policy for a representative voter. Both politicians have preferences over policy determined by their types—congruent with or divergent from the voter. After first-period policy is (or is not) enacted, an election is held in which the voter can independently retain or replace her agents. In the second-period, the politicians pursue their narrow self-interest, thus, the voter uses the policy outcome in the first period to update her beliefs about each agent's type to screen out those that are divergent. I compare the politicians' strategies and voter welfare from this game in two different separation of powers settings. In the *Constitutional* system, no single politician can change policy without the other's consent. In the *Unilateral* system, the executive is given a choice—he can

[4] "Congress and the Public", Gallup Inc, https://news.gallup.com/poll/1600/congress-public.aspx (accessed January 17, 2020).

[5] "Where public confidence stands about eight groups that have positions of power and responsibility", Pew Research Center, September 19, 2019. https://www.people-press.org/2019/09/19/where-public-confidence-stands-about-eight-groups-that-have-positions-of-power-and-responsibility/ (accessed January 17, 2020).

work with the legislature to pass policy as in the Constitutional regime, or he may instead pay an exogenous cost to unilaterally enact his preferred policy.

Unsurprisingly, when politicians with different types value policy more than reelection, gridlock is the modal outcome in the Constitutional regime. In the Unilateral regime, the executive can overcome gridlock by directly implementing policy—but which policy, and whether or not this benefits the voter, is type-dependent. Although this separation-of-powers setting can produce outcomes in which a divergent president unilaterally enacts the voter's least favorite policy in equilibrium, overall, voter welfare is higher under this regime. First, as the likelihood of gridlock increases, the Unilateral president can break the impasse and, if congruent, enact the voter's favorite policy. Second, unilateral action serves as a costly signal that reveals information about both politician's types. If the executive is congruent and acts unilaterally, the voter not only learns he is a "good" type, but also learns that the legislature is a "bad" type—otherwise the president would not need to act unilaterally in the first place. Conversely, only the most myopic, divergent executives unilaterally enact the voter's least favorite policy—doing so reveals their type and leads to certain electoral defeat. While the present model characterizes broad conditions in which voter welfare is higher when the executive is granted extra-constitutional authority, the check on his power does not rely on an assumption public-mindedness (see e.g. Hamilton, Jay and Madison 2001; Kagan 2001; Howell and Moe 2016) or executive self-restraint (Posner and Vermeule 2007). Rather, divergent presidents are constrained by the same forces that put them in the office in the first place—electoral politics.

2 A More Powerful Presidency?

Tensions between executive power and democratic accountability lie at the heart of the Declaration of Independence and the U.S. Constitution. When the Framers met in Philadelphia in 1787, they endeavored to create a different kind of executive—one powerful enough to execute the law, but not so powerful as to be totally unaccountable to the will of the people. Finding the right balance was difficult. Alexander Hamilton advocated in favor of a more powerful presidency, one whose "energy" would be tempered by his dependence on the people, while James Madison saw the legislative branch as the first among equals. Ultimately, the Founders left Article II, which enumerates the powers of the executive branch, intentionally vague. Presidents have since exploited this ambiguity and gradually augmented their powers with an arsenal of unilateral tools (Moe and Howell 1999).[6]. Although Congress retains the statutory authority to overrule these directives, collective action problems often prevent members from doing so (Howell 2003; Moe and Howell 1999).

If presidents are exceeding their Constitutional mandate, what is to be done? Some prominent scholars believe that, if anything, the president ought to be given even *more* power. These arguments, and others like it, begin from an assumption of "universalism"—because the president is elected by a national constituency, he will pursue the public (rather than partisan or personal) good. For example, Kagan (2001) acknowledges the conflict between effective governance and accountability, but favors expanding presidential control over the administrative state nonetheless. She writes, "the President has a national constituency, he is likely to consider, in setting the direction of administrative policy on an ongoing basis, the preferences of the general public, rather than merely parochial interests" (2335). The unitary nature of the executive makes him both a more effective and accountable bureaucratic master than Congress. Similarly, Howell and Moe (2016) argues that the Constitution, designed for a small, rural nation, is not able to produce solutions to nation's increasingly complex challenges. Their idea to overcome Congressional gridlock and parochialism is in permanently delegating "fast" track authority to the president. Under the 1974 Trade Act, Congress may authorize the president to propose international trade agreements to both chambers of Congress under a closed rule

[6] For a thorough examination of these tools see Cooper (2014)

without the possibility of a Senate filibuster. Under their proposal, the president would be able to use this authority to put all manner of legislation on the Congressional agenda for an up-or-down vote while avoiding Congressional inefficiencies like pork-barreling and filibustering.

There is reason to question whether presidents are public-minded, universal actors. Recent research suggests that presidents are elected by, and govern as, partisans (Kriner and Reeves 2015; Wood 2009). While this arrangement may benefit the voters who share the president's partisanship, those who do not are denied symbolic and substantive representation (Pitkin 1967). Kagan (2001) acknowledges that "There remains, of course, a question whether to count this presidential capacity for leadership over administration as virtue or vice, as a promise or a danger . . . The desirability of such leadership depends on its content; energy is beneficial when placed in the service of meritorious policies, threatening when associated with the opposite" (2001, 2341). Ultimately, any proposal to reform the separation of powers ought to consider the total welfare effects of both public-minded and selfish or partisan presidents. Is welfare higher when the president is able to bypass gridlock and enact his preferred policies—even if this delegation of power increases the risk of divergent policy?

2.1 Separation of Powers and Signaling

Existing formal models of presidential unilateralism tend to focus on either institutional constraints or electoral signaling. The institutional lens extends the pivotal politics (Krehbiel 1998) framework by situating the president as a first mover in a spatial bargaining game (Howell 2003; Chiou and Rothenberg 2017). The president is given an exogenous amount of discretion which he uses to unilaterally propose a policy on the real line. This choice is then subject to change by a unitary legislature, or it may be struck down by the courts if the president exceeds his discretionary allocation. In these one-shot games, the president rationally anticipates moves of the other branches and does not overreach.

However, he is still able to enact more personally preferable policy than were he simply a veto player. While these models characterize the institutional effects on policy outcomes, they do not include voters who may play a role in constraining the president's policy choices via electoral sanction. One model that tries to bridge this gap is Judd and Rothenberg (2019). In direct response to Howell and Moe (2016), they compare voter welfare between two versions of the pivotal politics setup—one where the president is given fast-track authority (and only needs to secure the vote of the median legislator) and one where policy is subject to supermajoritarian coalition building. They find that stronger separation of powers benefits voters when they care more about investment returns (which are increasing in policy stability) than policy congruence (which is increasing in presidential power). Even in this model, the voter is only making private investment decisions. In an extension the authors allow the possibility of a divergent president, but the voter does not play an active role disciplining or selecting her political agents. Without electoral pressure from voters, these models likely overstate the degree of discretion a unilateral president can wield. Additionally, they cannot come to robust conclusions about voter welfare under alternative separation of powers regimes.

The second group of unilateral action models simplifies the policymaking process to focus on the signaling dimension of presidential power. If inter-branch bargaining breaks down, especially under divided government, voters may not know who is to blame (Levinson and Pildes 2006). However, if the president acts unilaterally, voters can use the decision and/or policy outcome to learn something about his type by virtue of the fact that he was the sole decision-maker. For example, they may draw inferences about his policymaking skill (Judd 2017) or his commitment to a particular issue set (Kang 2020). Foreign leaders can also use the president's choice between a Senate-ratified treaty or executive agreement to infer his level of commitment to an international agreement (Martin 2005). Of these models, only (Judd 2017) directly considers voter welfare. He shows that high-skill incumbents "show off" in equilibrium to win reelection, even when the exogenous default policy would generate higher welfare. In simplifying the policymaking process, these models make Congressional action exogenous. Given the robust empirical literature on the legislative constraints on unilateral action (Howell 2003; Chiou and Rothenberg 2017; Barber, Bolton and Thrower 2019; Bolton and Thrower 2016; Deering and Maltzman 1999), this class of models is likely overstating the degree to which the president would leverage unilateral action.

However, Kang (N.d.) brings both the institutional and signaling perspectives together in a single model, analyzing how strong or weak separation of powers, along with electoral competition, can shape funding decisions. Depending on his policymaking competency, the president may prefer to underfund a policy to convince the voter that it was the budget, not skill, that led to policy failure. In a weak system where the president controls the budget, he can deceive the voter. In a strong system, Congress holds the power of the purse and is able to fully fund a program, reveal the president's weakness, and increase voter welfare. Similar to the present model, Stephenson and Nzelibe (2010) examines voter welfare under three different separation-of-power regimes—unilateral authority (where the president acts alone), checks and balances (where the president must go to Congress), and opt-in checks (where the president may choose between acting alone or working with Congress). In the model, each branch may be captured by a hawkish faction with biased policy preferences, and voters use policy success or failure to allocate support to both political actors. The authors conclude that voter welfare is highest under opt-in checks because voters are able to leverage three degrees of freedom when apportioning credit or blame. Under the unilateral system, they can only use the outcome. With opt-in checks, they can consider whether or not the president went to Congress, Congress' decision, and the ultimate outcome. Voters use these asymmetric rewards to discourage unilateral action, although they never learn their agents' types or screen for unbiased agents.

Consistent with Stephenson and Nzelibe (2010), I find that a system with optional checks produces greater voter welfare than one in which the Constitutional policymaking process *must* be followed. However, the mechanism is different. In the Constitutional equilibrium, gridlock only occurs when one politician is congruent and the other is divergent, but Bayes' Rule requires that the voter replace both politicians anyway. When the executive can choose between legislative and unilateral action, a congruent executive can unilaterally enact the voter's preferred policy while signaling his congruence and the legislature's divergence. Unilateral action is costly (Rudalevige 2012; Dickinson and Gubb 2016; Thrower 2017), which implies that *were* the legislature congruent, the executive would have made a different choice. This result is related to Groseclose and McCarty (2001), where Congress may propose a policy they know the president will veto to make him appear ideologically extreme. At the same time, if a divergent executive enacts the voter's least favorite policy unilaterally, she immediately learns his negative type and replaces him. Thus, the voter is able to hold most executives accountable; only the most myopic, divergent executives act in self-interested ways, limiting welfare loss under the Unilateral regime.

3 A Model of Separated Powers and Policymaking

This section describes the baseline model of policymaking between an executive and unitary legislature that will be analyzed in two alternative separation-of-powers regimes. In the "Constitutional" setting, both politicians must agree on a policy proposal to alter the status quo; in the "Unilateral" system, the executive may still make policy with the legislature, as in the Constitutional regime, or he may unilaterally make new policy on his own. In both settings, the legislature proposes a policy that the executive can either approve or veto. In the Unilateral setting, the president can enact his own policy rather than veto if he chooses.

Both politicians vary in their policy preferences—some have interests congruent with the voter while others have interests that are divergent. Because both politicians earn benefits from holding office and want to be reelected, they can increase their payoffs if the voter believes they are congruent. After observing the policy outcome, a representative voter chooses to reelect the executive and/or the legislature or replace one or both with a randomly drawn challenger from the same population. In the second period, the politican(s) propose a new policy, payoffs are distributed, and the game ends. After identifying the actors' equilibrium strategies in both regimes, I compare policy outcomes and voter welfare.

3.1 The Policy Environment

Both regimes feature three players: the executive (E), a unitary legislator (L), and a representative voter (V). In each period $t \in \{1,2\}$, each politician $i \in \{E, L\}$ selects a policy $x_i^t \in \{-1,1\}$. The labels, -1 and 1, represent left and right policy solutions respectively, but should be thought of as different policy domains across periods. At the beginning of each period, a status quo policy, $x^0 = 0$, is in place. To move policy away from this status quo, the politicians must propose (and depending on the regime, agree upon) a direction in which they will move policy. I refer to the retention of the status quo at the end of the period as *gridlock*. In the case that the executive works with the legislature, the per-period policy outcome, x^t (no subscript) is the mean value of both politicians' individual policy choices, x_i^t (subscript i), on the real line:

$$x^t(x_E^t, x_L^t) = \frac{x_E^t + x_L^t}{2}$$

When both politicians choose the same policy, the outcome is simply that policy; when the politicians choose different policies, the period-t status quo, 0, is implemented instead. Admissible policy outcomes, then, are $x^t \in \{-1, 0, 1\}$. Without loss of generality, I assume the voter ("she") prefers the right policy alternative in each period, and to simplify the presentation of the model, she does not discount the future. The voter's per-period payoff is specified as:

$$u_V^t(x^t) = x^t$$

Importantly, I assume the voter does not observe the politicians' individual policy selections (x_i^t), only the ultimate policy outcome (x^t).[7] Substantively, I argue that a voter in the real world does not follow the back-and-forth between the executive and legislative branch (e.g. see Cameron 2012; Carpini and Keeter 1997; Bartels 1996). It is only when the policy debate ends and a final decision is reached that the voter learns whether or not policy has changed and what that change is.

3.2 Uncertainty About Politician Types

Both the executive ("he") and the legislature have preferences over policy conditional on their type, $\tau_i \in \{C, D\}$. A politician with type $\tau_i = C$ is *congruent*, that is, their preference over policy aligns with the voter's. A politician with type $\tau_i = D$ is *divergent*; their preference ranking over policy is opposite the voter's. At the beginning of the game, these types are drawn independently from different distributions and revealed to both politicians, but not the voter. However, the voter knows the distributions from which these types are drawn and holds a belief that both types are congruent more often than not. Formally, $\{\Pr(\tau_L = C) = \pi,\ \Pr(\tau_E = C) = \gamma\} > 1/2$. Politicians receive per-period payoffs conditional on their type and the enacted policy. If a politician is congruent, her policy-specific payoff is x^t, while a divergent politician earns $-x^t$.

In addition to earning policy-specific benefits, politicians also receive an office-holding benefit, $\beta_i \in (0, \bar{\beta})$, for each period they hold office. β^i is a random variable drawn independently for each politician from a strictly increasing distribution when they enter

[7] In the supplemental appendix, I consider an extension in which the voter observes all individual actions taken by the politicians. The results are substantively similar those in the baseline model with private actions.

Table 1: Notation

$x_i^t \in \{-1, 1\}$	politician i's policy selection in period t
$x^t \in \{-1, 1\}$	policy outcome in period t
$\tau_i \in \{C, D\}$	politician i's type, congruent or divergent
$\pi \in (\frac{1}{2}, 1)$	prior probability the legislature is congruent
$\gamma \in (\frac{1}{2}, 1)$	prior probability executive is congruent
$\beta_i \in (0, \bar{\beta})$	politician i's office holding benefit
$\phi \in (0, 1)$	probability $\beta_i < 1$
$\alpha^t \in \{0, 1\}$	The executive's choice of legislation or unilateral action, respectively.
$\kappa \in (0, 1)$	the executive's cost of unilateral action
$\lambda \in (0, 1)$	Probability β_L achieves legislature's lower threshold in Unilateral regime
$\eta \in (0, 1)$	Probability β_E achieves executive's lower threshold in Unilateral regime

office. This value does not change between periods if the politician remains in office. As with politician's preferences, voters do not know their politicians' realizations of β_i, only the distribution from which they are drawn. The full, per-period payoff for congruent politicians for selecting policy x_t is given by:

$$u_i^t = (x^t; \tau_i = C, \beta_i) = x^t + \beta_i$$

A divergent politician's per-period policy payoff is given by:

$$u_i^t = (x^t; \tau_i = D, \beta_i) = -x^t + \beta_i$$

In the event that a politician leaves office, their payoff is normalized to zero. Table 1 summarizes all relevant notation used throughout the paper (some of which will be introduced in the sections that follow).

3.3 Constitutional Sequence of Play and Solution Concept

The sequence of play in the Constitutional regime between the executive, legislature, and the voter proceeds as follows:

1. Nature draws two politicians with types τ_i from the population to serve as the executive and the legislature. They take office and the game begins.

2. The legislature proposes a policy, x_L^1, which is revealed to the executive.

3. The executive then makes his policy selection, x_E^1. If it is the same policy chosen by the legislature, that policy is enacted and $x^1 = x_E^1 = x_L^1$. If it is the opposite policy, the status quo, $x^1 = 0$ is retained. The voter observes x_1.

4. An election is held. The voter chooses to retain each politician or replace one or both of them with challengers drawn from the population. If challengers were installed, Nature draws their types.

5. The players repeat steps 2 and 3.

6. Players receive payoffs and the game ends.

In Section 5, I describe the Unilateral sequence of play, which follows the same basic framework with one deviation.

In both regimes, I solve for Perfect Bayesian equilibria. However, this solution concept does not completely pin down beliefs at terminal histories off the equilibrium path. As such, it permits a multiplicity of equilibria in which the voter holds beliefs about her politicians' types that do not follow from what one might intuitively expect. For example, if gridlock never occurs in equilibrium, there exists a Perfect Bayesian equilibrium in which the voter believes both agents are congruent *were she to witness gridlock*. However, this belief is unnatural given that congruent politicians always prefer enacting policy $x^t = 1$. I rely on the intuitive criterion (Cho and Kreps 1987) to rule out off-path equilibria like the one just described in which at least one type of player could improve their payoff by deviating to another action.

4 The Constitutional Regime

In the Constitutional regime, the policymaking process follows a stylized version of that described by the Founders. First, the legislature proposes a policy. Then, the executive ratifies the proposal (i.e. he selects $x_E^t = x_L^t$), which becomes law, or he rejects it in favor of the status quo (i.e. he selects $x_E^t = -x_L^t$). Recall, the voter does not observe the individual policy choices of each politician; she only see the ultimate outcome. Although voters can look up legislative or executive positions, many do not follow the policymaking process (e.g. see Cameron 2012; Carpini and Keeter 1997; Bartels 1996). Instead, the voter will learn about bargaining failures or deviations from the status quo through media reports or pocketbook effects.

This informational asymmetry creates an agency problem. If the voter were to select policy herself, she would implement $x_t = 1$ in every period. However, both politicians have their own policy preferences which may not mirror the voter's. Because both politician's' types are drawn independently, four combinations are possible: both congruent, congruent executive and divergent legislature, divergent executive and congruent legislature, and both divergent. As in many principle-agent models, career concerns bias policymaking towards the voter's preferences. Additionally, the separation-of-powers system insulates the policymaking process from divergent agents who would otherwise enact the voter's least favorite policy. However, requiring both politicians to agree on new policy may also prevent changes toward the voter's preferred policy when politician types do not match.

When the voter sees gridlock, she rationally concludes that one agent is more likely to be congruent. However, she also knows one agent is more likely to be divergent. The problem is that she does not know which one. As such, her posterior belief that either agent is congruent is lower than the prior that a new politician will be congruent, and as such, she must replace them both. Gridlock results in welfare loss that unilateral action can offset, even with the risk of a divergent president enacting the voter's least favorite policy.

4.1 Analysis of the Constitutional Regime

I begin my formal analysis of the Constitutional regime in the second period using backward induction. Given that both politicians know each others' types with certainty, the policymaking process is a game of complete information that can be represented and solved using a game tree. A truncated version of the game tree is presented in Figure 1.

In the second period, there is no future election, so all actors play the stage game Nash equilibrium. That is, they choose their type-preferred policy. Congruent politicians choose $x_i^2 = 1$ and divergent politicians will choose $x_i^2 = -1$. The voter can maximize her second-period payoff by reelecting congruent politicians and replacing divergent ones.

At the time of the election, the voter does not know her politicians' types with certainty. She can, however, make inferences and update her beliefs after observing the first-period policy outcome. I assume (and will later show) that there exists an equilibrium in which the voter reelects both politicians when policy $x^1 = 1$ is enacted and replaces both politicians otherwise.[8]

Definition 1. *(Constitutional Voting Rule) In the Constitutional regime, the voter reelects both politicians when policy $x^1 = 1$ is enacted and replaces both politicians otherwise.*

This voting rule is trivial for congruent politicians as they maximize their own utility by selecting policy $x_i^1 = 1$. Divergent politicians, on the other hand, must choose between

[8] If Bayes Rule would ever make the voter indifferent between reelecting or replacing a politician, I assume she reelects.

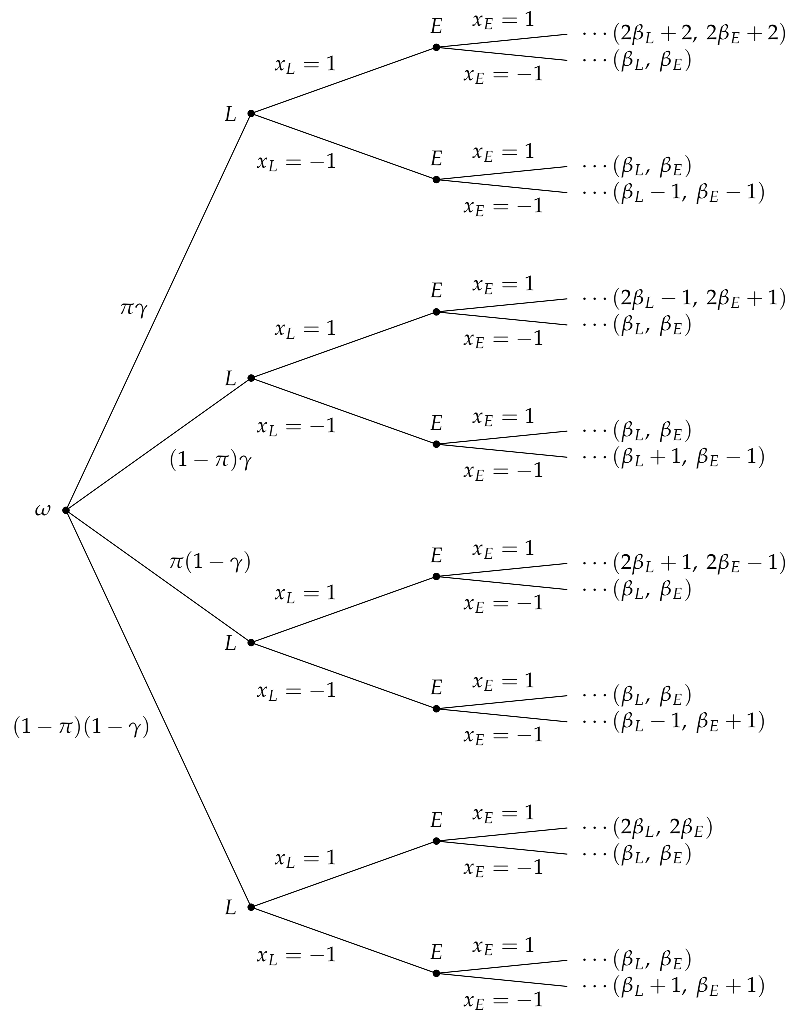

Figure 1: The game tree for the first period policymaking game of complete information between the executive and the legislature. Because politicians play their type-preferred action in the second period, those payoffs have been added to the first period outcomes following the voters decision rule.

policy benefits today or reelection tomorrow. If a divergent politician resolves this tradeoff in favor of policy, I call them *policy motivated*, whereas a politician who resolves this tradeoff in favor of reelection is *office motivated*.

The intuition for each politician's first-period policy decision is as follows. If both politicians are congruent, they naturally agree on policy $x^1 = 1$. Now suppose one politician is congruent and the other is divergent. The congruent politician still maximizes their payoff by selecting $x^1 = 1$. The divergent politician faces a choice. He can either choose to pool with congruent types and pass $x^1 = 1$, win reelection, and force gridlock in the second period, or, he can force gridlock in the first period and lose reelection. Although this latter action does not lead to the divergent politician's favorite policy, it does prevent the congruent politician from enacting $x_i^1 = 1$. The divergent politician's choice depends on their realization of β_i. If $\beta_i \leq 1$,[9] then the cost of passing his least preferred is higher than the benefit of holding office in the second period. If $\beta_i > 1$, then reelection benefits offset first-period policy loss. Because β_i is a random variable, I define ϕ as the cdf of β_i on the $[0,1]$ interval.

Definition 2. *(Constitutional Office-Seeking Threshold):*

$$\phi \equiv \int_0^1 f(\beta) d\beta$$

Thus, ϕ represents the probability which which the divergent politician is policy motivated whereas $1 - \phi$ is the probability with which he is office motivated. This threshold does not depend on which actor is divergent, despite the sequential nature of the policy-making process.

When both actors are divergent, $\beta_i = 1$ is still the relevant threshold. In this type combination, however, the legislature's agenda-setting power defines the outcome. Because the legislature moves first, they effectively force the president's hand. For example, if the legislature is office motivated, they would prefer to pool with congruent types and set first period policy to $x^1 = 1$. If the executive is also office motivated, then his choice is trivial: he would also prefer to set $x^1 = 1$. If the executive is policy motivated, given the legislature's choice, he cannot enact $x^1 = 1$. Instead, he must choose between gridlock and loss today or reelection and his most preferred policy in the second period. He always resolves this tradeoff in favor of reelection. A similar logic holds for the case when the legislature is policy motivated and the executive is office motivated. The first-period pol-

[9] When a politician is indifferent between two actions, I assume they default to choosing the voter's preferred policy.

		Executive	
		$\tau_E = C$	$\tau_E = D$
Legislature	$\tau_L = C$	Policy 1	Policy 1 or gridlock
	$\tau_L = D$	Policy 1 or gridlock	Policy 1 or -1

Figure 2: First-period equilibrium policy outcomes across all possible type combinations in the Constitutional regime

icy when both actors are divergent is entirely dependent on the legislature's realization of β_L.

A more intuitive way to think about the first period is to consider a 2×2 matrix, as in Figure 2, where each cell represents one of the four possible type combinations, $\{(\tau_E = C, \tau_L = C), (\tau_E = C, \tau_L = D) \ldots\}$, and so on. Within each cell, different policy outcomes are possible. When both politicians are congruent, the only outcome is the voter's preferred policy. When the politicians have different types, the divergent actor may either pool or force gridlock. When both actors are divergent, the legislature's agenda-setting power allows it to dictate policy, as the executive prefers either new policy to gridlock.

To show that these strategies constitute an equilibrium, the voter must follow through on the proposed reelection rule established in Definition 1. A rational voter who updates her beliefs following Bayes' Rule will only choose to retain an incumbent if her posterior belief about his congruence is weakly greater than her prior that his replacement will be congruent. First, from Table 2 it is clear that if the voter ever observes $x^1 = -1$, both agents are divergent with certainty and she should replace them. If the voter observes gridlock, then she knows one agent is divergent and one is congruent. Because she does not see her agents' individual policy choices, she cannot know which is which. Following Bayes' Rule, her belief that either agent is congruent is less than the prior that two new politicians will be congruent, so she replaces both. Finally, if she observes $x^1 = 1$, then her belief that both agents are congruent is weakly greater than the prior on replacements.

Therefore, the voter will not deviate from the proposed voting rule given the strategies of her agents. Proposition 1 summarizes the actors' strategies in the Constitutional regime.

Proposition 1. *(Constitutional Equilibrium) There exists an equilibrium in which the voter re-elects both politicians after observing $x_1 = 1$ and replaces both politicians otherwise. Both politicians choose their type-preferred policy in the second period, and in the first period:*

a. If both politicians are congruent, they select policy $x_i^1 = 1$.

b. If $\tau_i = C$ and $\tau_j = D$, the congruent politician selects policy $x_i^1 = 1$. If $\beta_j > 1$, the divergent politician also selects $x_j^1 = 1$ and $x_j^1 = -1$ otherwise.

c. If both politicians are divergent and $\beta_L > 1$, both politicians select $x_i^1 = 1$. If $\beta_L < 1$, they both select $x_i^1 = -1$.

Considering the strategies of the politicians established in Proposition 1, the voter's welfare in the Constitutional regime is formally given by:

$$W_C \equiv \phi(\pi - 2) + \pi - \gamma^2\pi\phi + \gamma(1 + \phi + 2\pi\phi - \pi^2\phi) \tag{1}$$

Overall, the Constitutional regime leads to mixed outcomes from the voter's perspective. On the one hand, she may see her most preferred policy outcome across all type combinations of the politicians. Additionally, her least preferred outcome is only enacted when both politicians are divergent and the legislature is policy motivated. However, only when her least preferred outcome is enacted does she learn her agents type with certainty. When her most preferred policy is enacted, she learns very little. Gridlock also leads to welfare loss. Although the voter knows for certain that one agent is congruent, she must rationally replace them both. In the next section, I show how the unilateral action may increase voter welfare by allowing a congruent executive to enact the voter's preferred policy and signal politician types through gridlock.

5 The Unilateral Regime

I turn my attention to an alternative separation-of-powers regime in which the executive is given substantial unilateral authority to make policy without legislative consent. However, the use of these powers is costly. As such, the executive may forego unilateral action and work with the legislature to pass mutually agreeable policy as in the Constitutional regime. This new decision, as well as the choice over policy, reveals information to the voter about her politicians' types, which she can leverage in the electoral phase to more finely tune her selection. Although unilateral power may allow divergent executives to go unchecked, in Section 6, I show that, overall, the benefits outweigh the risk of bad unilateral policy as compared to the outcomes in the Constitutional regime.

5.1 Sequence of the Unilateral Regime

The sequence of the Unilateral game is similar to the Constitutional game with one difference: after the legislature selects its policy for the period, the executive chooses his policy as well as a means of enacting that policy—legislatively ($\alpha^t = 0$) as in the Constitutional game, or unilaterally ($\alpha^t = 1$). If the executive chooses legislation, then the ultimate policy, x^t, is the average value of both policy inputs on the real line and the voter does not observe individual selections, as before. If, on the other hand, the executive chooses unilateral action, then his choice is implemented regardless of the legislature's preference. That is, $x^t = x^t_E$. Given the executive-branch resources necessary to create an executive order (Rudalevige 2012) as well as the ease with which future executives may overturn them (Thrower 2017), the executive pays a private cost $\kappa_E \in (0, 1)$ if he chooses

$\alpha^1 = 1$.[10] The president's per-period utility function in the unilateral regime is given by:

$$u_E^t(x^t, \alpha^t; \tau_E, \beta_E, \kappa_E) = \begin{cases} x^t - \alpha^t \kappa_E + \beta_E & \text{if } \tau_E = C \\ -x^t - \alpha^t \kappa_E + \beta_E & \text{if } \tau_E = D \end{cases}$$

Consistent with the legislative version of the game, the voter does not observe either politician's individual policy selection nor the cost the executive pays. However, the voter does observe *how* policy is implemented. If the executive chooses unilateral action, the voter can easily infer his policy choice and make inferences about the legislature's type. Thus, the voter never observes the politicians' individual choices, but she does see the outcomes of those choices and learns something about how those choices were made. Additionally, to ensure that the voter has an incentive to select a congruent legislature, I assume the voter has a weak, unmodeled preference for legislation (Reeves and Rogowski 2016, 2018).[11] Both the voter and legislature retain the same utility functions from the Constitutional regime.

5.2 Analysis of the Unilateral Regime

Again, we begin the analysis in the second period. As in the Constitutional regime, neither politician has an incentive to signal congruence, so each will choose their most preferred policy. If both politicians share a type, then their choice is to pass that type's preferred policy, and the executive will do so legislatively. As unilateral action is costly, there is no incentive for the executive to choose $\alpha^2 = 1$ when the legislature shares his type. If, on the other hand, politicians do not share types, the president will pass his type-preferred policy unilaterally. Although unilateral action comes with a cost, that cost

[10] In addition to capturing some of the real-world tradeoffs inherent in unilateral action, this cost is large enough to ensure the executive does not act unilaterally when he is indifferent between either policymaking vehicle but not so large as to overwhelm the policy benefit he can reap from using it.

[11] Obviously, if this preference carries a cost, and that cost is high enough, the unilateral regime may no longer be preferable.

is never so large as to overwhelm the policy benefit.

Lemma 1. *In the second period, if the executive and legislature do not share types, then the executive passes his preferred policy unilaterally. Otherwise, the executive and legislature pass the policy they both prefer through legislation.*

In the second period, the voter is weakly better off electing two congruent politicians, however, the choice of the executive takes on greater importance. Regardless of the legislature's type, the executive always implements his preferred policy. If the executive is congruent and the legislature is divergent, unilateral action breaks gridlock that would occur in the Constitutional regime, which increases voter welfare. If, however, types are reversed, the executive will have free rein to implement the voter's least favorite policy unilaterally, overcoming what would have been beneficial gridlock in the Constitutional regime.

But unilateral action does more than break gridlock. The executive's choice over policymaking vehicles adds an additional dimension to the voter's informational environment. In the Constitutional regime, the voter's equilibrium strategy is to replace both politicians in gridlock, even though she knows for certain that one of them is congruent. As I will show, the unilateral option—even if the executive does not use it—eliminates gridlock from the equilibrium outcome entirely, allowing the voter to make more sophisticated voting decisions. Although she does not observe individual policy selections, she can make several inferences conditional on observing (or not observing) unilateral action. For example, were the voter to see the executive unilaterally implement $x^1 = -1$, her least favorite policy, she can conclude with certainty that the president is divergent. A congruent president could never benefit from making this choice. Were she to see the executive enact $x^1 = 1$ unilaterally, she can be certain that the executive is congruent *and* Congress is divergent. After all, if Congress were congruent, it would no longer benefit the executive to act unilaterally (and divergent presidents never unilaterally enact the congruent policy).

Given her richer informational environment, the voter's new electoral rule is as follows:

Definition 3. *(Unilateral Voting Rule) In the Unilateral regime, the voter reelects both politicians when policy $x^1 = 1$ is enacted legislatively. She replaces both politicians when she sees any other legislative outcome. When she observes $x^1 = 1$ unilaterally, she reelects the presidents and replaces the legislature. Whens he observes $x^1 = -1$ unilaterally, she replaces the executive and retains the legislature.*

This electoral rule increases the voter's welfare over the Constitutional regime by allowing the executive to break gridlock and reveal information about both politicians' types in the first period. Figure 3 presents the first-period game tree and final payoffs (following Lemma 1 for the unilateral regime).

In the first period, the choice of two congruent politicians is trivial—they maximize their own payoffs and secure reelection by enacting $x^1 = 1$ legislatively. Across all other type combinations, unilateral action alters the strategic calculus in ways that may harm or help the voter.

Suppose, first, that the executive is congruent and the legislature is divergent. Here, unilateral action has the highest potential to help the voter in terms of policy and selection. In the Constitutional regime, recall that the outcome depends on the value of β_L. When $\beta_L \leq 1$, gridlock occurs, the voter replaces both politicians, and has probability $\pi\gamma$ of a positive payoff in the second period. If $\beta_L > 1$, the voter gets her preferred policy, reelects both politicians, and is guaranteed gridlock in the second period. In the Unilateral regime, however, the voter *always* gets her most preferred policy in both periods. If $\beta_L > 1$ (with probability $1 - \phi$), the legislature is office-motivated and proposes $x_L^1 = 1$. The executive accepts this proposal, both politicians are reelected, and by Lemma 1, the executive unilaterally enacts $x^2 = 1$ in the second period. If, however, $\beta_L \leq 1$ (with probability ϕ), the legislature proposes $x_L^1 = -1$, but the executive is able to leverage unilateral action to pass $x^1 = 1$ *and* signal to the voter that the legislature is divergent.

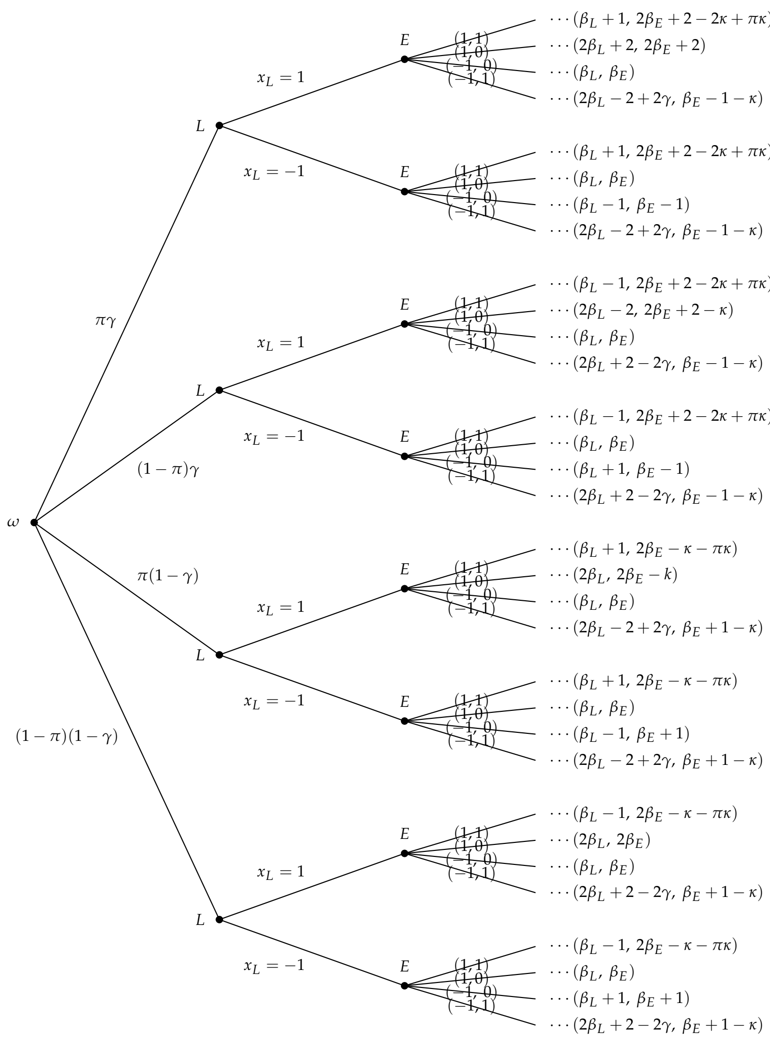

Figure 3: The truncated game free for the Unilateral regime. The tree represents decisions in the first period policymaking game of complete information and presents payoffs for the full, two-period game following Lemma 1.

The voter reelects the executive, replaces the legislature, and gets her preferred policy in period two—legislatively if the new legislature is congruent, or unilaterally if the new legislature is also divergent. Consistent with arguments of executive universalism (e.g. Howell and Moe 2016), when the executive and voter are ideologically aligned, unilateral action can overcome gridlock and improve welfare. But what about when the executive is divergent?

When the executive is divergent and the legislature is congruent, the voter has the most to lose from Unilateral action. In the Constitutional regime, the choice of $x_L^1 = 1$

would protect the voter from the executive's divergent preferences. In the Unilateral setting, however, the executive has the option to bypass this check. The problem, from his perspective, is that in circumventing the legislature he reveals his divergence and is replaced. When $\beta_E > 1$ (with probability $1 - \phi$), the executive is office-motivated and pools with congruent types and passes the voter's preferred policy legislatively. In the second-period, however, the executive has free rein to unilaterally implement the voter's least favorite policy. If $\beta_E \leq 1$ (with probability ϕ), the executive is policy motivated and he unilaterally enacts $x^1 = -1$ in the first period. Consistent with Bayes' Rule, the voter replaces the executive in the election but retains the legislature. After all, the executive is more likely to circumvent a congruent legislature rather than a divergent one.

Notice, though, what happens were the legislature to make the somewhat counter-intuitive choice of $x_L^1 = -1$. For moderate values of β_E, the executive simply passes $x_E^1 = -1$ legislatively—a bad outcome for the legislature. However, if the executive is very office motivated, i.e. $\beta_E > 1 + \pi(1 + \kappa)$, he chooses to pass the congruent policy unilaterally. Although the cases in which divergent presidents unilaterally pass the congruent policy are of theoretical interest, I restrict my attention to cases in which unilateral action is more informative. As such, I define the upper limit on as $\beta_i < 1 + \pi(1 + \kappa) \equiv \bar{\beta}$.

Finally, suppose both politicians are divergent. Both the executive and legislature would like to enact policy $x^1 = -1$, but electoral considerations may constrain them from acting in their short-term interest. In the Constitutional regime, the legislature's agenda-setting power gave it complete control over policy selection, regardless of the president's electoral preferences. With the introduction of unilateral action, the legislature's agenda power is weaker. In the case that the legislature is office-motivated and presents the executive with $x_1^L = 1$, the executive can choose between passing $x_1^E = 1$ or unilaterally enacting $x_1^E = -1$. The point at which he is indifferent between these two choices is $\beta_E = 1 - \kappa$. When $\beta_E > 1 - \kappa$, he chooses the congruent policy. Otherwise, he chooses the divergent policy unilaterally. The probability with which $\beta_E \leq 1 - \kappa$ is defined as:

Definition 4. *(Executive's Office-Holding Lower Bound)*

$$\eta = \int_0^{1-\kappa} f(\beta)d\beta$$

Note that $\eta < \phi$. If the legislature presents the executive with $x_1^L = -1$, he chooses $x_1^E = -1$ legislatively. In making a prospective decision, the legislature must first consider the executive's choice when presented with the congruent policy. If the executive would also choose the congruent policy, then the legislature is indifferent when $\beta_L = 1$. However, if the executive is so policy motivated that he would unilaterally enact the divergent policy, then the legislature would choose the congruent policy when $\beta_L > 2\gamma - 1$ and the divergent policy otherwise. Because the legislature will be reelected if the executive acts unilaterally, the legislature can take advantage of the executive to get its preferred policy *and* remain in office.

Definition 5. *(Legislature's Office-Holding Lower Bound)*

$$\lambda = \int_0^{2\gamma-1} f(\beta)d\beta$$

Notice that $2\gamma - 1 < 1$, so $\lambda < \phi$. Thus, both of these new thresholds are more easily satisfied than $\beta_i = 1$. The implication is that two divergent politicians in the unilateral regime are *more likely* to enact the voter's preferred policy in the first period than in the Constitutional regime.

Again, I outline first period outcomes by type combination in Figure 4. When both politicians are congruent, the voter always gets her most preferred outcome as in the Constitutional regime. However, unilateral action strictly increases her welfare when the president is congruent the legislature is divergent—whether legislatively or unilaterally, she gets $x^1 = 1$. When the executive is divergent, her expected payoff is weakly less than in the Constitutional regime. Where the legislature would have blocked $x^1 = -1$, the executive can now impose it unilaterally. Finally, when both politicians are divergent, the

		Executive	
		$\tau_E = C$	$\tau_E = D$
Legislature	$\tau_L = C$	Policy 1	Policy 1
	$\tau_L = D$	Policy 1 or -1	Policy 1 or -1

Figure 4: First-period equilibrium policy outcomes across all possible type combinations in the Unilateral regime

potential outcomes (but not the paths to those outcomes) are unchanged.

To constitute a Perfect Bayesian equilibrium, the voting rule proposed in Definition 3 must be sequentially rational. Given that policy $x^1 = 1$ may always be enacted legislatively, the voter's belief that both politicians are congruent after observing $x^1 = 1$ is weakly greater than her priors. If she sees $x^1 = -1$, she knows with certainty both politicians are divergent. Turning to unilateral action, only congruent executive's enact $x^1 = 1$ unilaterally, and they only do so when the legislature is divergent, giving the voter perfect information about the politicians' types. Only divergent executive's enact $x^1 = -1$ unilaterally, however, they may do so when the legislature is either congruent or divergent. Following Bayes' Rule, the voter updates in the legislature's favor, replacing the executive and retaining the legislature. Finally, gridlock is never an equilibrium outcome. Consistent with the intuitive criterion, were the voter to see gridlock, she would believe at least one agent were divergent, and as in the Constitutional regime, and reduce her beliefs about either agent's congruence. Thus, the voting rule is sequentially rational. Proposition 2 summarizes the actors' strategies in the Constitutional regime.

Proposition 2. *(Unilateral Equilibrium) There exists an equilibrium in which the voter reelects both politicians after observing $x^1 = 1, \alpha^1 = 0$ and replaces both politicians otherwise when $\alpha^1 = 0$. She retains the executive and replaces the legislature when $x^{=}1, \alpha^1 = 1$ and replaces the executive and retains the legislature when $x^1 = -1, \alpha^1 = 1$. Both politicians choose their type-preferred policy in the second period, and in the first period:*

a. If both politicians are congruent, they select policy $x_i^1 = 1$ and the executive selects $\alpha = 0$.

b. If $\tau_E = C$ and $\tau_L = D$ and:

- *$\beta_L > 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = 1, \alpha = 0$.*
- *$\beta_L \leq 1$, the legislature selects $x_L^1 = -1$ and the executive selects $x_E^1 = 1, \alpha = 1$.*

c. If $\tau_E = D$ and $\tau_L = C$ and:

- *$\beta_E > 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = 1, \alpha = 0$.*
- *$\beta_E \leq 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = -1, \alpha = 1$.*

d. If both politicians are divergent and:

- *$\beta_E > 1 - \kappa$ and $\beta_L > 1$, both politicians select $x_i^1 = 1$ and the executive selects $\alpha = 0$.*
- *$\beta_E > 1 - \kappa$ and $\beta_L \leq 1$, both politicians select $x_i^1 = -1$ and the executive selects $\alpha = 0$.*
- *$\beta_E \leq 1 - \kappa$ and $\beta_L > 2\gamma - 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = -1, \alpha = 1$.*
- *$\beta_E \leq 1 - \kappa$ and $\beta_L \leq 2\gamma - 1$, both politicians select $x_i^1 = -1$ and the executive selects $\alpha = 0$.*

Considering the strategies of the politicians established in Proposition 1, the voter's welfare in the Unilateral regime is formally given by:

$$W_U \equiv 2[\gamma - \phi + 2\gamma\phi - \gamma^2\phi - \eta + 2\gamma\eta - \gamma^2\eta + \phi\eta - 2\gamma\phi\eta + \gamma^2\phi\eta + (1-\gamma)^2(1-\phi)\eta\pi)] \tag{2}$$

From the voter's perspective, the Unilateral regime leads to both gains and losses. When the executive is congruent, the voter always gets her preferred policy. When the executive is divergent, the legislature loses some of its power to block the executive's actions. However, the introduction of unilateral action does not guarantee that the divergent executive will always enact bad policy. Rather, unilateral action allows the voter to learn more about her agents' types, which constrains the executive.

6 Voter Welfare Under Alternative Regimes

It is not surprising that voters stand to gain from unilateral action under the assumption that executive shares the voter's preferences. As James Madison writes in *The Federalist No. 51*, "If angels were to govern men, neither external nor internal controls on government would be necessary" (Hamilton, Jay and Madison 2001, 269). But voters do not necessarily know an executive's type *ex ante*, which necessitated the separation of powers in the first place. The Constitution places limits on executive power precisely to mitigate the malign impulses of a divergent actor. The relevant question is in which institutional framework are voters better off? Would they prefer a system as outlined in the Constitution, or do they fare better with unilateral powers, even under less generous assumptions of executive motivations?

In the Constitutional setting, the modal outcome is gridlock, which occurs with probability $\gamma + \pi - 2\pi\gamma > 1/2$. Beyond reducing the voter's potential policy payoff, gridlock also leads to the voter draw unfavorable inferences about both agents despite the fact that gridlock only occurs when one agent is congruent. The voter must replace both agents, which leads to lower welfare than when divergent agents choose to pool with congruent types in the first period. Unilateral action sidesteps this issue by allowing the president to "speak" directly to the voters. By acting unilaterally, the executive reveals information about his own and the legislature's type. In fact, gridlock never occurs in equilibrium in the unilateral regime. However, the voter is not strictly better off as unilateral action allows divergent executives to enact $x_E^t = -1$ even when legislature is congruent.

The key question is whether the gains from information and congruent unilateral action offsets the losses from divergent unilateral action, above and beyond the expected utility of the Constitutional regime. To determine the answer to this question, I set both welfare equations, Equations 1 and 2 equal to each other and solve for π on the left-hand side. This establishes conditions for $\tilde{\pi}(\gamma, \phi, \eta)$ at which the voter is indifferent between either regime. When $\pi > \tilde{\pi}$, the voter strictly prefers the Constitutional regime. When $\pi < \tilde{\pi}$, the voter strictly prefers the Unilateral regime. As $\tilde{\pi}$ increases (decreases), voter welfare is higher under the Unilateral regime for a wider (smaller) range of parameter values.

Proposition 3. *(Welfare Comparison) When $\pi < \tilde{\pi}$, the voter strictly prefers the Unilateral regime. Furthermore, $\tilde{\pi}$ is increasing in γ and ϕ and decreasing in η.*

Figure 5 plots $\tilde{\pi}$ for varying values of ϕ, the probability of gridlock. The x-axis is γ, the prior on executive congruence, and the y-axis is π, the prior on legislative congruence. I also plot the 45-degree line ($\pi = \gamma$); this line represents the case in which the two regimes provide equal welfare in the aggregate across all values of π and γ. What is shown in Figure 5, however, is that $\tilde{\pi}$ is always weakly greater than the 45-degree line, indicating that, in the aggregate, voters fare better under the Unilateral system.

As γ increases holding π constant, voter welfare is higher under the unilateral regime while welfare is higher in the Constitutional regime when increasing π while holding γ constant. In other words, when the executive (legislature) is more likely to be congruent, then the voter would prefer a Unilateral (Constitutional) system. This finding makes intuitive sense as a voter who shares the president's preferences would prefer to give him additional power while one who has opposing preferences would prefer a strong check. This finding also provides theoretical support to arguments that increasing presidential power increases voter welfare when assuming the president is public-minded or is a universal actor.

Figure 5 also investigates voter welfare when ϕ, a parameter that can be interpreted as the probability of gridlock, varies. When ϕ is low—that is, when divergent types pool

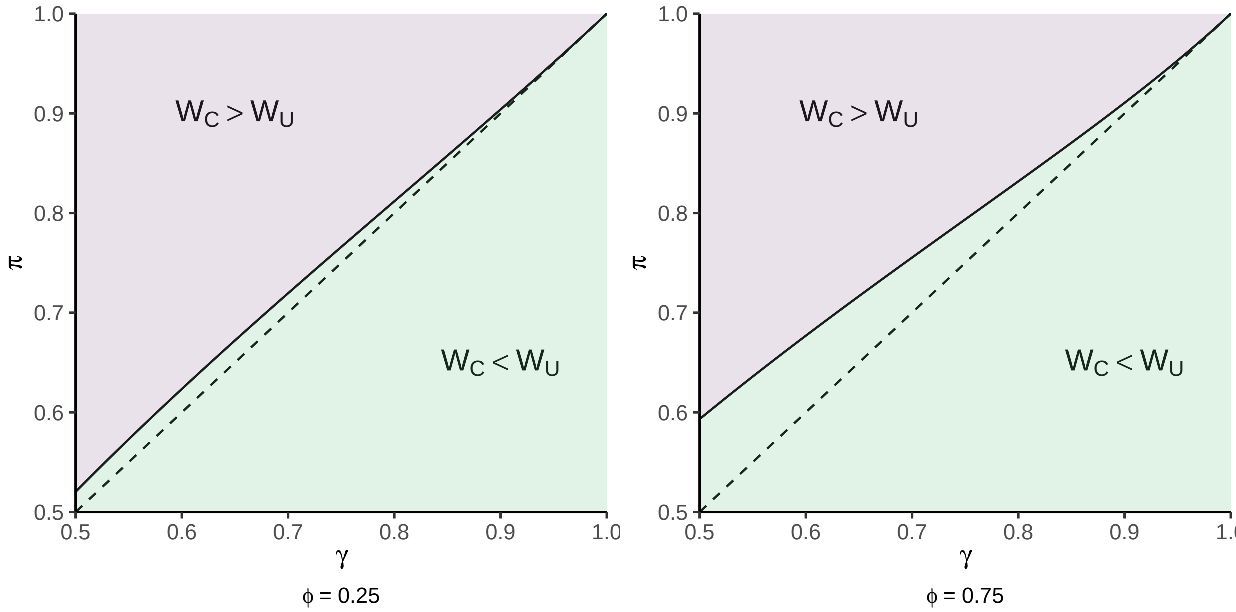

Figure 5: A comparison of voter welfare between the Constitutional regime and Unilateral regime at different values of ϕ, the probability of first period gridlock. The solid line plot $\tilde{\pi}$, the threshold at which the voter is indifferent between either regime type. The x-axis tracks γ, the prior on executive congruence, while the y-axis plots π, the prior on legislative congruence. The area below (above) the curve indicates when the voter would prefer the Unilateral (Constitutional) regime. The dotted line is the 45-degree line, the line at which both regimes would provide equal welfare on average. As $\tilde{\pi}$ is always above the 45-degree line, I conclude that the Unilateral regime is the better *ex-ante* system for the voter. Other parameter values for the figure are fixed at $\eta = 0.2, \lambda = 0.2$.

with congruent types in the first period and gridlock is unlikely—the indifference threshold tracks closely to the 45-degree line. Voters simply prefer one regime over the other based on prior probabilities of politician congruence. However, when ϕ is high, voters fare better under in the unilateral regime. Even when the legislature is more likely to be congruent, there exist many (γ, π) doubles in which voter welfare is higher when the president is given broad unilateral authority. Because the voters receive no policy payoff and must replace both agents in gridlock, unilateral powers—even with the risk of divergence—increases voter welfare when $\gamma > \pi$ and when $\pi > \gamma$, as long as the difference is not too large.

7 Discussion

Americans have always been skeptical of executive power, yet many also see a role for the president in tackling the nation's increasingly complex challenges. Recent increases in polarization, divided government, and Congressional gridlock have tempered concerns and led to proposals that would increase the president's policymaking authority (Howell and Moe 2016; Kagan 2001). However, these proposals often begin from a presumption of presidential "universalism"—the president, elected by a national constituency, will act in the national interest. The implication is that a president, promoted by his party and elected by a primarily partisan coalition, will suddenly cater to the median voter rather than a partisan one. Recent research suggests this pivot to the median may not be the case in word (Wood 2009) or deed (Kriner and Reeves 2015), which raises the question as to whether expanding presidential power will necessarily improve voter welfare.

In this model, I integrate two important strands of the unilateral action formal literature—separation of powers and electoral signaling. I then compare political behavior between the executive and the legislature as well as accountability and welfare across two regimes. In the Constitutional regime, the executive must work with legislature to pass policy, while in the Unilateral regime, he is able to choose between unilateral and legislative action. When the executive must work with Congress, gridlock is the modal outcome, which leads not only to policy loss but informational loss as well. In gridlock, the voter does not learn which of her agents is divergent, and thus, rationally dismisses them both in the electoral stage. Endowed with unilateral powers, the congruent executive is able to circumvent gridlock and reveal type-dependent information both about himself and the legislature. Although divergent presidents may act myopically—unilaterally enacting the voter's least favorite policy—the voter is often able to use electoral pressure to hold divergent presidents accountable, as divergent unilateral action reveals the executive's type and leads to removal. Increasing executive power does not necessarily improve voter welfare, but is preferable in the aggregate, especially as gridlock becomes more likely under the Constitutional regime.

Formal models necessarily present stylized versions of the policymaking process. One key assumption of the model is that the executive and legislature know each other's types with certainty, which may not hold in the real world. Although some uncertainty would likely preserve the main result, if the executive is unsure of the legislature's type, then unilateral action is not necessarily a signal. A second assumption is that voters do not observe individual policy inputs when gridlock occurs. This assumption follows from the fact that voters tend to ignore the policymaking process. However, Congressional votes and Presidential vetoes are a matter of public record. In an extension in the supplemental appendix, I show that the main results hold when the voter observes all individual actions taken by the politicians. However, the interpretation is no longer one of unilateral signaling, but one of accountability and pandering. Finally, I assume strong presidential powers under the Unilateral regime but do not consider the possibility of democratic backsliding or authoritarianism.[12] If the executive is able to use his increased power to circumvent or cancel future elections, then the conclusions about accountability would no longer be relevant.

If we assume a more powerful executive upholds democratic norms, then an increase in power increases voter welfare overall when Congress is unlikely to be congruent and/or when the potential for legislative gridlock is high. These gains come both from policy outcomes and costly signaling. Unilateral action allows the president to reveal politician types, which cannot be communicated through gridlock. While divergent presidents do leverage unilateral action to implement "bad" policies in equilibrium, they are somewhat constrained by their electoral ambitions. If members of Congress continue to focus on "message politics" at the expense of pursuing much needed reform (Lee 2016), expanding executive "energy"—beyond the current fast track proposals—has the potential to improve voter welfare without an overwhelming risk to "safety in the republican sense."

[12] See Svolik (2013) for a treatment of political power and democratic backsliding.

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A Proofs of the Baseline Model

A.1 Proofs for "Constitutional" Regime

Proposition 1. *(Constitutional Equilibrium) There exists an equilibrium in which the voter reelects both politicians after observing $x_1 = 1$ and replaces both politicians otherwise. Both politicians choose their type-preferred policy in the second period, and in the first period:*

a. If both politicians are congruent, they select policy $x_i^1 = 1$.

b. If $\tau_i = C$ and $\tau_j = D$, the congruent politician selects policy $x_i^1 = 1$. If $\beta_j > 1$, the divergent politician also selects $x_j^1 = 1$ and $x_j^1 = -1$ otherwise.

c. If both politicians are divergent and $\beta_L > 1$, both politicians select $x_i^1 = 1$ and $x_i^1 = -1$ otherwise.

Proof of Proposition 1. I solve the game by backward induction.

In the second period, there is no future election. As such, both politicians have no incentive to signal and will select their most preferred policy. Therefore, second period outcomes are deterministic. Congruent politicians will select $x_i^2 = 1$ and divergent politicians will select $x_i^2 = -1$. If both politicians are congruent, the policy outcome will be $x^2 = 1$. If both politicians are divergent, the policy outcome will be $x^2 = -1$. If the politicians have different types, the policy outcome will be gridlock ($x^2 = 0$). Given these outcomes, the voter's incentive is to maximize her probability of selecting congruent politicians after the first period.

Conditional on the voting rule, politicians in the first period will maximize their utility given their type. A reduced version of the game tree is presented in Figure A1. The tree presents both politicians' strategies in the first period as well as the sum of first and second period payoffs following the electoral decision. The full derivation of the payoffs shown at each terminal node—as well as all possible type combinations, actions, policy outcomes, and electoral decisions—are presented in Table A1 at the end of this section.

To reduce notation, in the text that follows, a utility function $u_i(x_i^1 = 1, x_i^2 = 1; \beta_i, x_j^1 = 1, x_j^2 = 1)$ is abbreviated as $u_i(1, 1; \beta_i, 1, 1)$.

If both politicians are congruent, enacting policy $x^t = 1$ is strictly dominant as both politicians signal their positive type and achieve their highest policy payoff.

If the president is congruent and the legislature is divergent, then the executive always selects $x_E^1 = 1$. If the legislature selects $x_L^1 = 1$, then $x^1 = 1$ is enacted, both politicians are reelected and in the second period, the politicians select the policy that matches their type, which results in gridlock and a payoff of 0. The legislature's payoff is:

$$u_L(1, -1; \beta_L, 1, 1) = 2\beta_L - 1$$

If the legislature selects $x_L^1 = -1$ instead, then gridlock results and both politicians are replaced. The legislature's payoff is:

$$u_L(-1; \beta_L, 1) = \beta_L$$

The legislature would prefer to select $x_L^1 = 1$ when:

$$\begin{gathered} u_L(1, -1; \beta_L, 1, 1) > u_L(-1; \beta_L, 1) \\ 2\beta_L - 1 > \beta_L \\ \beta_L > 1 \end{gathered}$$

which occurs with probability $1 - \phi$ (see Def 2 in the main text).

If the president is divergent and the legislature is congruent, the legislature always selects $x_L^1 = 1$. If the executive selects $x_E^1 = 1$, then $x^1 = 1$ is enacted, both politicians are reelected and in the second period, the politicians select the policy that matches their type, which results in gridlock and a payoff of 0. If the executive selects $x_L^1 = -1$ instead, then gridlock results and both politicians are replaced. The executive's payoffs from these outcomes are:

$$u_E(1,-1;\beta_E,1,1) = 2\beta_E - 1$$

$$u_E(-1;\beta_E,1) = \beta_E$$

The executive would prefer to select $x_E^1 = 1$ when $\beta_E > 1$, which occurs with probability $1-\phi$. Note that this is the same condition as above.

Finally, **if both politicians are divergent**, the executive will follow the legislature's lead. If the legislature chooses $x_L^1 = 1$, then $x_E^1 = 1$ strictly dominates $x_E^1 = -1$. The opposite is true when the legislature selects $x_L^1 = -1$. Therefore, the legislature must choose between two different two-period payoffs:

$$u_L(1,-1;\beta_L,1,-1) = 2\beta_L$$

$$u_L(-1;\beta_L,-1) = \beta_L + 1$$

The legislature would prefer to select $x_L^1 = 1$ when $\beta_L > 1$, which occurs with probability $1-\phi$. Note that this is the same condition as above.

Given these strategies, we can now check to ensure it is **Bayes rational for the voter to follow her proposed voting rule**. The probability that both politicians are congruent conditional on seeing $x_1 = 1$ is weakly greater than the prior on replacing an incumbent with a challenger:

$$\begin{aligned}\Pr(\tau_E = C|x_1 = 1) &= \frac{\gamma\left[\pi\cdot 1 + (1-\pi)(1-\phi)\right]}{\gamma\left[\pi\cdot 1 + (1-\pi)(1-\phi)\right] + (1-\gamma)\left[\pi(1-\phi) + (1-\pi)(1-\phi)\right]} \\ &= \frac{\gamma - \gamma\phi(1-\pi)}{1-\phi(1-\gamma\pi)} \geq \gamma\end{aligned}$$

Similarly:

$$\begin{aligned}\Pr(\tau_L = C|x_1 = 1) &= \frac{\pi\left[\gamma\cdot 1 + (1-\gamma)(1-\phi)\right]}{\pi\left[\gamma\cdot 1 + (1-\gamma)(1-\phi)\right] + (1-\pi)\left[\gamma(1-\phi) + (1-\gamma)(1-\phi)\right]} \\ &= \frac{\pi - \pi\phi(1-\gamma)}{1-\phi(1-\gamma\pi)} \geq \pi\end{aligned}$$

The probability that both politicians are congruent conditional on seeing $x_1 = 0$ is less than the prior on replacing an incumbent with a challenger:

$$\begin{aligned}\Pr(\tau_E = C|x_1 = 0) &= \frac{\gamma(1-\pi)\phi}{\gamma(1-\pi)\phi + (1-\gamma)\pi\phi} \\ &= \frac{\gamma - \gamma\pi}{\gamma + \pi - 2\gamma\pi} < \gamma \ \text{ iff } \ \pi > \frac{1}{2}\end{aligned}$$

Similarly:

$$\begin{aligned}\Pr(\tau_L = C|x_1 = 0) &= \frac{\pi(1-\gamma)\phi}{\pi(1-\gamma)\phi + (1-\pi)\gamma\phi} \\ &= \frac{\pi - \gamma\pi}{\gamma + \pi - 2\gamma\pi} < \pi \ \text{ iff } \ \gamma > \frac{1}{2}\end{aligned}$$

As $\{\pi, \gamma\} > 1/2$ by assumption, the voter prefers to replace both incumbents when she sees gridlock.

Finally, it is trivial to show that the voter prefers to replace both incumbents conditional on seeing $x^1 = -1$ as this outcome only occurs in equilibrium when both politicians are divergent.

Thus, the voter will stick to her proposed voting rule and we have established that Proposition 1 is an equilibrium □

Having outlined the all relevant strategies and their associated cut points, we can now calculate the voter's expected welfare in the Constitutional regime as established in Equation 1. Let $\nu \in \{0, 1\}$ represent the voter's choice to respectively replace or retain a politician. Note that the voter's expected welfare when she replaces both politicians is given by:

$$\begin{aligned}u_V^2(\nu = 0, \nu = 0) &= \gamma\pi(1) + \gamma(1-\pi)(0) + (1-\gamma)\pi(0) + (1-\gamma)(1-\pi)(-1) \\ &= \gamma + \pi - 1\end{aligned}$$

Then, we can define her total expected welfare as:

$$
\begin{aligned}
W_C \equiv & \gamma\pi(2)+ \\
& \gamma(1-\pi)[\phi(\gamma+\pi-1)+(1-\phi)\cdot 1]+ \\
& (1-\gamma)\pi[\phi(\gamma+\pi-1)+(1-\phi)\cdot 1]+ \\
& (1-\gamma)(1-\pi)[\phi(-1+\gamma+\pi-1)+(1-\phi)\cdot 0] \\
& =\phi(\pi-2)+\pi-\gamma^2\pi\phi+\gamma(1+\phi+2\pi\phi-\pi^2\phi)
\end{aligned} \tag{A0}
$$

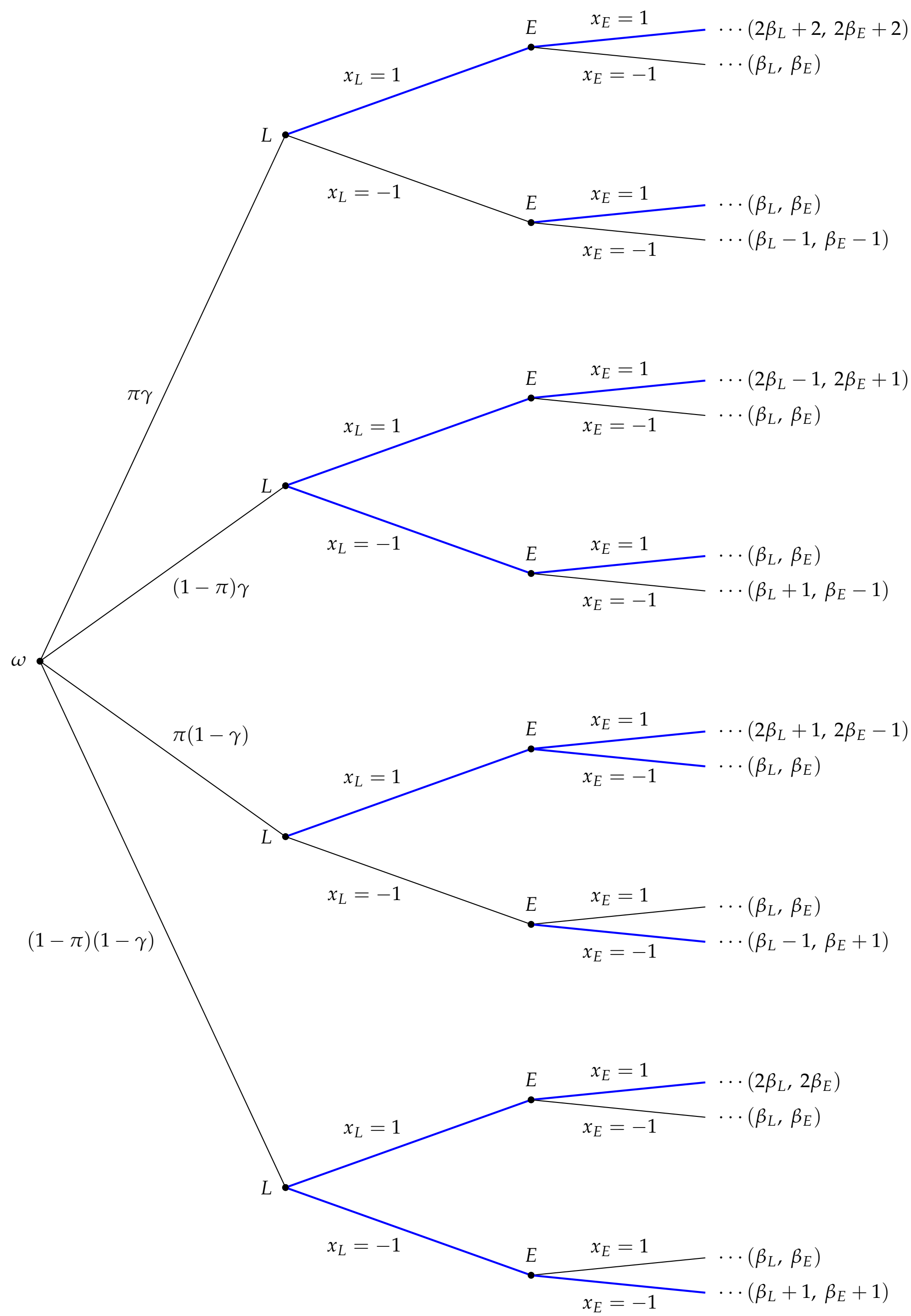

Figure A1: First period game tree and final payoffs following the voter's electoral decision and second period policy selections in the Constitutional Regime

Table A1: Payoffs for the Constitutional Regime

Type Combination	t_1 Action	t_1 Policy	t_1 Payoff	Voter's Electoral Decision	t_2 Action	t_2 Policy	t_2 Payoff	Total Payoff
$\tau_L = C,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = 1$	$x_2 = 1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L + 2$ $2\beta_E + 2$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1$	Replace Both				$\beta_L - 1$ $\beta_E - 1$
$\tau_L = D,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = 1$	$x_2 = 0$	β_L β_E	$2\beta_L - 1$ $2\beta_E + 1$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1$	Replace Both				$\beta_L + 1$ $\beta_E - 1$
$\tau_L = C,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = 1$	$x_2 = 0$	β_L β_E	$2\beta_L + 1$ $2\beta_E - 1$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1$	Replace Both				$\beta_L - 1$ $\beta_E + 1$
$\tau_L = D,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = -1$	$x_2 = -1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L$ $2\beta_E$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1$	Replace Both				$\beta_L + 1$ $\beta_E + 1$

A.2 Proofs for "Unilateral" Regime

To reduce notation, in the section that follows, a utility function $u_E((x_E^1 = 1, \alpha^1 = 1), (x_E^2 = 1, \alpha^2 = 2); \beta_E, \kappa, x_L^1 = 1, x_L^2 = 1)$ is abbreviated as $u_E((1,1),(1,1);\beta_i,\kappa 1,1)$.

Lemma 1. *In the second period, if the executive and legislature do not share types, then the executive passes his preferred policy unilaterally. Otherwise, the executive and legislature pass the policy they both prefer through legislation.*

Lemma 1. After the second period, the game ends. As such, there is no need for the politicians to signal. They select their most preferred action. When both politicians are congruent, they select $x_i^2 = 1$ and when they are divergent, they select $x_i^2 = -1$. Suppose the executive is congruent and the legislature is divergent. The legislature chooses its most preferred action, $x_L^2 = -1$. However, the executive may choose between $x_E^2 = 1, \alpha^2 = 0$ or $x_E^2 = 1, \alpha^2 = 1$:

$$u_E^2((1,0);\beta_E,\kappa,-1) = \beta_E$$

$$u_E^2((1,1);\beta_E,\kappa,-1) = \beta_E + 1 - \kappa$$

As $\kappa < 1$, the executive would always prefer to act unilaterally. The same logic follows when the legislature is congruent and the executive is divergent. □

Proposition 2. *(Unilateral Equilibrium) There exists an equilibrium in which the voter reelects both politicians after observing $x^1 = 1, \alpha = 0$ and replaces both politicians otherwise when $\alpha = 1$. She retains the executive and replaces the legislature when $x^{=}1, \alpha = 1$ and replaces the executive and retains the legislature when $x^{=} - 1, \alpha = 1$. Both politicians choose their type-preferred policy in the second period, and in the first period:*

a. If both politicians are congruent, they select policy $x_i^1 = 1$ and the executive selects $\alpha = 0$.

b. If $\tau_E = C$ and $\tau_L = D$ and:

- *$\beta_L > 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = 1, \alpha = 0$.*
- *$\beta_L \leq 1$, the legislature selects $x_L^1 = -1$ and the executive selects $x_E^1 = 1, \alpha = 1$.*

c. If $\tau_E = D$ and $\tau_L = C$ and:

- *$\beta_E > 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = 1, \alpha = 0$.*
- *$\beta_E \leq 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = -1, \alpha = 1$.*

d. If both politicians are divergent and:

- *$\beta_E > 1 - \kappa$ and $\beta_L > 1$, both politicians select $x_i^1 = 1$ and the executive selects $\alpha = 0$.*
- *$\beta_E > 1 - \kappa$ and $\beta_L \leq 1$, both politicians select $x_i^1 = -1$ and the executive selects $\alpha = 0$.*
- *$\beta_E \leq 1 - \kappa$ and $\beta_L > 2\gamma - 1$, the legislature selects $x_L^1 = 1$ and the executive selects $x_E^1 = -1, \alpha = 1$.*
- *$\beta_E \leq 1 - \kappa$ and $\beta_L \leq 2\gamma - 1$, both politicians select $x_i^1 = -1$ and the executive selects $\alpha = 0$.*

Proof of Proposition 2. I solve the game by backward induction.

In the second period, we have established politician behavior in Lemma 1. Given these outcomes, the voter's incentive is to maximize her probability of selecting congruent politicians after the first period.

Conditional on the voting rule, politicians in the first period will maximize their utility given their type. A reduced version of the game tree is presented in Figure A2. The tree presents both politicians' strategies in the first period as well as the sum of first and second period payoffs following the electoral decision. The full derivation of the payoffs shown at each terminal node—as well as all possible type combinations, actions, policy outcomes, and electoral decisions—are presented in Table A2 and Table A3 at the end of this section.

If both politicians are congruent, enacting policy $x^t = 1$ is strictly dominant as both politicians signal their positive type and achieve their highest policy payoff. As unilateral action is costly, the executive selects $\alpha^t = 0$ in both periods.

If the president is congruent and the legislature is divergent, then the executive always selects $x_E^1 = 1$. If the legislature selects $x_L^1 = 1$, then the executive selects $x_E^1 = 1, \alpha^1 = 0$ and $x^1 = 1$ is enacted. The voter reelects both politicians and in the second period, the executive selects $x_E^2 = 1, \alpha^2 = 1$. If the legislature selects $x_L^1 = -1$, it is strictly dominant for the executive to select $x_E^1 = 1, \alpha^1 = 1$. The executive is retained and the legislature is replaced. If the new legislature is congruent, the executive selects $x_E^2 = 1, \alpha^2 = 0$; if the new legislature is divergent, the executive selects $x_E^2 = 1, \alpha^2 = 1$. At the outset, the legislature will choose $x_L^1 = 1$ when:

$$u_L(1, -1; \beta_L, (1,0), (1,1) = 2\beta_L - 2 > \beta_L - 1 = u_L(-1; \beta_L, (1,1))$$

$$\beta_L > 1$$

which occurs with probability $1 - \phi$.

If the president is divergent and the legislature is congruent, the legislature always selects $x_L^1 = 1$.[13] If the executive selects $x_E^1 = 1$, he also selects $\alpha^1 = 0$ and $x^1 = 1$ is enacted. Both politicians are reelected and in the second period, the executive selects $x_E^2 = -1, \alpha^2 = 1$. If the executive selects $x_E^1 = -1$, he also selects $\alpha^1 = 1$. The executive is replaced, the legislature is retained, and the new executive dictates the second period policy. In the second period, the legislature always selects $x_L^2 = 1$. With probability γ, the challenger is congruent and chooses $x_C^2 = 1, \alpha^2 = 0$. With probability $1 - \gamma$, the challenger is divergent and chooses $x_C^2 = -1, \alpha^2 = 1$. The key decision is the incumbent executive's choice in the first period following the legislature's decision of $x_L^1 = 1$. The executive

[13]This is true because $\beta_i < \bar{\beta} < 1 + \pi + \pi\kappa$ by definition. If this were not true, the congruent legislature would choose $x_L^1 = -1$ and the executive would choose $x_E^1 = 1, \alpha = 1$. I rule out this possibility to concentrate on the cases in which unilateral action is an informative signal. If this condition did not hold, then the model would break down.

chooses $x_E^2 = 1, \alpha^2 = 0$ when:

$$u_E((1,0),(-1,1);\beta_E,\kappa,1,1,) = 2\beta_E - \kappa > \beta_E + 1 - \kappa = u_E((-1,1);\beta_E,\kappa,1)$$
$$\beta_E > 1$$

which occurs with probability $1 - \phi$.

Finally, **if both politicians are divergent** and the legislature selects $x_L^1 = 1$, the executive chooses between $x_E^1 = 1, \alpha = 0$ or $x_E^1 = -1, \alpha = 1$. If he chooses the former, both politicians are reelected and in the second period, they both select $x_i^2 = -1$. If he chooses the latter, then the legislature is retained, the executive is replaced, and the second period outcome depends on the executive challenger's type. If he is divergent, he chooses $x_C^2 = -1, \alpha = 0$. If he is congruent, he selects $x_C^1 = 1, \alpha = 1$. Conditional on the legislature selecting $x_L^1 = 1$, the executive chooses $x_E^1 = 1, \alpha = 0$ over $x_E^1 = -1, \alpha = 1$ when:

$$u_E((1,0),(-1,0);\beta_E,\kappa,1,-1,) = 2\beta_E > \beta_E + 1 - \kappa = u_E((-1,1);\beta_E,\kappa,1)$$
$$\beta_E > 1 - \kappa$$

which occurs with probability $1 - \eta$ (see Definition 4 in the main text). Note that $f(\beta)$ is strictly increasing, which allows us to state that $\eta < \phi$. If the legislature selects $x_L^1 = -1$, the executive selects $x_E^1 = -1, \alpha = 0$. Conditional on $\beta_E > 1$, the legislature will choose $x_L^1 = 1$ when:

$$u_L(1,-1;\beta_E,(1,0),(-1,0)) = 2\beta_L > \beta_L + 1 = u_L(-1;\beta_L,(-1,0))$$
$$\beta_L > 1$$

Conditional on $\beta_E \leq 1$, the legislature will choose $x_L^1 = 1$ when:

$$u_L(1,-1;\beta_E,(-1,1),(...)) = 2\beta_L + 2 - 2\gamma > \beta_L + 1 = u_L(-1;\beta_L,(-1,0))$$
$$\beta_L > 2\gamma - 1$$

which occurs with probability $1 - \lambda$ (see Definition 4 in the main text).

Given these strategies, we can now check to ensure it is **Bayes rational for the voter to follow her proposed voting rule**. First, consider the cases in which the president does not act unilaterally. The probability that both politicians are congruent conditional on seeing $x_1 = 1, \alpha = 0$ is weakly greater than the prior on replacing an incumbent with a challenger:

$$\Pr(\tau_E = C | x_1 = 1, \alpha = 0) =$$
$$\frac{\gamma \left[\pi \cdot 1 + (1-\pi)(1-\phi)\right]}{\gamma \left[\pi \cdot 1 + (1-\pi)(1-\phi)\right] + (1-\gamma)\left[\pi(1-\phi) + (1-\pi)(1-\phi)(1-\eta)\right]} \geq \gamma$$

Similarly:

$$\Pr(\tau_L = C | x_1 = 1, \alpha = 0) =$$
$$\frac{\pi \left[\gamma \cdot 1 + (1-\gamma)(1-\phi)\right]}{\pi \left[\gamma \cdot 1 + (1-\gamma)(1-\phi)\right] + (1-\pi)\left[\gamma(1-\phi) + (1-\gamma)(1-\phi)(1-\eta)\right]} \geq \pi$$

Trivially, when $x_1 = -1$ and $\alpha = 0$, the voter can infer both politicians are divergent with certainty.

Now consider the probability that both politicians are congruent conditional on seeing $x_1 = 1, \alpha = 1$. Because the divergent executive never enacts $x_1 = 1$ unilaterally, the voter can be certain he is congruent. Additionally, if the executive enacts $x_1 = 1$ unilaterally, he does so because the legislature has not given him the option to enact $x_1 = 1$ legislatively. Because unilateral action is costly, the executive never chooses $x_1 = 1, \alpha = 1$ when the legislature is congruent, therefore, she can infer that the legislature must be divergent. As such, she retains the executive and dismisses the legislature.

Finally, what does the voter believe conditional on seeing $x_1 = -1, \alpha = 1$? First, only a divergent executive enacts policy $x_1 = -1$ unilaterally, and as such, the executive must be divergent. However, a divergent executive may choose $x_1 = -1, \alpha = 1$ when the legislature is both congruent and divergent. Therefore, the voter's posterior is:

$$\begin{aligned}\Pr(\tau_L = C | x_1 = -1, \alpha = 1) &= \frac{\pi(1-\gamma)\phi}{\pi(1-\gamma)\phi + (1-\pi)(1-\gamma)\eta(1-\lambda)} \\ &= \frac{\pi\phi}{\pi\phi + \eta(1-\lambda)(1-\pi)} > \pi\end{aligned}$$

Thus, the voter will stick to her proposed voting rule and we have established that Proposition 2 is an equilibrium □

Having outlined the all relevant strategies and their associated cut points, we can now calculate the voter's expected welfare in the Unilateral regime as established in Equation 2. Note that the voter's expected welfare when she replaces both politicians is given by:

$$\begin{aligned}u_V^2(\nu = 0, \nu = 0) &= \gamma\pi(1) + \gamma(1-\pi)(1) + (1-\gamma)\pi(-1) + (1-\gamma)(1-\pi)(-1) \\ &= 2\gamma - 1\end{aligned}$$

Then, we can define her total expected welfare as:

$$\begin{aligned}W_C \equiv &\gamma\pi(2)+ \\ &\quad \gamma(1-\pi)[\phi(1+\pi\cdot 1 + (1-\pi)\cdot 1) + (1-\phi)(1+1)]+ \\ &\quad (1-\gamma)\pi[\phi(-1+\gamma\cdot 1 + (1-\gamma)\cdot(-1)) + (1-\phi)(1-1)]+ \\ &\quad (1-\gamma)(1-\pi)[(1-\phi)(1-\eta)\cdot 0 + \phi(1-\eta)(2\gamma-1)+ \\ &\quad \eta(1-\lambda)(-1+\gamma\cdot 1+(1-\gamma)\cdot(-1)) + \eta\lambda(-1+2\gamma-1)] \\ =&2[\gamma - \phi + 2\gamma\phi - \gamma^2\phi - \eta + 2\gamma\eta - \gamma^2\eta + \phi\eta - 2\gamma\phi\eta + \gamma^2\phi\eta + (1-\gamma)^2(1-\phi)\eta\pi)]\end{aligned} \tag{A1}$$

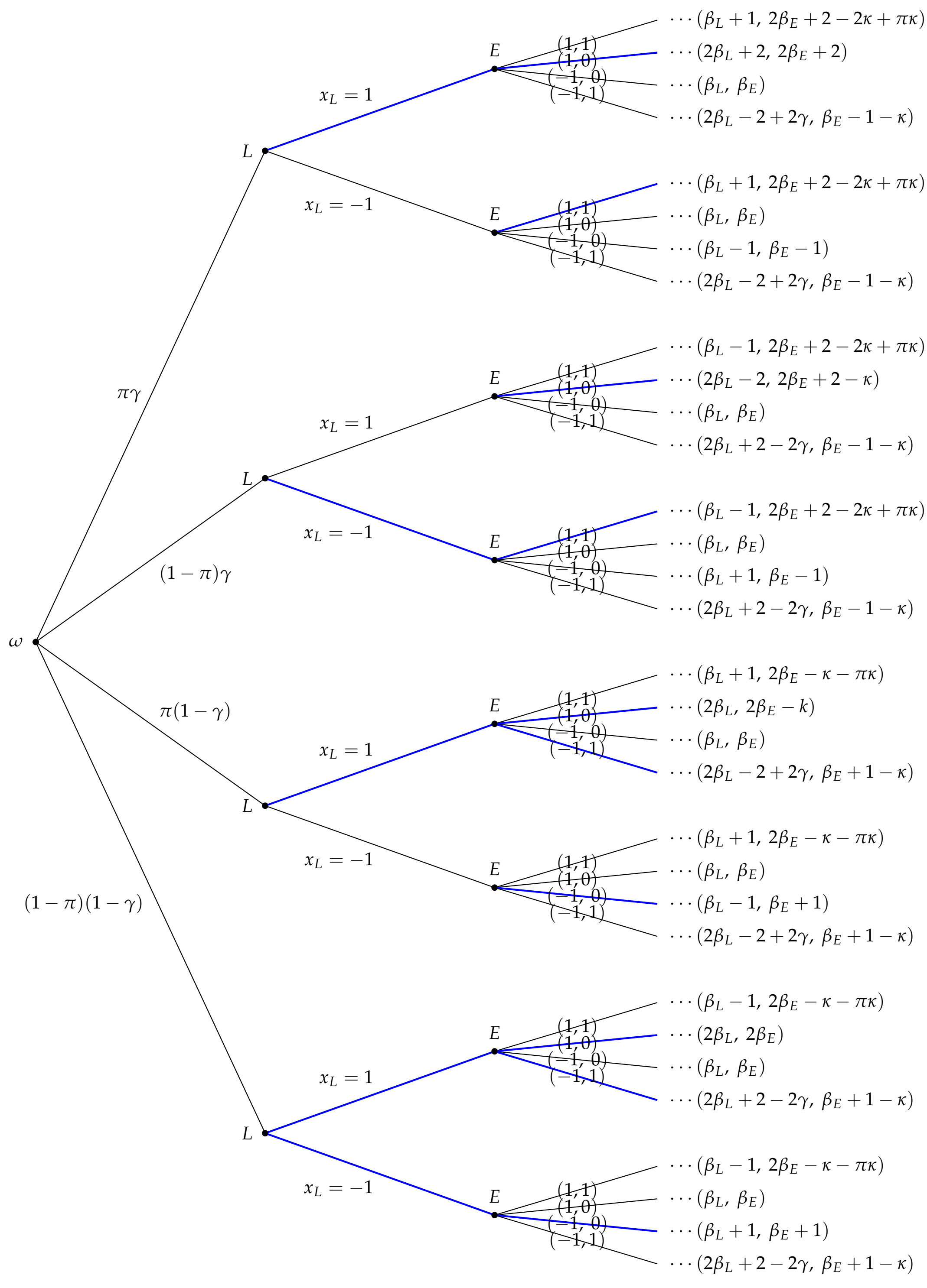

Figure A2: The truncated game free for the Unilateral regime. The tree represents decisions in the first period policymaking game of complete information and presents payoffs for the full, two-period game following Lemma 1.

Table A2: Payoffs for the Unilateral Regime, Part 1

Type Combination	t_1 Action	t_1 Policy	t_1 Payoff	Voter's Electoral Decision	t_2 Action	t_2 Policy	t_2 Payoff	Total Payoff
$\tau_L = C,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	$\beta_L + 1$ $2\beta_E + 2 - 2\kappa + \pi\kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = 1, \alpha = 0$	$x_2 = 1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L + 2$ $2\beta_E + 2$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1$	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot 1 + (1 - \gamma)(-1)$	$2\beta_L - 2 + 2\gamma$ $\beta_E - 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	$\beta_L + 1$ $2\beta_E + 2 - 2\kappa + \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1$	Replace Both				$\beta_L - 1$ $\beta_E - 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1 - \kappa$	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot 1 + (1 - \gamma)(-1)$	$2\beta_L - 2 + 2\gamma$ $\beta_E - 1 - \kappa$
$\tau_L = D,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	$\beta_L - 1$ $2\beta_E + 2 - 2\kappa + \pi\kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = 1, \alpha = 1$	$x_2 = 1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	$2\beta_L - 2$ $2\beta_E + 2 - \kappa$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot (-1) + (1 - \gamma) \cdot 1$	$2\beta_L + 2 - 2\gamma$ $\beta_E - 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	$\beta_L - 1$ $2\beta_E + 2 - 2\kappa + \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1$	Replace Both				$\beta_L + 1$ $\beta_E - 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot (-1) + (1 - \gamma) \cdot 1$	$2\beta_L + 2 - 2\gamma$ $\beta_E - 1 - \kappa$

Table A3: Payoffs for the Unilateral Regime, Part 2

Type Combination	t_1 Action	t_1 Policy	t_1 Payoff	Voter's Electoral Decision	t_2 Action	t_2 Policy	t_2 Payoff	Total Payoff
$\tau_L = C,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha \in \{0,1\}$	$x_2 = -1$	$\beta_E + \pi(1-\kappa) + (1-\pi) \cdot 1$	$\beta_L + 1$ $2\beta_E - \kappa - \pi\kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = -1, \alpha = 1$	$x_2 = -1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	$2\beta_L$ $2\beta_E - \kappa$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot 1 + (1-\gamma) \cdot (-1)$	$2\beta_L - 2 + 2\gamma$ $\beta_E + 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha \in \{0,1\}$	$x_2 = -1$	$\beta_E + \pi \cdot 1 + (1-\pi)(1-\kappa)$	$\beta_L + 1$ $2\beta_E - \kappa - \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1$	Replace Both				$\beta_L - 1$ $\beta_E + 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot 1 + (1-\gamma) \cdot (-1)$	$2\beta_L - 2 + 2\gamma$ $\beta_E + 1 - \kappa$
$\tau_L = D,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha \in \{0,1\}$	$x_2 = -1$	$\beta_E + \pi(1-\kappa) + (1-\pi) \cdot 1$	$\beta_L - 1$ $2\beta_E - \kappa - \pi\kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = -1, \alpha = 0$	$x_2 = -1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L$ $2\beta_E$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot (-1) + (1-\gamma) \cdot 1$	$2\beta_L + 2 - 2\gamma$ $\beta_E + 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha \in \{0,1\}$	$x_2 = -1$	$\beta_E + \pi \cdot (1-\kappa) + (1-\pi) \cdot 1$	$\beta_L - 1$ $2\beta_E - \kappa - \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace Both				β_L β_E
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1$	Replace Both				$\beta_L + 1$ $\beta_E + 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot (-1) + (1-\gamma) \cdot 1$	$2\beta_L + 2 - 2\gamma$ $\beta_E + 1 - \kappa$

A.3 Proofs for the Welfare Comparison

Proposition 3 *When $\pi < \tilde{\pi}$, the voter strictly prefers the Unilateral regime. Furthermore, $\tilde{\pi}$ is increasing in γ and ϕ and decreasing in η.*

Proposition 3. To determine when voter welfare is higher under Unilateral regime, set $W_C < W_U$:

$$\begin{aligned}&\phi(\pi-2)+\pi-\gamma^2\pi\phi+\gamma(1+\phi+2\pi\phi-\pi^2\phi) < \\ &2[\gamma-\phi+2\gamma\phi-\gamma^2\phi-\eta+2\gamma\eta-\gamma^2\eta+\phi\eta-2\gamma\phi\eta+\gamma^2\phi\eta+(1-\gamma)^2(1-\phi)\eta\pi)]\end{aligned}$$

and solve for π. The relevant root of the equation on the interval $[0.5, 1]$ is:

$$\begin{aligned}\pi < -\frac{1}{2\gamma\phi}\Big[&-1-\phi-2\gamma\phi+\gamma^2\phi+2\eta-4\gamma\eta+2\gamma^2\eta-2\phi\eta+4\gamma\phi\eta-2\gamma^2\phi\eta+ \\ &(\gamma\phi(-\gamma-3\gamma\phi+2\gamma^2\phi+2\eta-4\gamma\eta+2\gamma^2\eta-2\phi\eta+4\gamma\phi\eta-2\gamma^2\phi\eta)+ \\ &[1+\phi+2\gamma\phi-\gamma^2\phi-2\eta+4\gamma\eta-2\gamma^2\eta+2\phi\eta-4\gamma\phi\eta+2\gamma^2\phi\eta]^2)^{1/2}\Big] \equiv \tilde{\pi}\end{aligned}$$

The function, $\tilde{\pi}$, divides the parameter space into two regions on $[0.5, 1] \times [0.5, 1]$. For values of $\pi < \tilde{\pi}$, the Unilateral regime provides higher voter welfare than the Constitutional regime. When $\pi > \tilde{\pi}$ the Constitutional regime provides higher voter welfare. Increasing (decreasing) $\tilde{\pi}$, then, broadens (shrinks) the conditions under which the voter would prefer the Unilateral (Constitutional) regime.

Due to the numerical complexity of the first derivatives of $\tilde{\pi}$ with respect to the parameters, I use numerical methods to solve for the global minimum and maximum points with respect to the parameter bounds.

$$\frac{\partial \tilde{\pi}}{\partial \gamma} \in [0.71, 1] > 0$$
$$\frac{\partial \tilde{\pi}}{\partial \phi} \in [0, 0.25] \geq 0$$
$$\frac{\partial \tilde{\pi}}{\partial \eta} \in [-0.25, 0] \leq 0$$

$\tilde{\pi}$ is increasing in γ and ϕ and decreasing in η As the executive is more likely to be congruent or as the potential for gridlock increases, the regions of the parameter space in which the voter would prefer the Unilateral regime expand. As the executive is more likely to enact $x^1 = -1$ when divergent, the regions of the parameter space in which the voter would prefer the Unilateral regime contract. □

B Model Extension

B.1 Revealed Actions

In the baseline model, the voter never observes her agent's individual policy selections. The nature of the information environment requires that, in equilibrium, she dismiss both politicians when she observes gridlock—despite the fact that one of them is surely congruent. Unilateral action increases voter welfare when congruent presidents enact the voter's favorite policy over gridlock and signal information about types, which allows the voter to refine her electoral rule. In this section, I allow the voter to observe all actions taken by the politicians before the election. I show that the Unilateral regime provides higher welfare under broader conditions than in the baseline model. These gains primarily come from the fact that a more policy-motivated, divergent executive in the Unilateral regime can choose gridlock (rather than unilaterally enacting $x^1 = 1$) and still retain office. Although he ultimately enacts the voter's least favorite policy in the second period, this improves the voter's welfare by giving the executive an "off ramp," in which

Table B1: Notation

ρ	probability $\beta_E \leq \pi$
ζ	probability $\beta_E \leq \pi\kappa$
ψ	probability $\beta_L \leq 2 - 2\gamma$

he does not need to select the divergent action in the first period. In contrast, revealing actions does not change the cutpoints in the Constitutional regime, rather, it only improves electoral selection when politicians have different types.

Although actions are revealed, the complexity of the model actually increases because the politicians have additional cut-points in the Unilateral regime dependent on their office-holding benefit, β_E, in the Unilateral regime. Table B1 presents additional notation that will be introduced in this section.

B.1.1 Model Setup

Suppose that in both regimes, after policy is implemented but before the election, the voter observes x_i^t, the politicians' individual policy inputs. When both agents choose the same action, the voter does not learn anything more than she could infer in the baseline model from the policy change. However, revealing actions leads to new information both in gridlock—where previously the voter only learned that politicians disagreed, but not how—and when the executive acts unilaterally—where previously the voter could infer the executive's action but not the legislatures.

Given this new informational environment, the voter can simplify her voting rule—retain politicians who choose $x_i^1 = 1$ and replace politicians who choose $x_i^1 = -1$.

B.1.2 The Constitutional Regime

In the Constitutional regime, action revelation is only relevant when gridlock occurs. When gridlock does not occur, say, when $x_1 = 1$, then the voter can conclude that both actors chose $x_i^1 = 1$ with our without revelation. When gridlock occurs, however, then the voter observes which politician chose the congruent (divergent) action. However, revelation does not improve payoffs for the actor choosing the divergent action.

As an example, suppose the executive is divergent and the legislature is congruent. If both agents choose $x_i^1 = 1$, then they are retained whether or not their actions are revealed. If the legislature chooses $x_L = 1$ and the executive chooses $x_E = -1$ and actions are *not* revealed, then both agents are replaced. If actions are revealed, then the legislature is retained and the executive is replaced. Thus, action revelation does not provide any additional incentive to the divergent executive to choose the gridlock-causing policy. A similar argument applies when the types are reversed.

Table B2, presents payoff calculations for the politicians across all type and action combinations. Figure B1 presents the truncated game tree. When **both politicians are congruent**, they continue to choose $x_i^1 = 1$. Notice that while gridlock payoffs have changed, they change for the politician *not* causing gridlock. For example, **when the legislature is divergent and the executive is congruent**, the executive always selects $x_E^1 = 1$. Thus, the legislature must choose between $x_L^1 = 1$—which leads to her least favorite policy, reelection, and second period gridlock—or $x_L^1 = -1$, which leads to first period gridlock and replacement. In the latter case, the executive nets a higher payoff, but the decision is not his make. Rather, the legislature will choose $x_L^1 = 1$ when:

$$u_L(1, -1; \beta_L, 1, 1) = 2\beta_L - 1 > \beta_L = u_L(-1; \beta_L, 1)$$
$$\beta_L > 1$$

Notice that this is the same condition as in the baseline model. A similar logic holds for the case when **when the legislature is congruent and the executive is divergent**. In fact, the addition of action revelation does nothing to change the politicians' incentives except **when both politicians are divergent** and the legislature chooses $x_L^1 = -1$. In the baseline model, this choice forced the executive to also choose the same action. Now, however, the executive can choose $x_E^1 = 1$ to cause gridlock and retain office. He decides to take this action when:

$$u_E(1, -1; \beta_E, -1, ...) = 2\beta_E + 1 - \pi > \beta_E + 1 = u_E(-1; \beta_E, -1)$$
$$\beta_E > \pi$$

which occurs with probability $1 - \rho$. Because $\pi < 1$, we can state that $\rho < \phi$. If the legislature chooses $x_L^1 = 1$ instead, then it is strictly dominant for the executive to choose the same policy. The executive's new choice creates an additional complication for the legislature. When $\beta_E > \pi$, then it is strictly dominant for the legislature to choose $x_L^1 = 1$. If $\beta_E \leq \pi$, then the legislature can choose between either option, choosing $x_L^1 = 1$ when $\beta_L > 1$.

Given these strategies, does the voter follow the new voting rule (reelect politicians who choose $x_i^1 = 1$ and replace politicians that choose $x_i^1 = -1$)? Following Bayes Rule, her belief conditional on observing the executive choosing $x_i^1 = 1$:

$$\begin{aligned}\Pr(\tau_E = C | x_E^1 = 1) &= \frac{\gamma}{\gamma + (1-\gamma)[\pi(1-\phi) + (1-\pi)[(1-\rho) + \rho(1-\phi)]]} \\ &= \frac{\gamma}{1 - \phi(1-\gamma)(\pi - \pi\rho + \rho)} > \gamma\end{aligned}$$

Similarly:

$$\begin{aligned}\Pr(\tau_L = C | x_E^1 = 1) &= \frac{\pi}{\pi + (1-\pi)[\gamma(1-\phi) + (1-\pi)[(1-\rho) + \rho(1-\phi)]]} \\ &= \frac{\pi}{1 - \phi(1-\pi)(\gamma - \gamma\rho + \rho)} > \pi\end{aligned}$$

Trivially, congruent politicians never choose $x_i^1 = -1$. If the voter observes this action, she can conclude with certainty the politician is divergent, in which case, she would want to replace him.

