

Propping up Allies

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Third party intervention and reputation

- In many wars, at least one side's ability to fight depends on the support of an outside actor.
 - Ukraine
 - Vietnam
 - Afghanistan
 - Angola

How does the conditional nature of financing affect the conduct of war?

Even when both the third-party donor and the recipient of support have the same interests in the war, reputational concerns can make ineffective tactical choices pervasive.

Related Literature

- **Learning from fighting:** Slantchev (2003), Powell (2004), Smith and Stam (2004), Bils, Jordan, and Ramsay (2025).
- **State capacity and foreign finance:** Beasley and Perrson (2010), Beardsley (2102), Cunningham (2012), Dube and Naidu (2015), Sawyer, Cunningham, and Reed (2017).
- **Third-party intervention and quagmires:** Krainin, