Commitment Problems Don't Cause Conflict When Threats Arise Endogenously

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Abstract

Scholars commonly point to commitment problems as a fundamental cause of costly conflict. Often, this is modeled in a window-of-opportunity framework in which an offeree (the "opposition") can mobilize a high threat against the offerer (the "ruler") in an exogenously fixed fraction of periods. Infrequent windows of opportunity trigger conflict in equilibrium. In the present model, the opposition can choose to mobilize in any period. Doing so requires paying a sunk cost that fluctuates over time, which results in the opposition mobilizing sometimes but not others. The ruler's commitment problem appears identical to existing models, as the ruler makes transfers only when the opposition mobilizes. Nonetheless, the results diverge. Decreasing the frequency of mobilization does not affect the optimal transfer in a high-threat period—this effect is perfectly offset by lower average costs to mobilizing. Conflict never occurs in equilibrium, as long as conflict reduces surplus relative to a peaceful path.

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1 INTRODUCTION

Why costly conflict occurs is a central question in international and domestic politics. What prevents actors from peacefully bargaining away their disagreements, and thus preserving the surplus that conflict destroys? Commitment problems have become one of, if not the, main mechanisms posited across various literatures to understand costly conflict and other inefficient outcomes (Powell 2004). Within the realm of conflict specifically, many scholars analyze international war (Fearon 1995; Powell 2006; Debs and Monteiro 2014; Krainin 2017), and others study civil conflict (Fearon 2004; Chassang and Padro-i Miquel 2009; Walter 2009; Powell 2012; Gibilisco 2021). Additional scholarship examines how the commitment problem triggers institutional reform such as democratization (Acemoglu and Robinson 2006; Ansell and Samuels 2014; Leventoğlu 2014; Castañeda Dower et al. 2018), or power-sharing arrangements within authoritarian or democratic regimes (Helmke 2017; Christensen and Gibilisco 2020; Meng 2019; Powell 2020; Paine 2021).

The canonical model of the commitment problem in political science presents the following logic. A domestic opposition actor can occasionally mobilize a coercive threat against the ruler. Recognizing a time of peril, the ruler responds with temporary concessions to enact monetary redistribution schemes or other favored policies. However, mobilizing mass anti-regime movements is difficult. Therefore, an opposition actor who is strong today may fail to mobilize a coercive threat tomorrow. Absent a coercive threat, the ruler faces no incentive to redistribute, and hence the opposition does not gain transfers. Although the ruler's lack of commitment ability is, for this reason, obviously problematic for the opposition, it creates a problem for the ruler as well. If the opposition knows its windows of opportunity arise rarely, then, in a fleeting period in which the opposition has a window of opportunity, it will reject any temporary transfer and revolt instead. This is the only way for the opposition to "lock in" its temporary advantage. Thus, the ruler's inability to commit to future promises is problematic from his perspective because he cannot peacefully co-opt the opposition.[1]

A key assumption in the canonical model of the commitment problem is that windows of opportunity arise exogenously. In a fixed fraction of periods, the opposition can *costlessly* mobilize a threat against the ruler, but *cannot* mobilize in other periods. Although parsimonious and tractable, this leaves open a natural question: what if the opposition endogenously chooses when to mobilize an anti-regime movement? In the real world, actors undoubtedly mobilize as a strategic reaction to other aspects of the environment. Mobilizing may be more or less costly at different points in time, but conditions are not unambiguously either "great" or "terrible"—in contrast to the standard assumption.

This paper demonstrates that commitment problems do not cause conflict when anti-regime threats arise endogenously. In the model, Nature draws a cost from a continuous distribution in each period, rather than assigns the opposition to pose a high or low threat. The opposition then decides whether to pay this cost to mobilize an anti-regime movement, in which case it subsequently bargains with the ruler for a transfer. The model has the core frictions inherent in existing accounts of the commitment problem: (a) the ruler cannot commit to deliver transfers in periods the opposition does not mobilize, and (b) the opposition mobilizes in some periods but not others. Nonetheless, conflict cannot occur in equilibrium, as long as conflict is net costly relative to peace. Infrequent mobilization makes revolting relatively more attractive for the opposition, as in existing models, but this is perfectly offset by a novel element of the present model: a lower average cost of mobilizing. This offsetting benefit enables the ruler to buy off the opposition in every period. In a sense, smoothing out a key element of the canonical model eliminates the friction that yields conflict. In the conclusion, I discuss why models based on exogenous threats are, nonetheless, still valuable workhorse models; while also highlighting the new insights gained from better understanding precisely what drives the relationship between commitment problems and conflict.

[1]Changing the proper nouns, this generic mechanism can be applied to any of the distinct substantive settings mentioned in the previous paragraph.

2 Model

2.1 Setup

A ruler and opposition actor bargain over spoils throughout an infinite-horizon interaction. Periods are denoted by $t = 0, 1, 2, \ldots$ and the players share a common discount factor $\delta \in (0, 1)$. In every period, the ruler controls an asset valued at 1, and this comprises total output in society.

The first move is by Nature, who determines a contemporaneous cost c_t that the opposition would pay to mobilize against the ruler. With probability $r \in (0, 1]$, this cost is drawn from an iid distribution $F(c)$ with support over $[0, c^{\max}]$, for $c^{\max} \in [0, 1]$. The average cost is denoted as $\overline{c} \equiv \int_0^{c^{\max}} c_t dF(c)$. With complementary probability $1 - r$, the cost is degenerate: $c_t = \infty$.

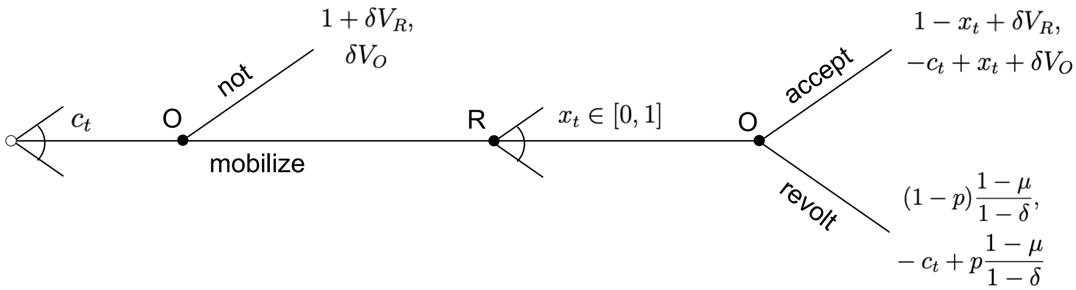
The standard model is a special case of this setup in which $r < 1$ and $c^{\max} = 0$. That is, in a fraction r of periods, mobilization is costless; and in the remaining $1 - r$ periods, it is not possible. A setup with purely endogenous mobilization (the main case of interest here) is one in which $r = 1$ and $c^{\max} > 0$. That is, the opposition always has agency to mobilize, which requires paying a positive but not restrictively high cost (less than total societal output).[2]

After observing the draw of c_t, the opposition decides whether to mobilize. If not, then the ruler and opposition respectively consume 1 and 0, and then engage in an identical interaction in period $t + 1$ with respective continuation values V_R and V_O. If instead the opposition mobilizes, then it pays the sunk cost c_t and engages in a bargaining interaction. The ruler makes a proposal to transfer $x_t \in [0, 1]$ to the opposition, the bounds of which capture (a) no transfer of resources from the opposition to ruler and (b) the offer cannot exceed the ruler's endowed asset of 1. If the opposition accepts the transfer, then the ruler and opposition respectively consume $1 - x_t$ and $-c_t + x_t$, and they begin an identical interaction in period $t + 1$ with the continuation values stated above. Alternatively, the opposition can revolt. A revolt succeeds with probability $p \in (0, 1]$,

[2]The upper bound of the support for $F(c_t)$ is $c^{\max} \leq 1$. Therefore, when c_t is drawn from $F(c)$, the cost of mobilization cannot exceed total societal output.

whereas the ruler survives with complementary probability. The winner consumes $1-\mu$ in the period of the revolt and in perpetuity. Assuming $\mu \in (0,1)$ implies that conflict permanently reduces total societal output. Figure 1 presents the tree of the stage game.

Figure 1: Tree of Stage Game



2.2 Analysis

The solution concept is Markov Perfect Equilibrium (MPE). If mobilization is purely endogenous ($r=1$) and a no-costly peace assumption is met, then the path of play is peaceful for all parameter values. Only when $r<1$ does a wedge exist that can trigger conflict in equilibrium.