From the voter's perspective, her welfare is unchanged save for when both politicians are divergent.

$$
\begin{aligned}
W_C(\tau_E = D, \tau_E = D) &= (1-\rho)(1-1) + \rho[(1-\phi)(1-1) + \phi(-1+\gamma+\pi-1) \\
&= \rho\phi(\gamma+\pi-2)
\end{aligned}
$$

Recall from Equation A0, that when both politicians are divergent, the voter's expected utility is:

$$\phi(\gamma+\pi-2) \leq \rho\phi(\gamma+\pi-2)$$

as $\rho \in (0,1)$ and the term $(\gamma+\pi-2) \leq 0$. As expected, revealing actions in the Constitutional regime increases expected voter welfare over the baseline model, but only when both politicians are divergent. It does not change the decision-making process when only one agent is divergent. The full welfare equation is given by:

$$
\begin{aligned}
W_C \equiv& \gamma\pi(2) + \\
&\gamma(1-\pi)[\phi(\gamma+\pi-1) + (1-\phi)\cdot 1] + \\
&(1-\gamma)\pi[\phi(\gamma+\pi-1) + (1-\phi)\cdot 1] + \\
&(1-\gamma)(1-\pi)[\rho\phi(-1+\gamma+\pi-1) + (1-\phi)\cdot 0]
\end{aligned}
\tag{B0}
$$

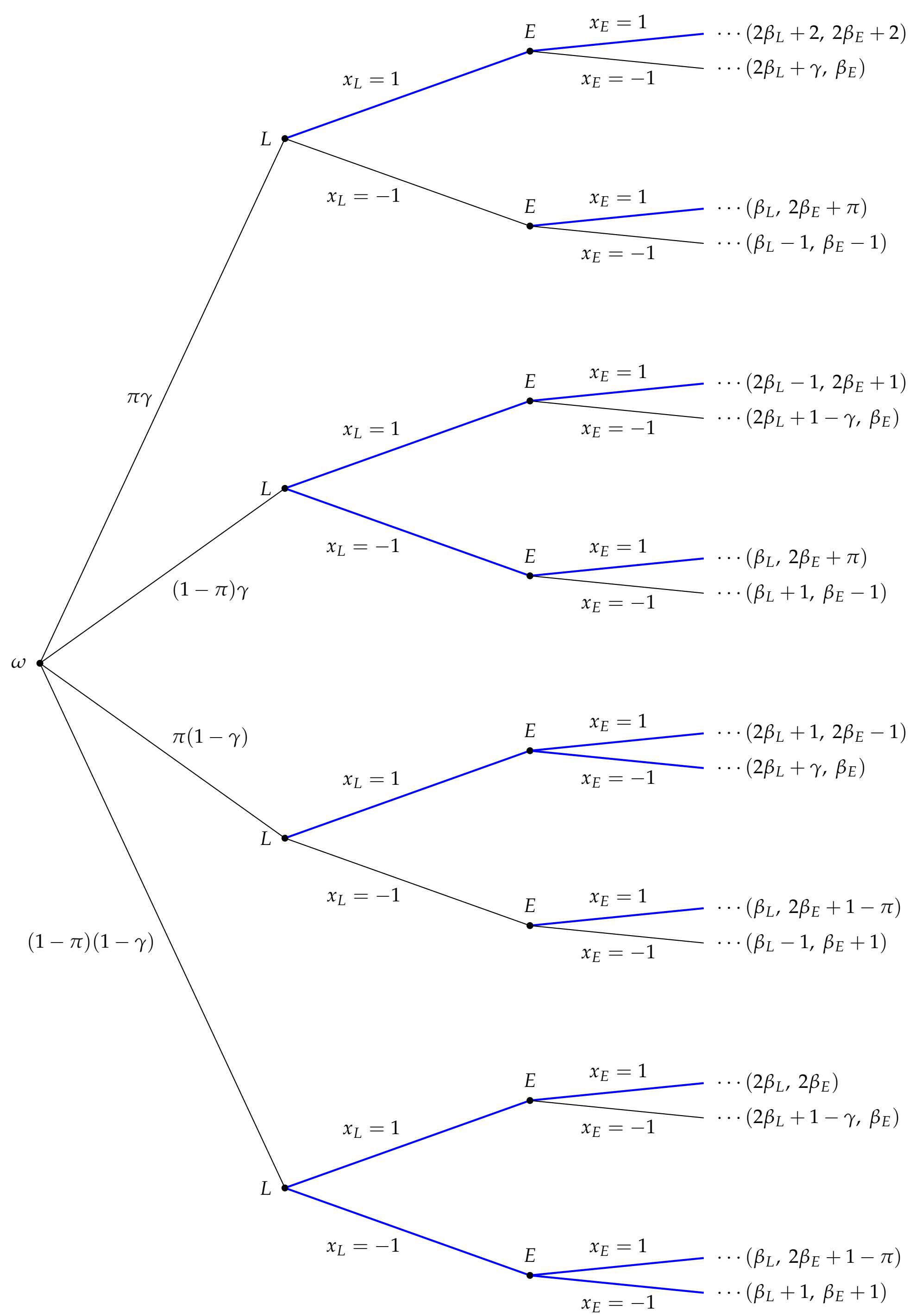

Figure B1: First period game tree and final payoffs following the voter's electoral decision and second period policy selections in the Constitutional Regime with revealed actions

Table B2: Payoffs for the Constitutional Regime with Revealed Actions

Type Combination	t_1 Action	t_1 Policy	t_1 Payoff	Voter's Electoral Decision	t_2 Action	t_2 Policy	t_2 Payoff	Total Payoff
$\tau_L = C,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = 1$	$x_2 = 1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L + 2$ $2\beta_E + 2$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1, 1\}$	$x_2 \in \{0, 1\}$	$\beta_L + \gamma \cdot 1 + (1 - \gamma)(0)$	$2\beta_L + \gamma$ β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1$	$x_2 \in \{0, 1\}$	 $\beta_E + \pi \cdot 1 + (1 - \pi) \cdot 0$	β_L $2\beta_E + \pi$
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1$	Replace Both				$\beta_L - 1$ $\beta_E - 1$
$\tau_L = D,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = 1$	$x_2 = 0$	β_L β_E	$2\beta_L - 1$ $2\beta_E + 1$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1, 1\}$	$x_2 \in \{-1, 0\}$	$\beta_L + \gamma \cdot 0 + (1 - \gamma) \cdot 1$	$2\beta_L + 1 - \gamma$ β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1$	$x^2 \in \{0, 1\}$	 $\beta_E + \pi \cdot 1 + (1 - \pi) \cdot 0$	β_L $2\beta_E + \pi$
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1$	Replace Both				$\beta_L + 1$ $\beta_E - 1$
$\tau_L = C,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = -1$	$x_2 = 0$	β_L β_E	$2\beta_L + 1$ $2\beta_E - 1$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1, 1\}$	$x_2 \in \{0, 1\}$	$\beta_L + \gamma \cdot 1 + (1 - \gamma) \cdot 0$	$2\beta_L + \gamma$ β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = -1$	$x_2 \in \{-1, 0\}$	 $\beta_E + \pi \cdot 0 + (1 - \pi) \cdot 1$	β_L $2\beta_E + 1 - \pi$
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1$	Replace Both				$\beta_L - 1$ $\beta_E + 1$
$\tau_L = D,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = -1$	$x_2 = -1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L$ $2\beta_E$
	$x_L^1 = 1$ $x_E^1 = -1$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1, 1\}$	$x_2 \in \{-1, 0\}$	$\beta_L + \gamma \cdot 0 + (1 - \gamma) \cdot (-1)$	$2\beta_L + 1 - \gamma$ β_E
	$x_L^1 = -1$ $x_E^1 = 1$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = -1$	$x_2 \in \{-1, 0\}$	 $\beta_E + \pi \cdot 0 + (1 - \pi) \cdot 1$	β_L $2\beta_E + 1 - \pi$
	$x_L^1 = -1$ $x_E^1 = -1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1$	Replace Both				$\beta_L + 1$ $\beta_E + 1$

B.1.3 The Unilateral Regime

In the Unilateral regime, action revelation is relevant when gridlock occurs or when the executive selects unilateral action. As in the Constitutional regime, absent gridlock and unilateral action, the voter does not learn any additional information from action revelation. From gridlock, she learns the same information as in the Constitutional regime. When unilateral action is chosen in the baseline model, the voter can infer the executive's policy decision but must imperfectly update about the legislator's choice. Recall that when the executive enacts $x^1 = 1$ unilaterally, the voter dismisses the legislature—which is always the welfare enhancing choice. When $x^1 = -1$, the voter retains the legislature, however, this leads to errors because a divergent executive will sometimes choose $x^1 = -1, \alpha = 1$ when the legislature is divergent. When actions are revealed, however, the voter can see the legislature's proposal, which changes the strategic choices of the politicians.

Tables B3 and B4 present payoff calculations for the politicians across all type and action combinations. Figure B3 presents the truncated game tree. When **both politicians are congruent**, they continue to select $x_i^t = 1$. When **the legislature is divergent and the executive is congruent**, it is now strictly dominant for the legislature to select $x_L^1 = -1$ and for the executive to select $x_E^1 = 1, \alpha^1 = 1$. The legislature is replaced and in the second period, the executive enacts $x_2 = 1$, legislatively if the new legislature is congruent and unilaterally if the legislature is divergent.

When **the legislature is congruent and the executive is divergent**, if the legislature selects $x_L^1 = 1$, then the executive chooses between $x_E^1 = 1, \alpha = 0$ and $x_E^1 = -1, \alpha = 1$. He chooses to pool with congruent types when:

$$u_E((1,0),(-1,1);\beta_E,1,1) = 2\beta_E - \kappa > \beta_E + 1 - \kappa = u_E((-1,1);\beta_E,1)$$

$$\beta_E > 1$$

which occurs with probability $1-\phi$. If, on the other hand, the legislature were to select $x_L^1 = -1$, then the executive would choose between $x_E^1 = 1, \alpha = 0$ and $x_E^1 = -1, \alpha = 0$. He chooses the congruent policy when:

$$u_E((1,0),(-1,\alpha^2);\beta_E,-1,x_C^2) = 2\beta_E + 1 - \pi\kappa > \beta_E + 1 = u_E((-1,0);\beta_E,-1)$$
$$\beta_E > \pi\kappa$$

which I define as occurring with probability $1-\zeta$ given that:

$$\zeta \equiv \int_0^{\pi\kappa} f(\beta)d\beta$$

Notice that when $\beta_E \in (\pi\kappa, 1)$, the legislature would actually prefer the divergent policy:

$$u_L(-1;\beta_E,(1,0)) = \beta_L > 2\beta_L - 2 + 2\gamma = u_L(1;\beta_E,(-1,0))$$
$$\beta_L > 2 - 2\gamma$$

which I define as occurring with probability $1-\psi$ given that:

$$\psi \equiv \int_0^{2-2\gamma} f(\beta)d\beta$$

Finally, when **both politicians are divergent**, suppose the legislature selects $x_L^1 = 1$. Then the executive chooses between $x_E^1 = 1, \alpha = 0$ and $x_E^1 = -1, \alpha = 1$. He chooses to pool with congruent types when:

$$u_E((1,0),(-1,0);\beta_E,1,-1) = 2\beta_E > \beta_E + 1 - \kappa = u_E((-1,1);\beta_E,1)$$
$$\beta_E > 1 - \kappa$$

which occurs with probability $1-\eta$. If, on the other hand, the legislature were to select $x_L^1 = -1$, then the executive would choose between $x_E^1 = 1, \alpha = 0$ and $x_E^1 = -1, \alpha = 0$.

He chooses the congruent action when:

$$u_E((1,0),(-1,\alpha^2);\beta_E,-1,x_L^2) = 2\beta_E + 1 - \pi\kappa > \beta_E + 1 = u_E((-1,0);\beta_E,-1)$$
$$\beta_E > \pi\kappa$$

Notice how the existence of action revelation incentives the president to select gridlock over his favorite policy when he is moderately office motivated. This is a key source of welfare gain in the unilateral regime. Conditional on the value of β_E and β_L, the legislature will choose between $x_L^1 = 1$ or $x_L^1 = -1$. However, the new payoff structure poses a problem of ordinality. If $\beta_E > 1 - \kappa$ and the legislature chooses $x_L^1 = 1$, then the executive chooses $x_E^1 = 1, \alpha = 0$. If, on the other hand, the legislature chooses $x_L^1 = -1$, it is unclear what the executive would select. If $\pi\kappa > 1 - \kappa$, the executive selects $x_E^1 = 1, \alpha = 0$ and the legislature would strictly prefer to select $x_L^1 = 1$. If $\pi\kappa < 1 - \kappa$ then the executive selects $x_E^1 = -1, \alpha = 0$ and the legislature may still prefer to select $x_L^1 = -1$ if $\beta_L < 1$. I will focus on the case in which $\pi\kappa > 1 - \kappa$ (the reverse case yields similar results).

To recap, if $\beta_E > \pi\kappa > 1 - \kappa$, the legislature strictly prefers to select $x_L^1 = 1$ and the executive selects $x_E^1 = 1, \alpha = 0$ as:

$$u_L(1,-1;\beta_L,(1,0),(-1,0)) = 2\beta_L > \beta_L = u_L(-1;\beta_L,(1,0))$$
$$\beta_E > \pi\kappa$$

If $\beta_E \in (1-\kappa, \pi\kappa)$, then the legislature selects between $x_L^1 = 1$ (in which case the executive selects $x_E^1 = 1, \alpha = 0$) and $x_L^1 = -1$ (in which case the executive selects $x_E^1 = -1, \alpha = 0$). Given this tradeoff, the legislature will select $x_L^1 = 1$ if:

$$u_L(1,-1;\beta_L,(1,0),(-1,0)) = 2\beta_L > \beta_L + 1 = u_L(-1;\beta_L,(-1,0))$$
$$\beta_L > 1$$

which occurs with probability $1 - \phi$. Finally, if $\beta_E < 1 - \kappa$, the legislature chooses between

$x_L^1 = 1$ (in which case the executive selects $x_E^1 = -1, \alpha = 1$) and $x_L^1 = -1$ (in which case the executive selects $x_E^1 = -1, \alpha = 0$). Given this tradeoff, the legislature will select $x_L^1 = 1$ if:

$$u_L(1, -1; \beta_L, (1, 0), (x_E^2, \alpha)) = 2\beta_L + 2 - 2\gamma > \beta_L + 1 = u_L(-1; \beta_L, (-1, 0))$$

$$\beta_L > 2\gamma - 1$$

which occurs with probability $1 - \lambda$. Notice that $2\gamma - 1 > 2 - 2\gamma$ when $\gamma > 3/4$. Therefore, $\lambda > \psi$, but when $\gamma < 3/4$, $\psi > \lambda$. The implication is that expected voter welfare is a piecewise function where the legislature will pursue a different strategy depending on the value of γ.

We can also check Bayes Rule to confirm the voter will adhere to the proposed voting rule:

$$\Pr(\tau_E = C | x_E^1 = 1) =$$
$$\frac{\gamma}{\gamma + (1-\gamma)[\pi[(1-\phi) + (\phi - \zeta)(1-\psi)] + (1-\pi)[(1-\zeta) + (1-\phi)(\zeta - \eta)]]} > \gamma$$

and $\Pr(\tau_E = C | x_E^1 = -1) = 0$. For the legislature:

$$\Pr(\tau_L = C | x_L^1 = 1) =$$
$$\frac{\pi[\gamma + (1-\gamma)[1 - (\phi - \zeta)(1-\psi)]]}{\pi[\gamma + (1-\gamma)[1 - (\phi - \zeta)(1-\psi)]] + (1-\pi)[(1-\gamma)[(1-\zeta) + (1-\phi)(\zeta - \eta)]} > \pi$$

and:

$$\Pr(\tau_L = C | x_L^1 = -1) = \frac{\pi(1-\gamma)(\phi - \zeta)(1-\psi)}{\pi(1-\gamma)(\phi - \zeta)(1-\psi) + (1-\pi)[\gamma + (1-\gamma)[(\zeta - \eta)\phi + \zeta]} < \pi$$

We are now ready to calculate voter welfare under the assumption that $\pi\kappa > 1 - \kappa$:

$$
\begin{aligned}
W_{U_1} \equiv& \gamma\pi(2)+\\
&\gamma(1-\pi)(2)+\\
&(1-\gamma)\pi[(1-\phi)\cdot 0+(\phi-\zeta)[(1-\psi)(2\gamma-2)+\psi(-1)]+\zeta(2\gamma-2)]+\\
&(1-\gamma)(1-\pi)[(1-\zeta)\cdot 0+(\zeta-\eta)[(1-\phi)\cdot 0+\phi(2\gamma-2)]+\\
&\eta[(1-\lambda)(2\gamma-2)+\lambda(2\gamma-2)]]
\end{aligned}
\tag{B1}
$$

$$
\begin{aligned}
=&2\gamma(\pi-1)-2\gamma\pi+2(\gamma-1)^2(\pi-1)[(\phi-1)\eta-\phi\eta]-\\
&(\gamma-1)\pi[\phi(2+2\gamma(\psi-1)-\psi)+(1-2\gamma)\psi\zeta]
\end{aligned}
$$

Note that although the ordering of λ and ψ lead to different strategic choices, the end result for the voter of either decision is the same. Therefore, we can ignore the piecewise nature of the welfare equation. We set Equation B0 to Equation B1 and solve for π:

$$
\begin{aligned}
\pi =& \frac{1}{2(\phi-2\gamma\phi-\phi\rho+\gamma\phi\rho)}(-1-2\gamma\phi+2\eta-4\gamma\eta+2\gamma^2\eta-2\phi\eta+4\gamma\phi\eta-2\gamma^2\phi\eta\\
&-3\phi\rho+4\gamma\phi\rho-\gamma^2\phi\rho+\phi\psi-3\gamma\phi\psi+2\gamma^2\phi\psi+2\phi\zeta-4\gamma\phi\zeta+2\gamma^2\phi\zeta-\psi\zeta+\\
&3\gamma\psi\zeta-2\gamma^2\psi\zeta+((-4(\phi-2\gamma\phi-\phi\rho+\gamma\phi\rho)(-\gamma-2\gamma\phi+\gamma^2\phi+2\eta-4\gamma\eta+\\
&2\gamma^2\eta-2\phi\eta+4\gamma\phi\eta-2\gamma^2\phi\eta-2\phi\rho+3\gamma\phi\rho-\gamma^2\phi\rho+2\phi\zeta-4\gamma\phi\zeta+2\gamma^2\phi\zeta)+\\
&(1+2\gamma\phi-2\eta+4\gamma\eta-2\gamma^2\eta+2\phi\eta-4\gamma\phi\eta+2\gamma^2\phi\eta+3\phi\rho-4\gamma\phi\rho+\gamma^2\phi\rho-\\
&\phi\psi+3\gamma\phi\psi-2\gamma^2\phi\psi-2\phi\zeta+4\gamma\phi\zeta-2\gamma^2\phi\zeta+\psi\zeta-3\gamma\psi\zeta+2\gamma^2\psi\zeta)^2))^{1/2}\equiv\tilde{\pi}^*
\end{aligned}
\tag{B1}
$$

Figure B2 plots $\tilde{\pi}^*$. For $\pi < \tilde{\pi}^*$ the Unilateral regime provides higher welfare as compared to the baseline model for the same values of the parameters, varying ϕ. For low values of ϕ, the extension is quite similar to the baseline model. Across values of ϕ, the revealed action model is quite similar to the baseline model.

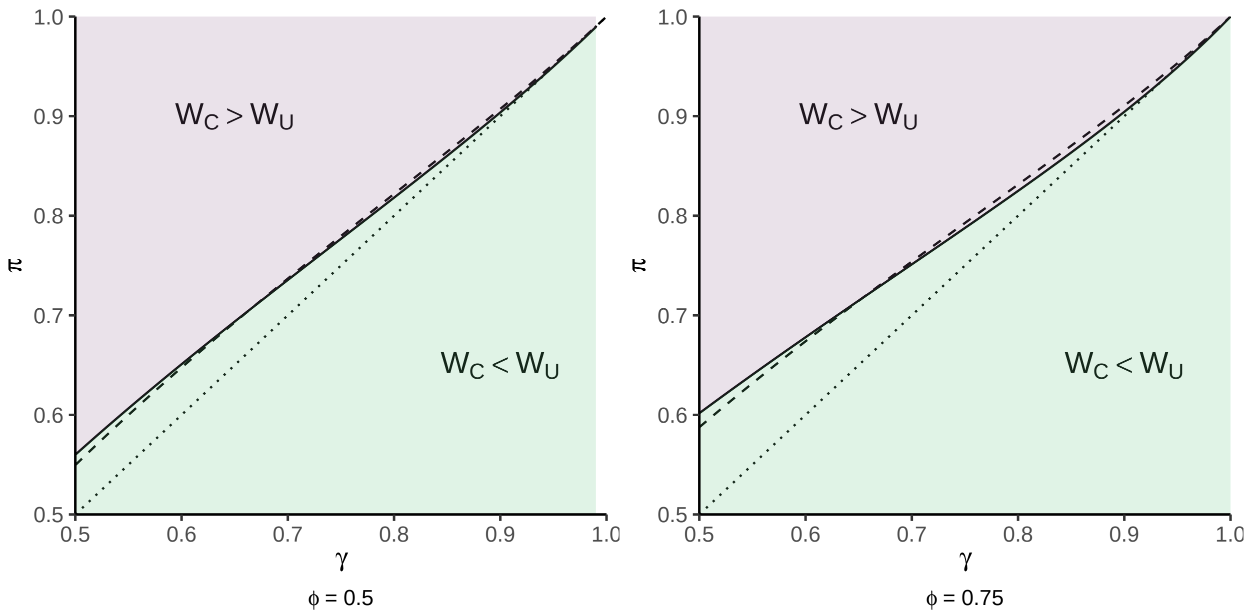

Figure B2: A comparison of voter welfare between the Constitutional regime and Unilateral regime at different values of ϕ, the probability of gridlock. The solid line indicates the threshold at which the voter is indifferent between either regime type. The x-axis tracks γ, the prior on executive congruence, while the y-axis plots π, the prior on legislative congruence. The area above (below) the curve indicates when the voter would prefer the Constitutional (Unilateral) regime. The dotted line is the 45-degree line and the dashed line is $\tilde{\pi}$ in the baseline model over the same parameters. Other parameter values for the figure are fixed at $\eta = 0.4, \rho = 0.3, \psi = 0.2, \zeta = 0.2$.

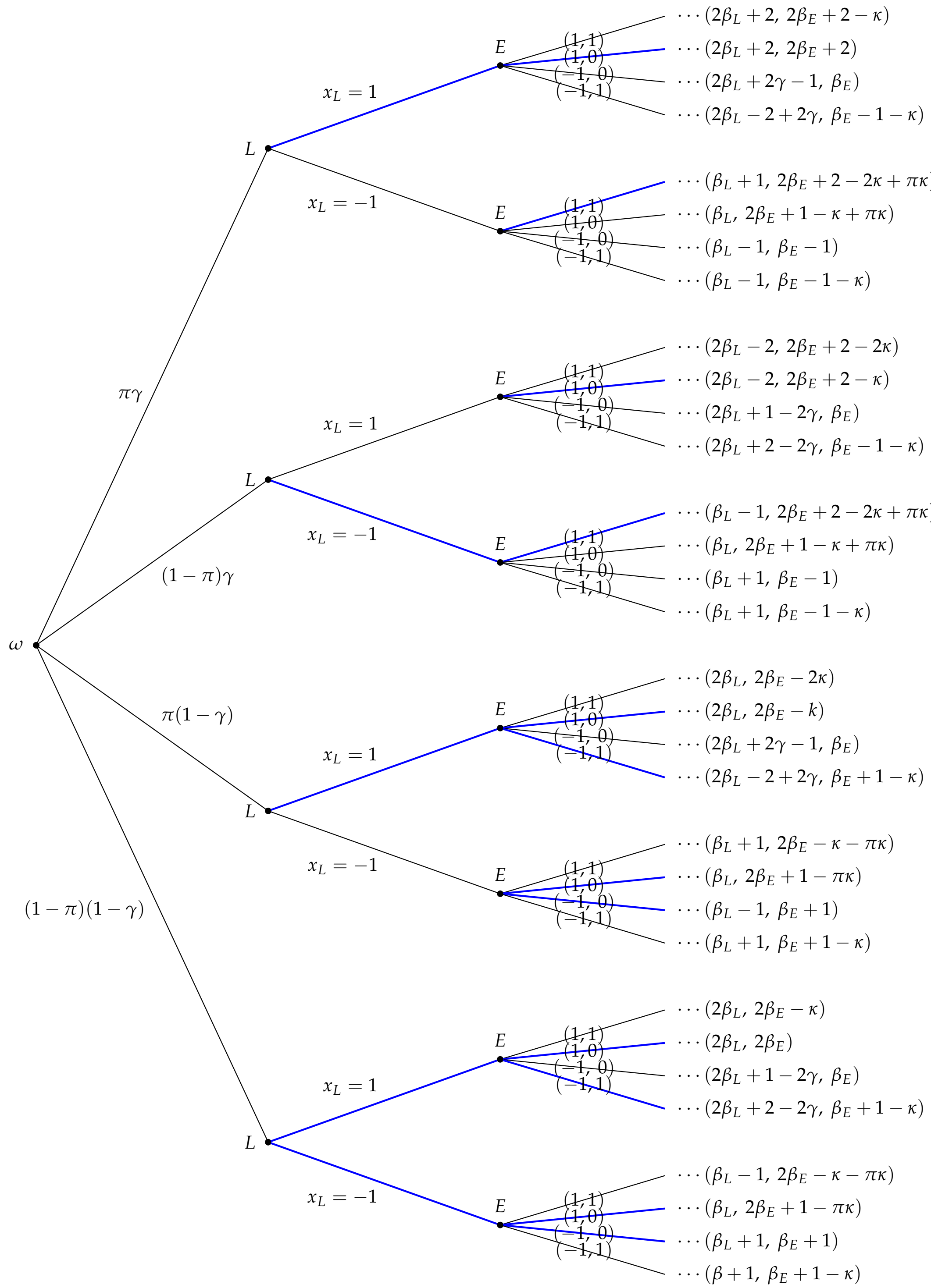

Figure B3: First period game tree and final payoffs following the voter's electoral decision and second period policy selections in the Unilateral Regime with revealed actions

Table B3: Payoffs for the Unilateral Regime with Revealed Action, Part 1

Type Combination	t_1 Action	t_1 Policy	t_1 Payoff	Voter's Electoral Decision	t_2 Action	t_2 Policy	t_2 Payoff	Total Payoff
$\tau_L = C,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Reelect Both	$x_L^2 = 1$ $x_E^2 = 1, \alpha = 0$	$x_2 = 1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L + 2$ $2\beta_E + 2 - \kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = 1, \alpha = 0$	$x_2 = 1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L + 2$ $2\beta_E + 2$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot 1 + (1 - \gamma) \cdot (-1)$	$2\beta_L + 2\gamma - 1$ β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1 - \kappa$	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot 1 + (1 - \gamma)(-1)$	$2\beta_L - 2 + 2\gamma$ $\beta_E - 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	$\beta_L + 1$ $2\beta_E + 2 - 2\kappa + \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha^2 \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	β_L $2\beta_E + 1 - \kappa + \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1$	Replace Both				$\beta_L - 1$ $\beta_E - 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E - 1 - \kappa$	Replace Both				$\beta_L - 1$ $\beta_E - 1 - \kappa$
$\tau_L = D,\ \tau_E = C$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Reelect Both	$x_L^2 = -1$ $x_E^2 = 1, \alpha = 1$	$x_2 = 1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	$2\beta_L - 2$ $2\beta_E + 2 - 2\kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = 1, \alpha = 1$	$x_2 = 1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	$2\beta_L - 2$ $2\beta_E + 2 - \kappa$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot (-1) + (1 - \gamma) \cdot 1$	$2\beta_L + 1 - 2\gamma$ β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1, 1\}, \alpha \in \{0, 1\}$	$x_2 \in \{-1, 1\}$	$\beta_L + \gamma \cdot (-1) + (1 - \gamma) \cdot 1$	$2\beta_L + 2 - 2\gamma$ $\beta_E - 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	$\beta_L - 1$ $2\beta_E + 2 - 2\kappa + \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1, 1\}$ $x_E^2 = 1, \alpha^2 \in \{0, 1\}$	$x_2 = 1$	 $\beta_E + \pi \cdot 1 + (1 - \pi)(1 - \kappa)$	β_L $2\beta_E + 1 - \kappa + \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1$	Replace Both				$\beta_L + 1$ $\beta_E - 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Replace Both				$\beta_L + 1$ $\beta_E - 1 - \kappa$

Table B4: Payoffs for the Unilateral Regime with Revealed Action, Part 2

Type Combination	t_1 Action	t_1 Policy	t_1 Payoff	Voter's Electoral Decision	t_2 Action	t_2 Policy	t_2 Payoff	Total Payoff
$\tau_L = C,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Reelect Both	$x_L^2 = 1$ $x_E^2 = -1, \alpha = 1$	$x_2 = -1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	$2\beta_L$ $2\beta_E - 2\kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = 1$ $x_E^2 = -1, \alpha = 1$	$x_2 = -1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	$2\beta_L$ $2\beta_E - \kappa$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot 1 + (1-\gamma) \cdot (-1)$	$2\beta_L - 1 + 2\gamma$ β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Reelect L, Replace E	$x_L^2 = 1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot 1 + (1-\gamma) \cdot (-1)$	$2\beta_L - 2 + 2\gamma$ $\beta_E + 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L + 1$ $\beta_E - 1 - \kappa$	Reelect E, Replace L	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha \in \{0,1\}$	$x_2 = -1$	 $\beta_E + \pi(1-\kappa) + (1-\pi) \cdot 1$	$\beta_L + 1$ $2\beta_E - \kappa - \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha^2 \in \{0,1\}$	$x_2 = -1$	 $\beta_E + \pi \cdot (1-\kappa) + (1-\pi) \cdot 1$	β_L $2\beta_E + 1 - \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1$	Replace Both				$\beta_L - 1$ $\beta_E + 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L - 1$ $\beta_E + 1 - \kappa$	Replace Both				$\beta_L - 1$ $\beta_E + 1 - \kappa$
$\tau_L = D,\ \tau_E = D$	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1 - \kappa$	Reelect Both	$x_L^2 = -1$ $x_E^2 = -1, \alpha = 1$	$x_2 = -1$	$\beta_L + -1$ $\beta_E + 1$	$2\beta_L$ $2\beta_E - \kappa$
	$x_L^1 = 1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1$	Reelect Both	$x_L^2 = -1$ $x_E^2 = -1, \alpha = 0$	$x_2 = -1$	$\beta_L + 1$ $\beta_E + 1$	$2\beta_L$ $2\beta_E$
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 0$	$x_1 = 0$	β_L β_E	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot (-1) + (1-\gamma) \cdot 1$	$2\beta_L + 1 - 2\gamma$ β_E
	$x_L^1 = 1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Reelect L, Replace E	$x_L^2 = -1$ $x_C^2 \in \{-1,1\}, \alpha \in \{0,1\}$	$x_2 \in \{-1,1\}$	$\beta_L + \gamma \cdot (-1) + (1-\gamma) \cdot 1$	$2\beta_L + 2 - 2\gamma$ $\beta_E + 1 - \kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 1$	$x_1 = 1$	$\beta_L - 1$ $\beta_E - 1 - \kappa$	Replace L, Reelect E	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha \in \{0,1\}$	$x_2 = -1$	 $\beta_E + \pi(1-\kappa) + (1-\pi) \cdot 1$	$\beta_L - 1$ $2\beta_E - \kappa - \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = 1, \alpha = 0$	$x_1 = 0$	β_L β_E	Replace L, Reelect E	$x_C^2 \in \{-1,1\}$ $x_E^2 = -1, \alpha^2 \in \{0,1\}$	$x_2 = -1$	 $\beta_E + \pi(1-\kappa) + (1-\pi) \cdot 1$	β_L $2\beta_E + 1 - \pi\kappa$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 0$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1$	Replace Both				$\beta_L + 1$ $\beta_E + 1$
	$x_L^1 = -1$ $x_E^1 = -1, \alpha = 1$	$x_1 = -1$	$\beta_L + 1$ $\beta_E + 1 - \kappa$	Replace Both				$\beta_L + 1$ $\beta_E + 1 - \kappa$