

Political Conflict over Time

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Abstract

We study a model in which public policies generate varying levels of political conflict over the course of their lifespans. Presenting a dynamic setting in which politicians must decide whether to initiate the provision of some public good and, afterwards, how much of the public good to supply, the model illuminates how a program's changing cost structures, difficulty of implementation, and popularity affect the likelihood that competing politicians will support it. Programs that involve high start-up costs relative to maintenance costs, all else equal, are marked by pitched political battles at their moment of creation but relative calm thereafter. Programs that are especially difficult to create, meanwhile, can unleash latent political controversy when discussions turn to its subsequent maintenance. The model also identifies conditions under which a politician will create an objectionable program, yielding an immediate policy loss, in order to negate an electoral advantage enjoyed by the opposition party. Lastly, the model reveals how perceived benefits of holding office can stoke conflict over otherwise broadly supported public goods.

Keywords: Political conflict, polarization, policymaking, elections.

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Whether politicians disagree with one another plainly depends upon what they are discussing. Observed levels of political conflict, as a result, crucially depend upon the contents of a policy agenda. And depending upon their stages of development, the initiatives that constitute that agenda can elicit very different political responses. A policy that is up and running may stimulate altogether different levels of partisan disagreement than a proposed policy that must be created anew.

For all the scholarly attention devoted to the topic of partisan polarization, however, we still know very little about the linkages between the subjects and objects of political conflict. Empirical studies of political polarization tend to abstract away from the composition of a political agenda (for reviews, see ??). Likewise, existing models of candidate polarization neither recognize the differences between initial and ongoing investments into a political initiative nor evaluate the downstream electoral consequences of contemporary partisan disagreement (for summaries of standard approaches to studying political competition, see ??).

To clarify the dynamic relationships between an evolving political agenda and political conflict, we study a model of electoral competition in which politicians stake out competing positions about whether to start a new political program; and then, once established, about how much to invest in the program. The electoral and policy benefits that flow from this strategic choice, we show, have consequences for the adoption of new policies, the continued funding of old ones, and observed levels of political conflict.

All else equal, we find, programs that involve high start-up costs relative to maintenance costs are marked by pitched political battles at their moment of creation but relative calm thereafter. Programs that require larger downstream investments, by contrast, may perpetuate controversy over longer periods of time. We also find that concerns about the benefits of holding public office—understood either as rents or policy gains on purely ideological issues—can disrupt negotiations over a public good, even when both political actors would otherwise support its provision. When the perceived benefits of holding office are sufficiently high, we find, support by one political actor unavoidably stimulates opposition by the other, and vice versa. We also identify conditions under which a politician will create a program that she opposes, yielding an immediate policy loss, in order to negate an electoral advantage enjoyed by the opposition party. Costly and unpopular actions today, as such, have the potential to yield electoral rewards tomorrow.

In various extensions, we investigate the relevance of candidate quality and the challenges of policy implementation for policy adoption and political conflict. Regardless of a candidate's direct benefits from policy action, we observe a nonmonotonic relationship between candidate quality and policy adoptions that are electorally damaging. This nonmonotonicity,

moreover, carries through to the electoral stage of competition, making it uncertain whether candidates with higher valences realizations will be re-elected at higher rates. The model also reveals how a program that is especially difficult to create tends to dampen political controversy before implementation. Given long odds of actually passing a policy, disagreements about its merits do not figure prominently in the voter’s calculus about who to support in the next election. Once established, though, such programs can unleash a torrent of political controversy.

The paper proceeds as follows. The first section summarizes the relevant empirical and theoretical literatures, while the second presents two motivating cases that highlight the divergent effects of political action on subsequent partisan conflict. Sections 3 and 4 present and analyze the model, paying particular attention to the conditions under which a program will be initiated and the incidence of political conflict. Section 5 shows how extensions of the model to more than two periods affect the willingness of players to initiate a program. The penultimate section revisits the motivating examples in light of the model, and the final section concludes.

1 Literature Review

This paper draws upon a whole range of empirical and theoretical literatures on party polarization, issue salience, issue ownership, and candidate divergence. Each in their own way, these literatures recognize the relevance of past political choices for contemporary political conflict. None, however, characterizes how an endogenously chosen and structurally changing policy initiative stimulates varying levels of partisan conflict over time.

Consider, for starters, the massive body of empirical scholarship that tracks the changing levels of polarization between the two major parties in the United States. In addition to documenting the fact of rising polarization over the last half century, this literature also posits income inequality, changes in the party structure, and money in politics as its causes (see, for example, ???). But as ?, p. 91 points out, “very little is known about the dynamics of how issues map (or not) into the major dimensions of conflict over time.” To be sure, scholars working within this research tradition recognize that estimates of politicians’ ideological differences, as measured by roll call votes, critically depend upon the contents of the legislative agenda (?). For the most part, though, these scholars treat the agenda as a nuisance parameter. Though a handful of studies leverage information about the distribution of estimated bill-specific cutpoints in order to characterize historical changes in the legislative agenda (see, e.g. ?), none offers a theoretically informed explanation of the strategic motivations that drive these changes or their consequences for political polarization.

Other relevant empirical work assesses the salience of different policy considerations in different elections (see, e.g., ?). Whereas voters may choose between candidates on the basis of their education policy positions in one election, this literature points out, they may focus more on their health policy positions in another. Here again, though, scholars treat the agenda itself as something to be controlled for rather than explained. Given the clear endogeneity concerns at hand, it is not surprising that researchers working within this domain have had a difficult time recovering a defensible identification strategy. Just as important, though, none of these studies explains how contemporary policy debates reflect past political decisions to either create new programs or invest in existing ones.

Lastly, there is a burgeoning body of empirical research on “issue ownership,” which suggests that voters rather instinctively trust one party or another to “handle” certain policy domains marked by widespread consensus (???). When elections turn to issues ostensibly “owned” by a given party, this literature posits, then that party retains clear advantages in the contest. Moreover, scholars have shown, issue ownership has important implications for how (and how much) each of the parties talks about different policies both in an electoral contest and while governing. How does one party come to enjoy this advantage? And what might the opposing party do to either seize or dismantle it? For explanations, scholars tend to look to changes in either the contents of public opinion or the organization of key interest groups within the Democratic or Republican parties (see, e.g., ?). These scholars have considerably less to say about the strategic policymaking efforts of one party to mitigate the electoral advantages enjoyed by another’s issue ownership. Indeed, instances when one party intrudes into an issue domain owned by another, what Patrick Egan calls “issue trespassing,” appear altogether idiosyncratic and, for the most part, ill-conceived (2013, 149-55).

Informing these empirical literatures are ample theories of political conflict, starting with the seminal median voter framework of ? and including models that modify this framework to explain the divergence of platforms between competing parties or candidates. Contributing factors include policy motivation (e.g., ???????); entry deterrence (e.g., ??); incomplete information among voters or candidates (e.g., ???); rent-seeking (e.g., ?), and differential candidate valence (e.g., ?????). None of this work, however, recognizes the electoral implications of contemporary policy decisions, which, we show, can induce conflict even on projects whose direct payoffs are positive for both parties.¹

? develop a dynamic model in which an incumbent chooses both the type and the amount of infrastructure investment.² As in our model, electoral considerations play a central role

¹Somewhat related, ? present a model of electoral competition that supports ideological spillovers to economic policy choices. Their framework and results, however, differ markedly from our own.

²See also ?.

in the analysis, inducing the incumbent to invest in wasteful types of projects (that are not used by anybody in equilibrium) and in amounts that are socially suboptimal. Unlike our model, however, ? finds that polarization between the two parties improves efficiency, and electoral considerations always reduce spending on useful infrastructure.

A related theoretical literature analyzes the adoption of reforms that benefit some voters and harm others, often under conditions of uncertainty (???). Most relevant, perhaps, is ?, which presents a dynamic citizen-candidate model in which first-period policy choices affect the second-period electorate, and thus the outcome of political competition in that period. As a result of an office-holder’s desire to influence her reelection chances in the second period, dynamic inefficiencies in policymaking can arise. Neither ? nor any of these other papers, however, account for the electoral considerations that inform politicians’ willingness to either create a program anew or make continued investments in an existing one.

2 Two Motivating Cases

Consider the two signature domestic policy achievements of the last two presidents: George W. Bush’s No Child Left Behind Act (NCLB) and Barack Obama’s Affordable Care Act (ACA). Both involved a major expansion of the federal government’s involvement in a policy domain that is “owned” by the Democratic Party (Egan 2013). Both policy interventions also deployed a good deal more than just money. With the enactment of NCLB and ACA, the federal government established numerous new rules and regulations for how education and health services would be delivered around the country. For all their descriptive commonalities, however, the political significance of these two laws could not be more different. Whereas NCLB settled political disputes, the ACA exacerbated them.

The 2000 presidential election between George W. Bush and Al Gore prominently featured competing claims about the federal government’s proper role in public education. In the presidential debates, the candidates sparred at considerable length over issues involving accountability, merit pay, spending, testing, and school choice. Teachers unions contributed upwards of \$6.5 million during the election cycle.³ Gallup polls indicated that roughly 10 percent of the American public ranked education as the “most important problem” facing the nation.⁴ The national news media featured long exposes on proposed changes to federal education policy (?).⁵ And according to some research, the positions taken by Bush and Al

³Center for Responsive Politics (OpenSecret). Accessed at: <https://www.opensecrets.org/industries/totals.php?cycle=2016&ind=L1300>.

⁴The complete time series is available at the Policy Agendas Project’s website, www.policyagendas.org.

⁵In 2000, 143 news segments aired on ABC, CBS, CNN, Fox New, and NBC. Source: Vanderbilt Television News Archive. Accessed at: <http://classic.tvnews.vanderbilt.edu/>.

Gore on the issue of education played a non-trivial role in the election's outcome.⁶

A year later, Bush signed NCLB into law, and education rather promptly disappeared from the federal political landscape. In the 2004 presidential election, hardly a word was said about the federal government's role in education. The issue did not make a single appearance in any of the three presidential debates that year. Political contributions from teachers unions declined by nearly 50 percent. Just three percent of surveyed Americans named education as the most significant problem facing the nation. Forty percent fewer stories on education policy appeared in the major television news stories as had in 2000. And there is no evidence that citizens cast their votes on the basis of their assessments of the candidates' positions on education policy.

Obama's experience with the ACA differed dramatically from Bush's under NCLB.⁷ Health care was a prominent issue when he ran for office, and it remained so throughout Obama's tenure in office. Indeed, judged by any number of criteria, the federal government's involvement in health care policy went from being politically contested to explosive in the aftermath of ACA's enactment. "Bashing Obamacare became a winning Republican message – an indictment of its polarizing namesake, of big-spending Democrats and of the boogeyman of creeping socialism all rolled into one."⁸ House Republicans voted on upwards of 50 bills repealing the law, none of which stood any chance at overcoming a presidential veto, but all of which kept the issue politically salient. And the strategy worked. Just as many Americans identified healthcare as the most important problem facing the nation in 2012 as they had in 2008. In both the 2012 and 2016 presidential elections, the candidates devoted ample time in the debates and on the campaign trails detailing their views about healthcare. Collectively, the American Medical Association, the American Hospital Association, and Pfizer Inc. made just as many political contributions in 2012 and 2016 as they had in 2008. And roughly the same number of news stories about health care policy aired on the national networks in each of the last three presidential election years.

NCLB and the ACA were both highly controversial federal interventions into policy occupied by a dense thicket of organized interests. They both ushered in new eras of federal involvement in policy domains that previously had been a primary responsibility of state and local governments. And in the months and years after their enactments, they both encountered numerous practical problems of implementation. But whereas NCLB assuaged political controversy, ACA plainly aggravated it. How is this possible? In the next section, we present a model that rationalizes these dynamics.

⁶For accounts of the legislative history of NCLB, see ??.

⁷For accounts of the politics of health care reform under Obama, see ???.

⁸Robert Draper, "Obama the Care Operation." *New York Times Magazine*, February 19, 2017, 35.

3 The Model

We analyze a T period model in which players' payoffs are a function both public good investments and private consumption. Each citizen of type θ derives a policy utility of $u_\theta^0(c, g) = c + \theta g$ in each period, where g is the quantity of the public good and c is private consumption in that period. Thus, $\theta \geq 0$ measures how much a citizen values one unit of public good consumption relative to private consumption. We denote the median voter's type by θ_M .

Public good provisions depend upon decisions made by the office-holder in each period. If a public project has not already been started, the office-holder chooses whether or not to *initiate* one. Initiation requires a setup cost of K per citizen, and no benefits accrue in that period.⁹ In each period thereafter, the office-holder chooses how much additional money to allocate to the project, denoted by L on a per-citizen basis. The project then supplies $g = f(L)$ units of the public good, where $f' \geq 0$ and $f'' \leq 0$. If no further money is needed to produce the public good after its initial creation, $f(0)$ is strictly positive.

In each period, a Democrat and a Republican compete in an election. In addition to the voters' utility from public good provision and private consumption, there is an election-specific shock v_t at time t , which can be interpreted as the additional utility from the Democrat holding office due to other issues that are salient at time t . (The additional utility from the Republican is normalized to zero.) Thus, $v_t < 0$ corresponds to states of the world where, all project-related matters equal, the voters prefer the Republican candidate, and vice versa. We assume that v_t is drawn i.i.d. across time according to a distribution with cumulative distribution function $\Phi(\cdot)$, which is symmetric around zero.

Candidates have preferences that resemble those of citizens, with the type parameters of the Democrat and Republican denoted θ_D and θ_R , respectively, and $\theta_R \leq \theta_M \leq \theta_D$, where at least one of these inequalities is strict. In terms of a project's *direct* utility, therefore, Democratic candidates are assumed to prefer more of the public good than the median voter; and the median voter, in turn, prefers more of the public good than the Republican candidates.¹⁰

Unlike voters, candidates receive an additional payoff of $\psi \geq 0$ in each period that they (or their party) win the election. The payoff $\psi > 0$ can be understood as stemming from either the personal benefits of holding office ("ego rents") or the additional benefits associated

⁹We are thinking of a project that takes some time to build or launch, which motivates our assumption that no public good is provided in the first period of its implementation. This assumption, however, can easily be relaxed without qualitatively affecting our results below.

¹⁰Of course, we need only assume that the one party has stronger preferences for the public good than the other. For purely expositional purposes, we call the party with the stronger preferences the "Democrat."

with the office-holder’s ability to advance a strictly ideological agenda (“ideology rents”).¹¹

Candidates cannot commit to a policy position ex-ante. Upon being elected, therefore, an office-holder either chooses to initiate the project or, if the project is already underway, selects L to maximize her own utility.

In each period $t = 1, \dots, T$ the following sequence of events takes place.

1. The election shock v_t is realized, and the median voter elects one of the two candidates.
2. If the project has not yet been started, then the winning candidate decides whether or not to try to initiate the project. If initiation is successful, which occurs with probability p , then each voter is taxed an amount K to cover setup costs. Formally, we assume that the government has a budget m per voter. If there are no expenses related to the project, m is redistributed to voters. If the project is started, the redistribution decreases to $m - K$.¹²
3. If the project was started in a previous period, then the winning candidate chooses L , the amount each voter is taxed for public good provision in that period, and a quantity $f(L)$ of the public good is provided.

We assume that all agents’ utility is equal to the sum of their (undiscounted) period utilities. This is only to simplify the presentation of results, as we could add discounting to the model without any qualitative changes.

Given this order of play, subgame perfect equilibria always exist and payoffs are generically unique.¹³ These features of the model are formally expressed in the following proposition:

Proposition 1. *There exist subgame perfect equilibria in pure strategies. Furthermore, for all subgame perfect equilibria (pure or mixed) starting at the beginning of each period t , expected payoffs to the median voters are the same. The expected payoffs for candidates are the same except for the single electoral shock realization at which the median voter is indifferent between the candidates.*

¹¹Note that the latter benefit would also accrue if the incumbent is term-limited. In this case, ψ can be interpreted as the incumbent’s ideological benefit from being succeeded by a member of her own party, rather than the opposition.

¹²Alternatively, one can think of this as an opportunity cost expressed in terms of other public goods that can no longer be provided.

¹³That is, subgame perfect equilibria are unique except for the case that the median voter is exactly indifferent between the candidates. For those electoral shock realizations where the median voter is indifferent between candidates, indifference of the median voter in general does not imply that the candidates are indifferent. Candidate payoffs will depend on how the median voter breaks the indifference, whether by randomization or by selecting one candidate with probability one).

4 Equilibrium Analysis with Two Time Periods

In this section, we focus on a two-period setting, which allows us to derive key effects in the simplest-possible framework. In Section ??, we show how these results extend to settings with additional periods.

4.1 Policy Decisions in the Second Period

To analyze subgame perfect equilibria of the game, we proceed by backward induction.

The model assumes that no payoffs accrue in the implementation period and the game ends after the second period. As a result, if no project was implemented in the first period, the politician will not initiate it in the second period, and the median voter's decision in the second-period election will be based solely on the date t election shock: the Democrat is elected if $v_t > 0$, and the Republican if $v_t < 0$.

If, instead, the project was successfully implemented in the first period, then office-holders in the second period choose their optimal level of public good provision. To do so, the winning candidate of party $P = D, R$ solves:

$$\max_L m - L + \theta_P f(L). \quad (1)$$

Let L_D and L_R be the solutions of this optimization problem. In an interior solution, the first-order condition of (??) reveals that $\theta_D f'(L_D) = 1$ if the Democrat wins, and, analogously, that $\theta_R f'(L_R) = 1$ if the Republican's wins.¹⁴

If investments are strictly positive and $f'' < 0$, then from the voter's standpoint the Democratic politician will over-invest in the project and the Republican will under-invest. Hence, $L_R < L_M < L_D$, where L_M is the solution to (??) for $\theta_P = \theta_M$.

In the election at $t = 2$, the median voter understands that if party P wins, then public good investments will be L_P . The electoral shock level v_2^* at which the median voter θ_M is indifferent between the two candidates is therefore

$$m + \theta_M f(L_R) - L_R = v_2^* + m + \theta_M f(L_D) - L_D,$$

which implies

$$v_2^* = \theta_M f(L_R) - L_R - (\theta_M f(L_D) - L_D). \quad (2)$$

If $v > v_2^*$, then the Democrat wins the election; if $v < v_2^*$, then the Republican wins.

¹⁴If, instead, $\theta_P f'(0) \leq 1$ then the optimal $L_P = 0$. If in addition $f(0) > 0$ then a newly initiated project generates downstream payoffs without incurring any additional maintenance expenses.

Note that $\theta_M f(L_R) - L_R$ is the median voter's utility if the Republican chooses the amount of public good expenditures, L_R . Similarly, $\theta_M f(L_D) - L_D$ is the median voter's utility if the Democrat manages the project. As a result, v_2^* is equivalent to the median voter's net policy benefit from having the Republican rather than the Democrat manage the public good. Thus, for the Democrat to win the election when $v_2^* > 0$, she needs an electoral shock that is at least as large as the Republican's policy advantage. For $v_2^* < 0$, the same holds true for the Republican.¹⁵

4.2 Policy Decisions in the First Period

We now turn to the first period of the game. Under what conditions will an elected politician initiate the project? To answer this question, we first examine the incumbent's expected payoff from doing so. Subsequently, we evaluate her optimal strategy when the electoral effects assume different value. We then perform comparative statics on policy implementation and characterize the trajectory of political conflict over a program's lifespan.

4.2.1 Incumbent Payoff from Project Implementation

If the winning candidate does not implement the project at $t = 1$, then, given that the electoral shock distribution is symmetric around zero, both parties win with probability $1/2$ in period $t = 2$. The office-holder's expected payoff from this course of action therefore is

$$m + \beta(m + 0.5(\psi + E[v|v \geq 0])). \quad (3)$$

Now, let us suppose that the office-holder implements the project. So doing, the voter incurs a cost $K > 0$ today, and the project's payoff tomorrow depends on who wins the election in $t = 2$. The Republican candidate's winning probability is $\Phi(v_2^*)$, as she wins if the electoral shock value is below v_2^* , where v_2^* is given by (??).

If a type θ office-holder at $t = 1$ implements the project, her expected discounted net policy benefit (i.e., disregarding the reelection payoff ψ and the additional payoff from the electoral shock at $t = 2$) is

$$\Delta(\theta) = (\Phi(v_2^*)(\theta f(L_R) - L_R) + (1 - \Phi(v_2^*))(\theta f(L_D) - L_D)) - K. \quad (4)$$

Observe that the Democrat has a higher direct benefit than either the median voter or

¹⁵In our model, a second-period advantage from policy implementation is generated by preference differences between parties, and consequently the median voter (generically) prefers one of the parties for its handling of the project. Alternatively, such an advantage could derive from a party's *capabilities*, along the lines of ??, or the available authority vested in a political office to perform specific tasks, as in ?.

the Republican. In this regard, Δ is increasing in type, because $\Delta(\theta) - \Delta(\theta') = (\theta - \theta')[\Phi(v_2^*)f(L_R) + (1 - \Phi(v_2^*))f(L_D)] > 0$.

In addition to its direct effects on policy utility, a project's implementation also affects the expected size of the election shock. Because the implementation of a project makes the candidates asymmetric for the median voter with respect to policy utility in the second period, the voter will sometimes elect a candidate that she likes less with respect to the other policy areas (as summarized by v). More formally, if the project is implemented, the median voter's expected utility derived from the winning candidate's valence in the second-period decreases by $\int_0^{|v_2^*|} v d\Phi(v)$, relative to the case where the project is not implemented.¹⁶

A Democratic office-holder in period 1 tries to implement the project if the sum of the net policy benefit $\Delta(\theta_D)$ and the expected net effect on future party control and additional payoff from the electoral shock are non-negative, i.e., if

$$\Delta(\theta_D) + \left(\psi(0.5 - \Phi(v_2^*)) - \int_0^{|v_2^*|} v d\Phi(v) \right) \geq 0. \quad (5)$$

Similarly, the Republican attempts to implement the project if

$$\Delta(\theta_R) + \left(\psi(\Phi(v_2^*) - 0.5) - \int_0^{|v_2^*|} v d\Phi(v) \right) \geq 0. \quad (6)$$

In comparison, the median voter's net benefit from the project's implementation is

$$\Delta(\theta_M) - \int_0^{|v_2^*|} v d\Phi(v). \quad (7)$$

4.2.2 Projects without Electoral Effects

We can now describe conditions under which each party tries to initiate the project. Let θ^* be the voter type who is indifferent between the Democrat and the Republican handling the project in the second period, i.e., $\theta^* f(L_D) - L_D = \theta^* f(L_R) - L_R$. Solving for θ^* yields

$$\theta^* = \frac{f(L_D) - f(L_R)}{L_D - L_R}. \quad (8)$$

The simplest case arises if $\theta_M = \theta^*$, such that $v_2^* = 0$ and all terms relating to party control ψ and expected electoral shock disappear from equations (??)–(??). When the median voter is

¹⁶To see this, notice that the second period expected v is $\int_{v_2^*}^{\infty} v d\Phi(v)$ if the project is implemented, and $\int_0^{\infty} v d\Phi(v)$, otherwise. Thus, if the project is implemented, the expected v decreases by $\int_0^{v_2^*} v d\Phi(v) = \int_0^{|v_2^*|} v d\Phi(v)$, where the equality follows because Φ is symmetric around zero.

exactly indifferent between the Democrat and Republican handling the project in the second period, Proposition ?? characterizes the three possible first-period behaviors.

Proposition 2. *Let $\theta_M = \theta^*$. In this instance, there exists a cutoff value v_1^* such that the Democrat is elected at $t = 1$ if $v > v_1^*$ and the Republican is elected if $v < v_1^*$. Further, there are three possible types of equilibria:*

- (a) *If $\Delta(\theta_R) > 0$ then the first period incumbent, independent of whether the Democrat and the Republican, initiates the project, and the median voter's cutoff at $t = 1$ is $v_1^* = 0$.*
- (b) *If $\Delta(\theta_R) < 0$ and $\Delta(\theta_D) > 0$ then only the Democrat implements the project, and the median voter's cutoff at $t = 1$ is $v_1^* = -\Delta(\theta_M)$.*
- (c) *If $\Delta(\theta_D) < 0$ then neither the Democrat nor the Republican initiates the project, and the median voter's cutoff at $t = 1$ is $v_1^* = 0$.*

While there is no electoral effect in period 2 if $\theta_M = \theta^*$, there could actually be an electoral effect of the project *in period 1* if we are in case (b), wherein the opportunity to initiate a project plays to one candidate's electoral benefit. If the median voter likes the project, i.e., $\Delta(\theta_M) > 0$, then she knows that she will only get it if the Democrat wins in period 1, and so the Democrat has an ex-ante electoral advantage ($v_1^* < 0$). Conversely, if the median voter does not like the project, then the Republican is advantaged in the first period. In cases (a) and (c), meanwhile, both candidates display the same behavior in office in the first period, and therefore the median voter's choice is unaffected by the existence of the project (i.e., $v_1^* = 0$).

4.2.3 Projects with Small Electoral Effects

We now turn to the case when a project generates an electoral advantage in the second period for one of the parties, but when this advantage is not of overwhelming importance (in a way that will become clearer in this and the next subsection) for the incumbent.

If the median voter is not exactly indifferent between the two candidates in the second period—that is, $\theta_M \neq \theta^*$ —then electoral considerations enter the calculus of all players because $v_2^* \neq 0$. In this case, the differences in behavior between the Democratic and Republican office-holders are driven by two factors. First, by construction, the Democrat receives a higher direct payoff from initiating the project than the Republican. This fact alone, however, does not guarantee that the Democrat is more inclined to initiate the project. A project's implementation, after all, also has a partisan effect that can go in either direction, depending upon the median voter's support for the project.

If $\theta_M > \theta^*$, an implemented project delivers a second period electoral advantage to Democrats. As a result, in the first period the Democrat will be more willing to initiate the project, and the Republican will be less willing to do so, relative to the case where $\theta_M = \theta^*$ (for the same θ_D, θ_R). The reverse is true if $\theta_M < \theta^*$, in which case the Republican becomes more willing to initiate the project and the Democrat less willing to do so.¹⁷

Proposition ?? summarizes these results. The first part states that, if the project’s implementation does not disadvantage the Democrats in the second period election, then a Democrat is more willing to implement the project than a Republican. Moreover, if the Republican is willing to implement, then the median voter also supports the project. This follows because the median voter gets a higher direct payoff from the project than the Republican ($\theta_M \geq \theta_R$), and does not care about the electoral effect.

The second part of the proposition deals with a situation in which a project’s implementation generates a Republican electoral advantage. In this case, the Democrat implements the project if and only if the benefits derived from the project’s creation outweigh the losses associated with the subsequent electoral disadvantage. We can interpret the Democrat’s action in this instance as expending “political capital,” in spite of the expected electoral backlash in the next election. The Republican, in this case, does one of two things. If her direct payoffs from the project are non-negative, she initiates the project. Likewise, if the direct payoffs are negative but outweighed by the electoral advantage she obtains from the project’s creation, then the Republican initiates. In all other cases, the Republican opposes acting on the matter.

Proposition 3. *1. If $\theta_M \geq \theta^*$ and it is optimal for the Republican to initiate the project if elected, it is also optimal for the Democrat to do so. Furthermore, in this case the median voter will always want the project to be implemented.*

2. If $\theta_M < \theta^$ and the median voter prefers that the project is implemented, then there exists $\bar{\psi} > 0$ such that the Democrat implements the project for all $0 \leq \psi \leq \bar{\psi}$, even though Democrats face an electoral disadvantage ex post. Moreover, if $\Delta(\theta_R) \geq 0$, then the Republican implements the project.*

4.2.4 Projects with Large Electoral Effects

We now turn to cases in which the importance of electoral effects are large, and partisan conflict, as a result, is more intense. If a project’s implementation yields a partisan advantage

¹⁷As previously explained, project implementation also changes the expected value of the additional utility from the period t officeholder (either 0 from the Republican, or v_t from the Democrat). Because all agents are affected uniformly (see (??)–(??)), however, it does not bear on either office holder’s decision about whether to implement the project in the first period.

in the second period (i.e., if $\theta_M \neq \theta^*$), then, for sufficiently large electoral considerations, political conflict over project implementation will necessarily ensue. Regardless of whether the median voter supports the project’s implementation, the Democrat initiates the project if the Republican does not, and vice versa. Partisan conflict, in this sense, is inescapable, as each political actor adopts exactly the opposite behavior of her competitor.¹⁸

Proposition 4. *If $\theta_M \neq \theta^*$ then there exists $\bar{\psi}$ such that, if $\psi > \bar{\psi}$, then one party supports and one party opposes implementation. Moreover, such a conflict equilibrium can arise in cases where the median voter either supports or opposes implementation.*

There are at least two ways of thinking about ψ , the benefits accrued from holding office. Most naturally, perhaps, ψ reflects material, reputation, or egoistic rents. To wit, holding office may improve a politician’s ability to fundraise, augment her party’s brand, or deliver simple pleasures. Viewed this way, the model underscores the ways in which political rents can disrupt policy negotiations over which general consensus may exist. Indeed, as Proposition ?? shows, when these rents are sufficiently large, negotiations over public good provisions necessarily falter.

Alternatively, we might interpret ψ as the level of disagreement between politicians on strictly ideological policies, which are unrelated to the kinds of public goods that our model explicitly studies. As these ideological divisions become more pronounced, the perceived stakes of an election rise and ψ increases in value. Understood this way, the model illustrates how strictly ideological considerations can infect deliberations over seemingly non-ideological public projects from which both parties receive a positive direct utility. As ideological disagreement rises, politicians may be less willing to compromise even on issues that are, in principle, non-ideological. In this way, topics of ideological contestation may bleed into negotiations over policies where both parties stand to receive an immediate positive payoff.¹⁹

For voters, this effect can be extremely detrimental. In terms of the social welfare from implementation decision, two types of errors can arise from the fact that decision makers’ preferences are not perfectly aligned with those of the median voter: first, the incumbent forgoes a project that the median voter likes; or second, the incumbent implements a project that the median voter opposes. Given high ψ , for any given project, it is guaranteed that one type of incumbent will rationally commit one of these errors. This is true even if the

¹⁸For a description of these dynamics in the contemporary U.S. Congress, see ?.

¹⁹These results speak to a small formal literature that analyzes the costs and benefits of polarization (???). In these papers, a central question is whether the equilibrium positions taken by candidates in electoral competition are “too similar” or “too different,” with respect to the voters’ preferences on that policy dimension. The results presented here, by contrast, show that ideological polarization between parties on moral and cultural issues may “spill-over” to non-ideological issues and create disagreement even about public policies over which there is broad public agreement.

project is unambiguously “good” (i.e., everyone would receive a positive expected payoff) or unambiguously “bad” (i.e., everyone would receive a negative expected payoff). In contrast, if the office-holder cares very little about who succeeds him, good projects (in the sense defined above) will be reliably implemented, and bad projects will not.

Finally, Proposition ?? identifies conditions under which a project is implemented only by Republican office-holders, even though Democrats value it more. This occurs when concerns about the changing electoral landscape overwhelm immediate concerns about a policy’s direct benefits.

Proposition 5. *If $\theta_M < \theta^*$ then there exists $\bar{\psi}$ such that, if $\psi > \bar{\psi}$, only a Republican office-holder supports implementation.*

The intuition here is the same as above. If $\theta_M < \theta^*$, then Republicans are more aligned with the median voter and they therefore benefit electorally from a project’s implementation. If this effect is sufficiently large, Republicans will favor and Democrats will oppose implementation, even though Democrats receive a higher direct payoff from the project.

4.3 Comparative Statics on Project Implementation

The comparative static effects on implementation are summarized in Table ?. To begin, consider the effect of the different actors’ preferences toward the project. If θ_D increases, two countervailing effects arise: a consumption effect and an electoral effect, the first of which is more easily discerned. When the Democrat’s preference for the public good increases, a Democratic office-holder will increase the amount of public good provision in period 2, provided that it was implemented in period 1, which has the effect of moving policy away from the ideal levels of both the Republican and the median voter. Holding constant the second period election probabilities, this fact makes implementation in the first period less attractive to a Republican office-holder and more attractive to a Democratic office holder.

The electoral effect runs in exactly the opposite direction. Because the Democrat’s second-period behavior after implementation is less attractive to the median voter, the probability that a Democrat will be elected in the second period election decreases. Ceteris paribus, this makes Democrats less willing, and Republicans more willing, to implement the project in the first period. Because these two effects run counter to one another, the overall effect of an increase in θ_D on implementation by either a Democratic or Republican incumbent is ambiguous.

Similarly, the effect of an increase in θ_R can be split into a consumption and an electoral effect. In this instance, however, we have a clear prediction for one of the two parties. A larger θ_R implies both that the public good becomes more attractive to the Republican, and that

Table 1: Comparative Statics on Project Implementation

| Variable | Republican's Decision | Democrat's Decision |
|------------|---|---|
| θ_D | ambiguous: negative consumption effect, positive electoral effect | ambiguous: positive consumption effect, negative electoral effect |
| θ_R | positive | ambiguous: positive consumption effect, negative electoral effect |
| θ_M | negative | positive |
| K | negative | negative |
| ψ | ambiguous: positive for party closer to MV, negative for opponent | ambiguous: positive for party closer to MV, negative for opponent |

Note: this table presents comparative static effects of an increase in different parameters on project implementation.

the Republican's provision level, should she hold office in period 2, is more attractive for both Democrats and the median voter. With regard to consumption, therefore, an increase in θ_R makes implementation unambiguously more attractive for both Democrats and Republicans. Electorally, an increase in θ_R makes the Republican candidate more attractive to the second period median voter, provided that the project was implemented. As a result, the Republican is more willing to implement the project, while the Democrat is less willing to do so. Overall, then, an increase in θ_R improves the odds that a Republican will implement the project in period one. The effect for Democrats, however, is ambiguous, since the consumption effect and the electoral effect point in opposite directions.

Increasing the median voter's preference θ_M while keeping θ_R and θ_D constant yields no direct consumption effect for either the Democratic or Republican office-holder. Electorally, however, an increase in θ_M aligns the Democrat more closely with the median voter in the second period after implementation. As a result, the Democrat will be more willing to implement the project in the first period, while the Republican will be less willing to do so.

An increase in first-period implementation cost K has no effect on second-period elections. Rather, it only diminishes the consumption payoffs for Democrats and Republicans alike. As a result, an increase in K unambiguously decreases the incentive of both parties to implement the project.

Lastly, higher values of ψ increase the incentive to implement the project for the elec-

torally favored party, and decrease it for the electorally disadvantaged party. Whether this is the Democrat or the Republican depends on which party's preferences are more closely aligned with the median voter θ_M .

4.4 Dynamic Political Conflict

To investigate the dynamic nature of political conflict between Republicans and Democrats, we require a measure on which comparative statics can be assessed. Ours is based on each party's net (project-related) utility of holding office. If the project is implemented, then in the second period only the project investments affect utility. The benefit of a Democrat holding office is therefore given by the net benefit to the Democrat from running the project himself (rather than having a Republican run it), i.e., $\theta_D f(L_D) + L_D - \theta_D f(L_R) - L_R$. Similarly, the net benefit of the Republican running the project instead of the Democrat is $\theta_R f(L_R) + L_R - \theta_R f(L_D) - L_D$. We define the level of political conflict in period 2, c_2 , by the sum of these two terms. Thus,

$$c_2 = (\theta_D - \theta_R)(f(L_D) - f(L_R)). \quad (9)$$

If Democratic and Republican preferences are close, i.e., θ_D and θ_R have similar values, then the level of conflict in the second period, as measured by c_2 , is small. The same is true if the levels of investment by both parties are close, as is likely to occur when the project's ongoing maintenance costs are small.

The level of political conflict in the first period is defined analogously by the net-benefits of holding office, which is summarized by the decisions of whether or not to implement the project. Specifically, if office-holders from both parties would make the same decision regarding implementation (i.e., either both favor implementation, or both oppose it), then there is no conflict and $c_1 = 0$. Conflict at $t = 1$ only arises if one party favors the project's initiation and the other opposes it, in which case the left-hand sides of (??) and (??) have different signs. If only the Democrat wants to start the project, then her benefit from being elected is equal to the left-hand side of (??) and the Republican's net-benefit is equal to the negative of the left-hand side of (??). The reverse is the case if only the Republican wants to start the project. Thus,

$$\begin{aligned} c_1 &= |\Delta(\theta_D) - \Delta(\theta_R) + \psi(1 - 2\Phi(v_2^*))| \\ &= \left| (\theta_D - \theta_R) \left(\Phi(v_2^*)f(L_R) + (1 - \Phi(v_2^*))f(L_D) \right) + \psi(1 - 2\Phi(v_2^*)) \right|. \end{aligned} \quad (10)$$

Equation (??) shows that the extent of conflict in the first period depends on the difference

in preference parameters, $\theta_D - \theta_R$, the total expected amount of public good, and a term that captures the future electoral effects of implementation. For example, if the project does not provide any electoral advantages ex post, then $v_2^* = 0$ and hence $\psi(1 - 2\Phi(v_2^*)) = 0$. In contrast, the last term matters if the project yields an electoral advantage to one party in the second period.²⁰

We can now use (??) and (??) to calculate the amount of political conflict in each period. First, suppose that conflict in the second period is low. Thus, either θ_D is close to θ_R or $f(L_R)$ is close to $f(L_D)$. If θ_D is close to θ_R , then, not surprisingly, conflict is low in both periods. But now consider a second case, where $f(L_R)$ approximates $f(L_D)$. In this instance, L_D must also be close to L_R and (??) implies that the second-period cutoff v_2^* is close to 0. Hence, the term $\psi(1 - 2\Phi(v_2^*))$ in (??) is small. For conflict in the first period to be large, $f(L_D)$ and $f(L_R)$ must assume large values. We now can see how the political conflict associated with a single project can change over time. When a project's ex post maintenance costs are much smaller than its ex ante implementation cost, then political conflict tends to be front-loaded.

Table ?? summarizes the main comparative static effects of an increase in different parameters on political conflict in periods 1 and 2, assuming that the parties initially disagree on the project. An increase in project-related preference polarization ($\theta_D - \theta_R$) clearly increases the stakes in the second period, but has an ambiguous effect in period 1. Specifically, if Republicans gain an electoral advantage from implementation ($v_2^* > 0$), then first-period conflict can decrease, as long as $\theta_D - \theta_R$ is not too large.

An increase in reelection importance ψ can also yield ambiguous effects, depending on which party gains an electoral advantage. If Democrats benefit, then an increase in ψ will increase first-period conflict. If Republicans gain an electoral advantage from implementation ($v_2^* > 0$), however, then an increase in ψ will lower conflict, as Democratic support and Republican opposition to implementation both decline.

5 Extensions

In this section, we re-evaluate our core findings in models with more than two periods, when election shocks correlate over time, and when the successful implementation of a project occurs probabilistically.

²⁰It may seem counterintuitive that costs K disappear from (??). Recall, however, that this formula for c_2 only applies if exactly one party wants to implement the project, which in turn implies that K must be neither too large (when both candidates oppose implementation) nor too small (when both support implementation).

Table 2: Comparative Statics on Political Conflict

| Variable | Period 1 conflict, c_1 | Period 2 conflict, c_2 |
|-------------------------|--|--------------------------|
| $(\theta_D - \theta_R)$ | ambiguous: increase if either $v_2^* \leq 0$ or $(\theta_D - \theta_R)$ large or ψ small; decrease if $v_2^* > 0$ and $(\theta_D - \theta_R)$ small | increase |
| ψ | ambiguous; increase if large | increase |

Note: this table presents comparative static effects of an increase in different parameters on the incidence of political conflict over time.

5.1 Models with Longer Time Horizons

Our main model posits two time periods in which the project is either implemented immediately or not at all. While the two-period framework simplifies the analysis, a model with more periods generates many of the same comparative statics on political conflict, subject to a few caveats and modifications, but also reveals new conditions under which a politician will forsake her immediate policy interests in order to shore up her party’s longer-term electoral fortunes.

The simplest extension of our basic framework is to allow for $T = 3$ periods,²¹ which immediately alters the strategic calculus of the first-period incumbent. Suppose this politician is the Republican. If she does not implement the project, the continuation of the game proceeds exactly as before, as now there are two remaining periods. As we have seen, this second-period Republican (i.e., the first-period Republican in the two-period model) will have an electoral disadvantage if the median voter in period 2 would prefer the project to be implemented, and expects the Democrat, but not the Republican, to abide her wishes. If electoral concerns are sufficiently important, then the first-period Republican incumbent may choose to implement the project in order to “take the issue off the table.” This type of implementation does not occur in a two-period setting because there, if the project is not implemented in the first period, it is not implemented at all.

As an illustrative example, consider a project that initially costs $K = 4$ and, once implemented, does not require additional investments and yields a public good output of $f(0) = 1$.

²¹For any finite number of periods T , the equilibrium can be found through backwards induction, and this equilibrium is (generically) unique. In contrast, in an infinite period setup, a large number of subgame-perfect equilibria arise because of repeated game effects that do not align with the main interest of this paper. One way to exclude these reward-and-punishment equilibria is to focus on Markov perfect equilibria in which the median voter’s election decision only depends on whether the project has already been implemented and on the electoral shock in period t . If we restrict our attention to Markov perfect equilibria, we can show that the main results derived for the two-period and three-period model go through qualitatively unchanged.

In terms of public good preferences, suppose that $\theta_R = 0$, and $\theta_M = \theta_D = 10$; furthermore, the electoral shock follows a normal distribution with mean zero and standard deviation 10.

Since the project does not require additional investments once implemented, we have $v_2^* = v_3^* = 0$ after implementation. If at the beginning of the second period the project is not yet implemented, then electing the Democrat provides a policy utility of $10 - 4 = 6$ for the median voter (because a Republican second-period office-holder will not implement the project). Thus, for a Republican office-holder in the first period, implementation costs 4 with no direct offsetting benefits because $\theta_R = 0$, but the probability that a Republican will be elected in the second period increases from $\Phi(-0.6) \approx 0.274$ to $\Phi(0) = 0.5$. Thus, the electoral value of project implementation for the first-period Republican is 0.226ψ , so (approximately) for $\psi > 17.7$, implementation is worthwhile.

Of course, because first-period implementation decreases the winning probability for a Democratic candidate in the second period, it also reduces the incentive for a first-period Democratic office-holder to implement the project. A first-period Democrat receives a direct payoff of $2 \cdot 10 - 4 = 16$, so a Democrat will not implement the project if ψ is sufficiently large (approximately $\psi > 70.8$).

In both of these scenarios, the electoral effects of implementation dominate the immediate policy payoffs. Were the outcome of the election a foregone conclusion, then the Republican office-holder would never implement the project and the Democrat would always do so. Only when their actions have the potential to alter the outcomes of an election does either politician deviate from her preferred policy stance.

5.2 Correlated Election Shocks

In the basic model, we assume that the election shocks v_t are drawn from a distribution Φ that is independent across time. If we interpret v_t as derived from the valence difference of the two candidates running in election t , rather than as an idiosyncratic election shock, then it may be more realistic to assume that its values are positively correlated across time. If the incumbent had a high net valence in the first period, then it is more likely than not that her own valence is high, and this will therefore also affect her net valence in the second period, even against another opponent from the opposition party. To formalize this intuition, suppose the valence distribution in the second period is given by $\mu + \varepsilon$, where μ is a shift parameter,²² and the distribution of ε has mean zero and is independent of the first-period valence. Let H be the cdf of ε . Then the valence distribution in the second period is given by $H(x - \mu)$.

²²This could, for example, be the realized valence in the first period, but other interpretations are possible as well.

We want to investigate how changes in μ affect the incumbent's decision to initiate the project when there is a trade-off between her direct preference for the project and its electoral implications.²³ Let's first consider the decision of a Democratic incumbent whether to implement the project that provides the Republican with an ex-post electoral advantage, i.e., $v_2^* > 0$. We show that the Democrat's net-benefit of implementing the project is a U-shaped function of μ for a large class of distributions, H . This, in turn, means that the Democrat may implement the project for small and large values of μ , but not intermediate values. Recall that implementing the project lowers the Democrat's probability of winning, because the Republican has an ex-post electoral advantage. Thus, the Democrat's winning probability is not an increasing function μ .

Formally, to understand the impact of changes of μ on project implementation, we must adjust equations (??) and (??) to account for the fact that $H(v - \mu)$ is no longer symmetric around zero. If $v_2^* > 0$, then (??) becomes

$$\Delta(\theta_D) + \left(\psi(H(-\mu) - H(v_2^* - \mu)) - \int_0^{v_2^*} v dH(v - \mu) \right) \geq 0. \quad (11)$$

The project's net-policy benefit, $\Delta(\theta_D)$, is independent of μ . Thus, μ only affects the second summand of (??) through its impact on changes of the winning probability and the valence loss. The precise impact depends on the underlying distribution.

For example, if the distribution H is uniform, then μ has no effect on project implementation. More formally, suppose that H is uniformly distributed on some interval $[-\underline{v}, \bar{v}]$ and that μ and $v_2^* - \mu$ are in the support $[-\underline{v}, \bar{v}]$ of H . Then $H(-\mu) - H(v_2^* - \mu)$ does not change with μ and the same is true of the net-valence loss, $\int_0^{v_2^*} v dH(v - \mu)$. In this case the Democrat's winning probability in the second period is strictly increasing in μ .

Now suppose instead that H is a single-peaked distribution with a density $h(v)$ that is strictly increasing for $v < 0$ and strictly decreasing for $v > 0$ (for example, a normal distribution with mean zero). The derivative of (??) with respect to μ is given by

$$\psi(h(v_2^* - \mu) - h(-\mu)) + \int_0^{v_2^*} v h'(v - \mu) dv. \quad (12)$$

Note that (??) is strictly negative at $\mu = 0$ and strictly positive at $\mu = v_2^*$. Thus, there exists a value μ^* between 0 and v_2^* at which the project's net-benefit assumes a minimum. One can find parameters such that the net-benefit is positive when $\mu = 0$ or $\mu = v_2^*$, and negative

²³Clearly, if the incumbent likes the project in terms of direct payoff and benefits electorally from implementation, she will implement the project, and that choice is unaffected by μ . Likewise, the choice not to implement a project that the incumbent dislikes and that is electorally unfavorable is unaffected by μ .

when $\mu = \mu^*$. Thus, if we raise μ starting from $\mu = 0$, then the Democrat implements the project and the winning probability in the second period is increasing in μ . Once μ becomes close enough to μ^* then implementing the project is no longer optimal. As a result, the Democrat's winning probability increases by $H(v_2^* - \mu) - H(-\mu)$ (recall that $v_2^* > 0$ means that implementing the project gives the Republican an electoral advantage in the second period). If μ is raised further, the Democrat again implements the project, at which point the winning probability drops. The Democrat's winning probability in the second period is therefore not an increasing function of the Democrat's expected valence.

We can derive a similar non-monotonicity result if the project gives the Democrat an electoral advantage in the second period, i.e., if $v_2^* < 0$. In particular, suppose that the Democrat's policy net-benefit is negative, i.e., $\Delta(\theta_D) < 0$. The Democrat's only reason for implementing the project, therefore, is to gain the second-period electoral advantage. This may be optimal for small, positive μ . However, once μ is sufficiently large, an increase in the winning probability becomes small because the changes occur in the tail of the distribution. Thus, concerns about the policy's cost $\Delta(\theta_D)$ outweigh the policy's electoral benefits for large μ . At the point where the project is no longer implemented, the Democrat's winning probability drops by $H(-\mu) - H(v_2^* - \mu)$, and the winning probability is again nonmonotone in the Democrat's expected valence.

Analogous results apply to Republican incumbents. For example, a Republican incumbent who dislikes the project, but benefits electorally from implementation has the biggest electoral advantage if μ is close to zero, and therefore is more inclined to implement the project when her expected valence is in a middle range than when it is either very high or very low.

This extension of our model clarifies the challenges of empirically evaluating two relationships of political interest. The first concerns an incumbent's quality and willingness to take costly policy action. Depending on whether a policy adoption is electorally advantageous or costly and whether the politician's direct utility from the policy is positive or negative, marginal changes in quality can either increase or decrease a politician's willingness to take a policy action. The politician who benefits directly but suffers electorally from a policy's adoption is especially inclined to implement it when her valence realization is either high or low. Conversely, an incumbent whose direct payoffs are negative, but who benefits electorally from a policy's adoption is especially likely to implement it for moderate realizations of valence. In both instances, then, we observe a nonmonotonic relationship between quality and action.

The second relationship concerns an incumbent's quality and prospects for reelection. Given that marginal changes in a candidate's valence can either increase or decrease the

probability that she will take an electorally costly or beneficial political action, the unconditional correlation between a candidate's quality and electoral fortunes also remains ambiguous. Marginal increases in valence that do not trigger a change in policy adoption will invariably improve an incumbent's reelection prospect. Should an increase in valence alter the incumbent's decision about whether to implement the policy, however, her chances of reelection could either increase or decrease, depending on the size of the valence increase and whether the policy's adoption was either electorally advantageous or damaging.

5.3 Uncertain Implementation

In the baseline model, we assumed that the incumbent in period 1 is completely in control of whether or not to implement the project. In reality, though, additional (and unmodeled) political actors, such as a legislature (which could, in turn, be influenced by lobbyists), may have to consent to a project's implementation. A simple, albeit slightly reduced-form, way to model the resulting uncertainty is to assume that an office-holder's decision to implement a project will succeed with probability $p < 1$.

Given this simple change, some of our core findings carry through unaltered. For instance, the introduction of this additional parameter does not affect the office-holder's first-period decision about whether to try to implement the project. If the incumbent's payoff is higher if the project is successfully implemented, then it is worth trying to implement as well.

In the first period, by contrast, the electoral benefits of agreement with the voter about the merits of policy initiation decline relative to the baseline model. Suppose, for example, that both the Democrat and the voter prefer that the project be implemented in period 1, while the Republican does not, so that $v_1^* < 0$. Because implementation is only successful with probability p , the fact that the voter prefers the Democrat on project implementation becomes less important for her voting decision, whereas other factors, summarized by v_1 , become more important.

Introducing uncertainty about the project's successful implementation also has implications for the emergence of political conflict. In the first period, a low p is likely to mute antagonism because it is known that, while candidates may disagree on the merits of implementing the project, even the Democrat is unlikely to succeed in starting it. The issue, as a result, is less consequential for the first-period election. But if, against the odds, a first-period Democratic incumbent succeeds at implementing the project, then partisan disagreement over the project's management plays a more prominent role in the second-period election.

6 Returning to Our Motivating Examples

With Bush’s No Child Left Behind and Obama’s Affordable Care Act, two presidents launched major initiatives with divergent consequences. In one instance, the enactment of a new program tempered political conflict; in the other, it plainly exacerbated it. Our model clarifies why.

Let’s start with NCLB. For decades prior to its enactment, Republicans stood firmly against the federal government’s involvement in education policy; and certainly against the kind of heavy-handed tactics associated with the law’s accountability measures. Ever since President Jimmy Carter created the Department of Education (DOE), Republican candidates for president called for its abolition. Among Republican party leaders more generally, DOE interventions that intruded upon the province of local education authorities was met with considerable skepticism (??).

Throughout this period, however, the American public was not especially averse to federal involvement in education, and it positively endorsed strong accountability measures. In 2001, 55 percent of the American public supported the increased use of standardized tests to measure student achievement, and 75 percent believed that schools should be held accountable for how much students learned.²⁴ Meanwhile, the issue of education played to Democrats’ electoral advantage. In the year before NCLB’s enactment, the public was upwards of 12 percentage points more likely to “trust” the leadership on education policy offered by Democrats over Republicans. As Bill Galston put it, Republicans’ education platform at the time “could easily be heard by the public as a retrenchment of the national commitment to and federal role in education”²⁵

In ways that are perfectly consistent with our model, NCLB removed education as a subject of political contestation and thereby enhanced the electability of Republican candidates. By enacting NCLB, Bush reduced the Republicans’ electoral disadvantage over education at the federal level of government. In 2004, the first year the question was asked again, the partisan difference in trust on education declined by more than half. Conflict in this policy domain, moreover, dissipated just as soon as the new regime was established. Whereas Republicans and Democrats had disagreed about the merits of investing the up-front costs of building a federal accountability regime, as parameterized by K , thereafter they largely agreed about the merits of maintaining it, as parametrized by $f(L_D)$ and $f(L_R)$.

The model also offers insight into why Bush, in particular, was willing to implement NCLB. Recall that incumbent politicians of moderate quality are the ones most likely to

²⁴Phi Delta Kappa/Gallup Polls of the Public’s Attitudes towards Public Schools, accessed at: http://www.pdkmembers.org/members_online/publications/GallupPoll/k_q_government_2.htm#194.

²⁵As quoted in ?, p.111.

adopt policies that are electorally advantageous but that do not deliver direct benefits. Bush in 2001 certainly fit this bill. Neither an unmitigated disaster nor a political prodigy, Bush, at least early in his first term of office, was generally understood to be competent-talented, to a degree; experienced, to a point; persuasive, among a least some portions of the electorate. Bush, by this telling, was willing to adopt a policy that Republicans had opposed for years because she was a politician of middling quality, and the electoral advantages of doing so, therefore, would meaningfully affect his chances of reelection.

In important respects, the policy dynamics of the ACA differed from those of NCLB. Health, after all, is a policy domain in which presidents had spent decades trying (and failing) to effect meaningful change. Nearly every president since Franklin Roosevelt, Democrat and Republican alike, sought to reform the nation's health care system. Though members of the two parties disagreed about the best way to move forward, all sought to rationalize a patchwork system of employer-mandated health care. And until Obama enacted the ACA, nearly all failed. Powerful interest groups like the American Medical Association, the American Hospital Association, and the American Association for Retired People, as well as insurance companies, doctors associations, and the pharmaceutical industry consistently stood in the way of any substantial reform (Hacker 1999; Starr 2011). This dense thicket of powerful interests combined with features of the lawmaking process itself made it virtually impossible to pass any health care initiative (Steinmo and Watts 1995).

When Obama assumed office, there was very little indication that he would succeed where so many others had failed. That Obama managed to pass the ACA, and then only barely so, came as a great surprise,²⁶ and thus ensued a political row that played to the Republicans' distinct advantage. Where NCLB leveled the electoral landscape, ACA tilted it. Running on the promise to overhaul Obamacare,²⁷ Republican majorities promptly took back both the House and Senate.

Once again, our model speaks to all of these dynamics. From the model, we see how people's latent expectations of political success, as parametrized by p , can have immediate consequences for observed levels of political conflict, c . When p is low, as it was before ACA's enactment, voters tend not to put much stock in the observed levels of policy disagreement between candidates, and hence conflict tends to be relatively low. As we have seen, though, conflict can quickly escalate when an effort to initiate a policy change surprisingly succeeds,

²⁶See Norm Ornstein, "The Real Story of Obamacare's Birth." *The Atlantic*, July 6, 2015.

²⁷The nomenclature typically used is "repeal and replace." Of course, our model does not recognize the possibility of repeal, which suggests that a public works project, once implemented, can subsequently be eliminated. The model does recognize, however, the possibility of considerable disagreement over continued public investments into a successfully implemented project, which, substantively, is exactly what the debate over the ACA's "replacement" involves.

exactly as occurred in the aftermath of the ACA.

Whereas Bush’s NCLB mitigated an electoral advantage previously enjoyed by Democrats, Obama’s ACA degraded his party’s subsequent electoral fortunes. Proposition ?? shows that this is possible if ψ is small, i.e., if Obama was more concerned with passing a healthcare bill than he was about his party’s chances at reelection. This, it turns out, is exactly the sentiment he shared before a joint session of Congress in the fall of 2009, when debate over the ACA was in full bloom: “I understand that the politically safe move would be to kick the can further down the road – to defer reform one more year, or one more election, or one more term. But that is not what the moment calls for. That’s not what we came here to do. We did not come to fear the future. We came here to shape it.”²⁸

The model profitably trains our attention on the costs not just of initiating the ACA but also of maintaining it. The ACA does not resemble a generic public works project that, once created, persists in perpetuity without need for upkeep. Nor does it look like NCLB, wherein most of the work involved in implementation fell to the states. Rather, the ACA called for additional subsidies and the creation of health exchanges, both of which required substantial federal investment. Infrastructure had to be built, insurance companies had to be solicited, new plans had to be developed, and new markets had to be opened. As a consequence, political conflict at the federal level of government persisted long after the program’s initiation. Within the model, $f(L_D)$ and $f(L_R)$ differed, and hence downstream conflict, c_2 , remained large.

Lastly, the model again clarifies why this particular president was willing to take this particular action. Whereas Bush was generally recognized as a moderately capable politician during his early tenure in office, Obama, by all accounts, exhibited all the qualities of a once-in-a-generation leader. Politically savvy and rhetorically gifted, Obama drew from the upper tail of the valence distribution—precisely the kind of politician, our model suggests, who will accept the electoral costs of adopting a policy that they support.

7 Conclusion

Political conflict is not strictly a function of politicians arguing from fixed and uncompromising points of disagreement. Rather, the incidence of political contention crucially depends upon the subject of discussion and the electoral benefits afforded by its persistence. As political initiatives evolve and the electoral landscape shifts, some conflicts that were once

²⁸Barack Obama, “Health Care Address to Congress.” Presented at the Joint Session of Congress, September 9, 2009. *The New York Times*. <http://www.nytimes.com/2009/09/10/us/politics/10obama.text.html>.

intense may soften, just as other conflicts that were previously sublimated suddenly awoken.

In this paper, we study a model in which a politician must decide whether to initiate a program at a fixed cost; and having succeeded in doing so, she then must decide how much to fund the program. Following each policy decision, the candidate faces a voter who decides whether to replace him with someone of the same or the opposite party. This simple framework reveals a great deal about how changes in the probability of a successful project initiation, the intrinsic benefits of holding office, players' assessments of the future, project-related preferences, and electoral shock distributions either exacerbate or mitigate political conflict. While some comparative statics are clear, consistent, and self-evident, others plainly are not. Policy disagreement, for instance, is not synonymous with political conflict. For electoral reasons, we show, an increase in project-related disagreement does not necessarily translate into heightened political conflict, particularly in the early stages of a programmatic initiative; and likewise, prior agreement about the merits of a public works project does not guarantee that political conflict will not emerge, particularly when the benefits of holding office are high.

The model also clarifies the conditions under which politicians will take policy actions that either increase, decrease, or sustain existing levels of political conflict. Here again, we can see how changes in a program's initiation costs, probability of success, and players' project-related preferences and electoral chances all affect a program's realized support. In models with intertemporally correlated valences, we uncover nonmonotonic relationships between candidate quality and both policy action and electoral support. And in models with three or more periods, we find cases where politicians who, on policy grounds alone, would prefer to initiate a project opt not to do so; as well as politicians who, again on policy grounds, oppose a project nonetheless initiate it.

Throughout, we have characterized the object of policy conflict as a public works project, with our motivating examples consisting of domestic interventions in education and health. Still, the structural differences between a policy's initiation and maintenance, and the electoral incentives undergirding them, obviously apply to a much wider class of phenomena. As an example from foreign policy, consider the Ostpolitik initiated after the SPD took over the West German government in 1969. This policy of increased diplomacy with the communist countries of Eastern Europe was highly polarizing in Germany at the time because the opposition CDU/CSU perceived it as normalizing communist rule over Eastern Europe and the GDR, and as conceding valuable bargaining chips for future peace negotiations. Once Ostpolitik was firmly established, however, both parties at least implicitly agreed on the economic and diplomatic benefits and political conflict altogether vanished.²⁹ The issue

²⁹For example, German exports to Poland quadrupled between 1969 and 1979 (Pac and Anusz, 1991).

disappeared as a cleavage issue from German politics, and when the CDU/CSU returned to government in 1982, Ostpolitik remained in force without major changes.

The model may also have applications to military policy. In some U.S. wars (e.g. World Wars I and II), pre-existing domestic political controversies evaporated the moment that troops were committed to the field; whereas in others (e.g. Vietnam), a war's onset only stoked domestic political discord. In each of these cases, our models suggests, the varying levels of investments needed to launch and then maintain a government initiative coupled with electoral concerns about which party was better suited to make the attendant decisions jointly determined the contours and intensity of political conflict over time.

Scholars have long recognized that observed levels of partisan conflict depend upon the policy agenda being discussed. This paper clarifies the consumption and electoral incentives that affect the willingness of politicians to support the specific elements of that agenda, recognizing the underlying differences between an attempt to create a program and a commitment to sustain one. As we have seen, this distinction proves crucial, as it helps explain why some policy actions trigger latent disagreement, whereas others settle, once and for all, longstanding political imbroglios.

8 Appendix

Proof of Proposition ??. Suppose that the project is implemented at some time $k \leq T$. We first show that all equilibria of subgames at time k have the same payoff.

Let $k = T - 1$. Then, in the final period T , the winner of the election, P , chooses the investment that solves (??). At the voting stage the median voter selects the candidate from whom she receives the higher expected utility. In case of indifference, the median voter can randomize, or in the case of a pure strategy equilibrium, she can select one of the candidates with probability 1. Note that the payoffs to the median voter is the same in all equilibria. Further, payoffs are the same for candidates across different equilibria, except possibly for the single electoral shock realization that makes the median voter indifferent. The equilibrium payoffs depend on the electoral shock realization and on the fact that the project was implemented, but not on any other part of the game's history.

Proceeding by way of induction, suppose we have shown the uniqueness result and lack of history dependence for k . We show that it also is true if the project is implemented in period $k - 1$. Independent of the actions at k , the equilibria of subgames starting at $k + 1$ only depend on the electoral shock realization at $k + 1$. Thus, the decision problem of the median voter and the candidates is the same as in the case where there is only one period left. Equilibrium payoffs are unique for the median voter. They are unique for the candidates except for the electoral shock realization at which the median voter is indifferent between the candidates.

Now suppose that the project has not yet been implemented. If we are in period T then it is no longer optimal to implement it, and the median voter is only indifferent between the candidates when electoral shock is zero, in which case randomization in equilibrium is possible. Thus, the median voter's expected utility is the same in all equilibria of subgames starting in period T , and the equilibrium in the subgame only depends on the electoral shock, and the fact that the project has not yet been implemented.

Suppose we have shown uniqueness for subgames starting at $t > k$. We show that the same is true if the project is not yet implemented in period $t = k$. Independent of whether the project is successfully implemented, the median voter's expected payoffs are identical in all subgames starting at $t = k + 1$, before the electoral shock is realized. In period k the median voter selects the preferred candidate, or if the median voter's utility is the same, then the winning candidate can be picked randomly. This, however, can only occur for exactly one electoral shock realization. Hence, equilibrium payoffs are unique in all subgames for the median voter, and they are unique for candidates for all but a single electoral shock realization. \square

Proof of Proposition ??. If $\theta_M = \theta^*$ then, as stated in the text, $v_2^* = 0$. Hence after implementation, each candidate is elected with probability 0.5. Thus, candidate P will strictly prefer to implement the project when elected if and only if $\Delta(\theta_P) > 0$, and the candidate is indifferent if $\Delta(\theta_P) = 0$.

Next, note that Δ is increasing in type, so $\Delta(\theta_D) > \Delta(\theta_R)$. Thus, if $\Delta(\theta_R) > 0$ then $\Delta(\theta_D) > 0$, i.e., we get case (a) where both candidates initiate the project. Hence, $v_1^* = 0$ because candidates implement the same policy with respect to the project and are selected solely according to the electoral shock.

Similarly, because Δ is increasing in type, $\Delta(\theta_D) < 0$ implies $\Delta(\theta_R) < 0$. Thus, we have case (c) where neither candidate implements the project. Again, $v_1^* = 0$.

Finally, if $\Delta(\theta_R) < 0$ and $\Delta(\theta_D) > 0$ then only the Democrat implements the projects. The median voter's payoff is $\Delta(\theta_M)$. The median voter's net-benefit of voting for the Democrat is therefore $\Delta(\theta_M) + v_1$. At cutoff v_1^* , the median voter must be indifferent between the candidates, which implies $\Delta(\theta_M) + v_1^* = 0$. \square

Proofs of Propositions ?? to ?? follow from the arguments given in the text.