Optimal transfer and cost-of-mobilization threshold. Solving backwards on the stage game, the opposition's no-revolt constraint is

$$-c_t + x_t + \delta V_O \geq -c_t + p\frac{1-\mu}{1-\delta}. \quad (1)$$

The cost of mobilizing is sunk, and the opposition decides between accepting and revolting. Upon accepting, it consumes a transfer x_t today and remains as the opposition tomorrow, valued at V_O. Alternatively, it can revolt and consume $1-\mu$ in the present and all future periods, if the revolt succeeds, which occurs with probability p.

The ruler never proposes a transfer that strictly satisfies Equation 1 because doing so would diminish his consumption without changing the opposition's action. Thus, along a peaceful equilibrium path, the transfer makes the opposition indifferent between accepting and revolting, as is standard in these models. We denote this transfer amount as x^*, which is identical in any period the opposition mobilizes. This enables restating the no-revolt constraint as an equality

$$x^* + \delta V_O = p\frac{1-\mu}{1-\delta}. \tag{2}$$

Because the ruler holds the opposition to indifference, mobilizing yields lifetime expected consumption of $p\frac{1-\mu}{1-\delta}$ for the opposition—regardless of whether it accepts the offer or revolts. Thus, when deciding whether to mobilize, the opposition does so only if paying the cost c_t in return for gaining this consumption value exceeds consuming 0 today and remaining as the opposition tomorrow

$$-c_t + p\frac{1-\mu}{1-\delta} \geq \delta V_O.$$

At a unique cost-of-mobilization threshold, denoted as $\hat{c}$, the opposition is indifferent between these two choices, and thus chooses to mobilize if and only if $c_t \leq \hat{c}$. The threshold satisfies

$$-\hat{c} + p\frac{1-\mu}{1-\delta} = \delta V_O. \tag{3}$$

Given the distribution of c_t, the opposition will mobilize in a fraction $rF(\hat{c})$ of periods, thus recovering the standard result that the opposition mobilizes in some periods and not others. In every period in which the opposition mobilizes, it receives the transfer x^*,[3] and pays an average cost of mobilization $c^{\text{avg}} \equiv \frac{\int_0^{\hat{c}} c_t dF(c)}{F(\hat{c})}$. Whenever the opposition does not mobilizes, it consumes 0, which recovers the standard finding that the ruler cannot commit to deliver transfers in periods the opposition lacks a coercive threat. This yields a continuation value for the opposition of

[3]The state space is continuous because c_t is distributed continuously. However, c_t does not affect payoffs at the ruler's information set, and thus a unique choice of x^* solves the present system of equations. Given the Markov assumption, this must be the transfer in every period (because players cannot condition on actions in prior periods).

$V_O = rF(\hat{c})\frac{x^* - c^{\text{avg}}}{1-\delta}$.

These equations uniquely pin down the endogenous quantities of interest.[4]

$$\hat{c} = x^* \tag{4}$$

$$\underbrace{x^* + \frac{\delta}{1-\delta} rF(\hat{c}) \overbrace{\left(x^* - c^{\text{avg}}\right)}^{\text{Avg. consum. in mob. period}}}_{\text{Peaceful path}} = \underbrace{p\,\frac{1-\mu}{1-\delta}}_{\text{Revolt}}, \tag{5}$$

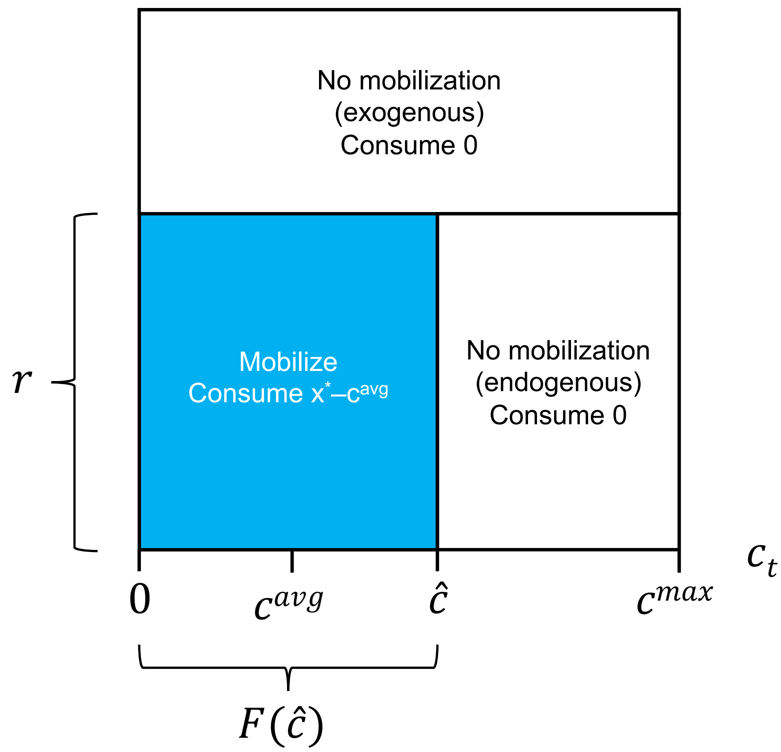
and the second equation can also be rearranged to isolate x^* on the left-hand side

$$x^* = \frac{p(1-\mu) + \delta rF(\hat{c})c^{\text{avg}}}{1 - \delta(1 - rF(\hat{c}))}.$$

The cost-of-mobilization threshold in Equation 4 highlights the intuitive idea that the opposition mobilizes in a particular period if and only if the cost of doing so is lower than the transfer it will receive. Equation 5 implicitly characterizes the latter term, which is premised on a period in which the opposition has mobilized. In the current period, the opposition gains the transfer x^*, but the contemporaneous cost of mobilization does not affect the bargaining calculus because this cost is sunk at the bargaining stage. In future periods, the opposition mobilizes in a fraction $rF(\hat{c})$ of periods and consumes an average amount of $x^* - c^{\text{avg}}$. For the value of x^* to be in equilibrium, the total consumption stream along a peaceful path equals to expected value of revolting. Figure 2 summarizes the opposition's consumption in each period based on the Bernoulli draw related to r and the draw of c_t.

[4]Equation 4 characterizes behavior in any equilibrium, whereas Equation 5 characterizes the equilibrium transfer only if $x^* \in [0, 1]$. It is obvious that the lower bound never binds, and we check the upper bound in the subsequent analysis.

Figure 2: Mobilization and consumption



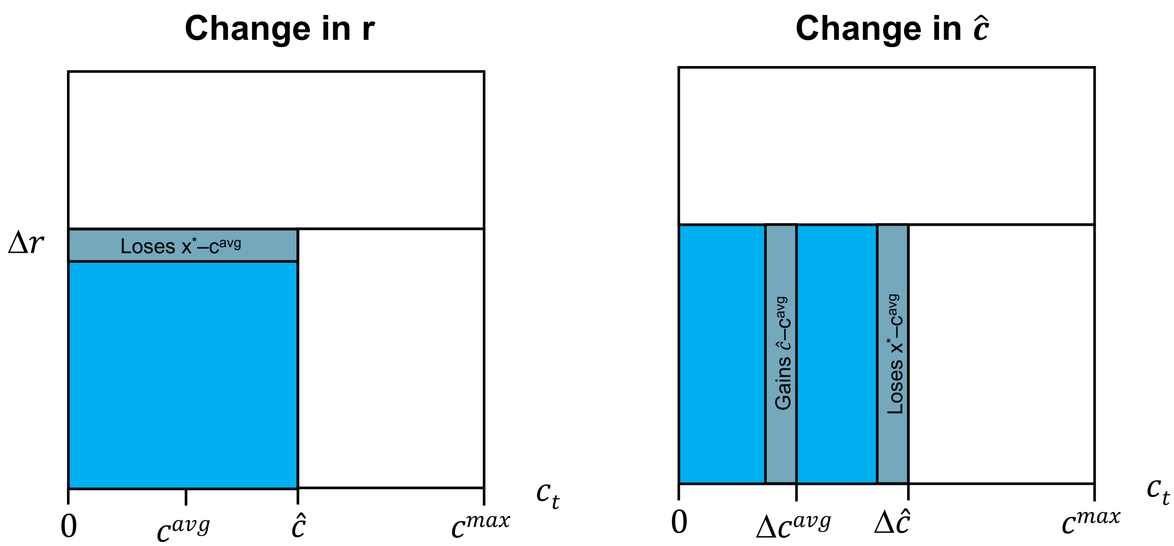
Notes: The draw of c_t varies along the x-axis. The y-axis indicates, based on a fixed value of r, whether Nature chooses $c_t < \infty$.

Cost-of-mobilization threshold does not affect the equilibrium transfer. Two factors affect the frequency of mobilization. First, r, the fraction of periods in which mobilization is possible, an exogenous parameter akin to existing models. Second, $F(\hat{c})$, the fraction of periods in which the cost of mobilizing is low enough that the opposition would choose to do so (conditional on not being "blocked" by the draw related to r). This endogenous term is new to the present model. Given intuitions from existing models, we would expect that reducing the frequency of mobilization, by lowering either r or the cost-of-mobilization threshold $\hat{c}$, would increase the equilibrium transfer. The opposition can more credibly demand a larger transfer every time it mobilizes to compensate for the relative rarity of future periods in which it will receive another transfer. This is indeed true for the exogenous parameter r

$$-\frac{dx^*}{dr} = \frac{\delta F(\hat{c})}{1-\delta(1-rF(\hat{c}))} \underbrace{(x^* - c^{\text{avg}})}_{\text{Consumes less often}} > 0.$$

Lowering r reduces the fraction of periods in which the opposition mobilizes, and therefore gains the net consumption amount $x^* - c^{\text{avg}} > 0$ less frequently. If we impose the standard assumption $c^{\text{avg}} = c^{\text{max}} = 0$, it is even clearer to see why lowering the exogenous mobilization parameter raises the optimal transfer. The left panel of Figure 3 presents the effect graphically, using the same scheme as in Figure 2.

Figure 3: Marginal effects on the optimal transfer



Notes: See Figure 2.

By contrast, altering the endogenous threshold $\hat{c}$ yields divergent insights; the marginal effect on the optimal transfer is 0

$$-\frac{\partial x^*}{\partial \hat{c}} = \frac{\delta r f(\hat{c})}{1-\delta(1-rF(\hat{c}))} \overbrace{\Big(\underbrace{(x^* - c^{\text{avg}})}_{\text{Consumes less often}} - \underbrace{(\hat{c} - c^{\text{avg}})}_{\text{Lower average cost}} \Big)}^{x^* - \hat{c} = 0} = 0. \tag{6}$$

As with the standard, exogenous parameter, lowering $\hat{c}$ corresponds with the opposition mobilizing less often. Thus, this marginally reduces the fraction of periods in which the opposition consumes

$x^* - c^{\text{avg}} > 0$, rather than 0. However, the opposition's endogenous reaction creates a second, countervailing effect. Lowering $\hat{c}$ also reduces c^{avg}, the average cost paid in a mobilization period, a force that *decreases* the optimal transfer. The average cost is implicitly defined as

$$\underbrace{r\int_0^{\hat{c}} c_t dF(c)}_{\text{Avg. mob. cost in all periods}} = \underbrace{rF(\hat{c})}_{\text{Frequency of mob.}} \underbrace{c^{\text{avg}}}_{\text{Average cost when mobilizing}}.$$

A marginal decrease in $\hat{c}$ means the opposition no longer mobilizes when $c_t = \hat{c}$. This reduces the average cost across *all periods* by a magnitude of $\hat{c}$ because this is the cost the opposition would have paid in the marginal periods in which it no longer mobilizes.[5] But, for the average cost in *mobilization* periods, this reduction is offset by c^{avg} because any marginal reduction in the fraction of mobilization periods results in the opposition paying c^{avg} less frequently.[6] Thus, the overall magnitude of the second effect on lowering the average cost of mobilizing is a function of $\hat{c} - c^{\text{avg}}$. The right panel of Figure 3 graphically presents the two countervailing effects.

Combining the two effects of lowering $\hat{c}$ (consumes less often, lower average cost) yields a net change in x^* that is scaled by $x^* - \hat{c}$. Thus, the two effects *perfectly offset* each other because, at the threshold cost $\hat{c}$, the opposition is indifferent between (a) mobilizing and gaining x^*, and (b) not mobilizing. Consequently, the present model explains a shortcoming with the standard finding that infrequent mobilization makes it more difficult to buy off the opposition. If infrequent mobilization is a product of the endogenous threshold $\hat{c}$, then this corresponds with a low average cost to mobilizing. The two countervailing effects cancel out because the mobilization choice is endogenous and the costs of mobilizing are drawn from a continuous distribution.

Ruler's incentive-compatibility condition. We now turn to the incentive-compatibility constraints for each player to choose actions that foster a peaceful rather than conflictual path. The ruler strictly prefers to (a) offer $x_t = x^*$ and induce acceptance, and surely remain as ruler into the

[5] Formally, $\frac{\partial}{\partial \hat{c}}\left(r\int_0^{\hat{c}} c_t dF(c)\right) = rf(\hat{c})\hat{c}$.

[6] Formally, $\frac{\partial}{\partial \hat{c}}\left(rF(\hat{c})c^{\text{avg}}\right) = rf(\hat{c})c^{\text{avg}}$.

next period, rather than (b) make a lower offer that would violate Equation 1 and trigger a revolt, if and only if

$$1 - x^* + \delta V_R > (1-p)\frac{1-\mu}{1-\delta}. \tag{7}$$

The ruler begins each period with an endowment of 1 and gives away x^* in a fraction $rF(\hat{c})$ of periods, and therefore the continuation value satisfies $V_R = \frac{1-rF(\hat{c})x^*}{1-\delta}$. After slight rearranging, this enables us to rewrite the incentive-compatibility constraint as

$$1 - \big(1-\delta(1-rF(\hat{c}))\big)\underbrace{\frac{p(1-\mu)+\delta rF(\hat{c})c^{\text{avg}}}{1-\delta(1-rF(\hat{c}))}}_{x^*} > (1-p)(1-\mu). \tag{8}$$

Many terms cancel out because the ruler holds the opposition down to indifference, which enables the ruler to consume all the surplus associated with preventing conflict. The resulting inequality states that conflict must be net costly to satisfy the incentive-compatibility constraint

$$\frac{1-\delta rF(\hat{c})c^{\text{avg}}}{1-\mu} > 1. \tag{9}$$

Specifically, the inequality states that total consumption in an average period along a peaceful path, which is less than 1 because the opposition periodically pays costs to mobilize, exceeds total surplus in any period once a conflict has occurred. The ruler internalizes both sources of costs; he must offer more compensation to the opposition to offset higher future costs of mobilization,[7] and can offer less to the opposition if revolts are more costly.

Equation 9 is true for all parameter values if it holds when the costs of mobilizing are set to their maximum value. This occurs when the opposition mobilizes in every period, and therefore $r = 1$ and $F(\hat{c})c^{\text{avg}} = \overline{c}$, the latter of which is simply the average draw of the full distribution $F(c)$. Thus,

[7]The term $1 - \delta F(\hat{c})c^{\text{avg}}$ discounts the costs of mobilization by one period because, in the stage game, the opposition sinks the cost of mobilizing prior to the bargaining interaction. Therefore, the ruler does not offer compensation for the present-period cost of mobilizing.

the following inequality comprises an analog of the standard assumption that conflict destroys surplus, or, equivalently, that peace is not costly

$$\frac{1-\delta\bar{c}}{1-\mu} > 1. \tag{10}$$

Opposition's incentive-compatibility condition. Upon mobilizing, the opposition accepts the equilibrium transfer rather than revolts if and only if

$$\big(1-\delta(1-rF(\hat{c}))\big)x^* - \delta rF(\hat{c})c^{\text{avg}} \geq p(1-\mu),^{8} \tag{11}$$

with the feasibility constraint $x^* \leq 1$. The opposition consumes the transfer in the current period and in a fraction $rF(\hat{c})$ of future periods, and pays an average cost of c^{avg} in future mobilization periods. This must exceed the per-period expected consumption from revolting.

Unlike standard models, it is not trivial that offering the entire budget $x^* = 1$ maximizes the opposition's consumption along a peaceful path, as x^* also affects the frequency of mobilization and the average mobilization cost. However, as shown in Equation 6, the two indirect effects perfectly offset, leaving only the positive direct effect. Therefore, if we take the left-hand side of Equation 11 and set x^* and $\hat{c}$ equal to some generic z, we have $\arg\max_{z\in[0,1]}\big(1-\delta(1-rF(z))\big)z - \delta r\int_0^z c_t dF(c) = 1$ because the objective function strictly increases in z. Setting $x^* = \hat{c} = 1$ in Equation 11 and simplifying yields

$$\frac{1-\delta(r\bar{c}+1-r)}{1-\mu} \geq p. \tag{12}$$

If we make mobilization fully endogenous by setting $r = 1$, then we have

$$\frac{1-\delta\bar{c}}{1-\mu} \geq p.$$

[8] This is a slight rearrangement of Equation 5.

Because $p \leq 1$, this is *always* true if the no-costly-peace condition in Equation 10 holds—unlike existing models of the commitment problem, in which conflict occurs in equilibrium if the frequency of mobilization is low. Therefore, conflict cannot occur in equilibrium despite recovering the two core tensions in the canonical formulation of the commitment problem: (a) the ruler is unable to commit to deliver transfers when the opposition cannot mobilize, and (b) the opposition mobilizes in some periods but not others. If mobilization is determined solely by the opposition's optimal reaction to continuously distributed costs, as opposed to discrete parameters that in effect simply block the opposition from mobilizing in certain periods, then the model lacks a wedge that triggers conflict—despite featuring these two core features of the canonical commitment problem. Any force that causes mobilization to occur less frequently also reduces the average costs of mobilizing by an equivalent amount, which ensures that the ruler can buy off the opposition. This intuition yields the main proposition of the paper, the proof of which follows directly from the preceding discussion.

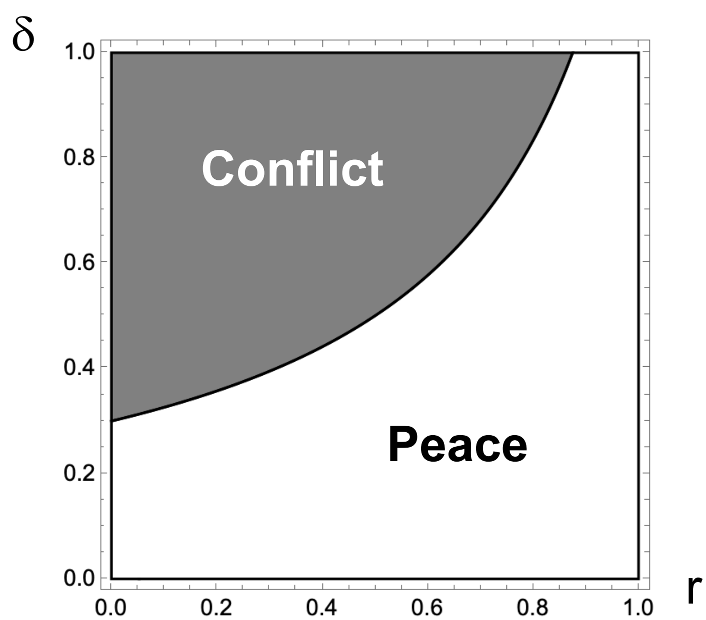
> **Proposition 1** (Peaceful equilibrium)**.** *Suppose mobilization is fully endogenous ($r = 1$) and peace is not costly $\left(\frac{1-\mu}{1-\delta\bar{c}} < 1\right)$. The following strategy profile constitutes the unique MPE. The opposition mobilizes if $c_t \leq \hat{c}$ and does not mobilize otherwise; for $\hat{c}$ defined in Equation 4. If the opposition mobilizes, the ruler proposes $x_t = x^*$, for x^* defined in Equation 5. The opposition accepts any $x_t \geq x^*$. In equilibrium, the opposition accepts the transfer in every mobilization period.*

Relaxing the assumption $r = 1$ is necessary for conflict to occur in equilibrium. As already shown, lowering r raises the optimal transfer, and in fact it can do so to the point that x^* exceeds the per-period budget constraint of 1. Figure 4 plots when Equation 12 holds and fails as a function of r and δ, holding other parameter values fixed at values stated in the accompanying note (which satisfy the no-costly peace condition). The figure depicts the preceding result: if $r = 1$, then the equilibrium must be peaceful, regardless of other parameter values.[9] However, if r is sufficiently

[9] In the standard model with $c^{\max} = 0$, it would be trivial that conflict would not occur if $r = 1$. The opposition would freely mobilize in every period, thus obviating the ruler's inability to commit to transfers in periods the opposition cannot mobilize. However, in the present model, the

low and δ is sufficiently high, then the inequality fails and the equilibrium is conflictual. To see why, lower r blocks the opposition from gaining future transfers, without a fully compensating benefit of lower average mobilization costs. This effect is exacerbated by higher δ because a more patient opposition places more weight on future consumption. This makes the revolt option more tempting because revolting yields the same expected consumption in all periods. At the extreme, when $r \to 1$, the opposition chooses between (a) accepting and consuming 1 in the current period but never again, and (b) revolting and consuming an expected amount $p(1-\mu)$ forever. Revolting yields less consumption in the current period but greater consumption in all future periods, and a more patient player places more weight on the latter. As $r \to 0$ and $\delta \to 1$, Equation 12 reduces to $p(1-\mu) \leq 0$, a false statement. Proposition 2 presents the set of parameter values under which conflict occurs.

Figure 4: Peace and conflict regions



Parameter values: $p = 1$, $\bar{c} = 0.2$, $\mu = 0.3$. These parameter values satisfy the no-costly peace condition for all $\delta \leq 1$.

opposition does not mobilize in every period even if $r = 1$, given the costs of mobilizing.

Proposition 2 (Conflictual equilibria)**.** *Suppose* $\frac{1-\mu}{1-\delta\bar{c}} < 1$ *and* $1 - \delta < p(1-\mu)$*. A unique threshold* $\tilde{r} \in (0,1)$ *exists satisfying* $1 - \delta(1-\tilde{r}) - \delta\tilde{r}\bar{c} = p(1-\mu)$ *such that if* $r < \tilde{r}$*,*[10] *then the following strategy profile constitutes the unique class of payoff-equivalent MPE. The opposition mobilizes if* $c_t \leq \hat{c}$ *and does not mobilize otherwise; for* $\hat{c}$ *defined in Equation 4. If the opposition mobilizes, the ruler proposes any* $x_t \in [0,1]$*, and the opposition revolts in response to any offer. In equilibrium, the opposition revolts in the first period such that* $c_t \leq \hat{c}$*.*

3 DISCUSSION

This paper embeds endogenous, costly mobilization into a model that otherwise resembles the canonical framework for analyzing commitment problems and conflict. In standard models, infrequent mobilization by the opposition triggers conflict. Although the present model contains this tension, the endogenously determined component of the frequency of mobilization is perfectly balanced by the average cost of mobilizing. When mobilization is fully endogenous and conflict destroys net surplus, the ruler's lack of commitment ability is not *problematic* in the sense that conflict never occurs along the equilibrium path; the opposition can always be induced to accept a transfer offer. Recovering the standard story requires that threats cannot be fully endogenous. Instead, the opposition must be unable to mobilize for exogenously determined reasons in a large-enough fraction of periods.

These results fundamentally alter our intuitions about the relationship between commitment problems and conflict. However, they do not imply that commitment problems are unimportant or even that commitment problems cannot be linked to conflict. Instead, they enable us to better understand how this relationship works. The standard assumption of a binary mobilization structure is not terribly limiting. Little and Paine (2023) demonstrate that even if the opposition's threats are distributed continuously (while retaining the standard assumption that mobilization is exogenous),

[10] The equation characterizing $\tilde{r}$ draws from Equation 12. The lower and upper bounds on $\tilde{r}$ follow directly from the two inequalities assumed for this proposition. The unique threshold claim follows from $\frac{d}{d\tilde{r}}\big(1 - \delta(1-\tilde{r}) - \delta\tilde{r}\bar{c} - p(1-\mu)\big) = \delta(1-\bar{c}) > 0$.

conflict occurs in equilibrium when the maximum threat is high relative to the average threat. But, as we have seen, assuming that mobilization is exogenous is not a mere simplification that facilitates analytical tractability. Instead, an exogenous block against the opposition mobilizing is a necessary friction for the commitment problem to trigger conflict. The real world is likely somewhere in between the canonical model and the present model. Mobilization is neither fully exogenous and costless when it occurs, nor fully endogenous with continuously distributed costs. How mobilization happens carries important substantive implications, as opposed to comprising a narrow technical issue. This is undoubtedly an important area for future research.

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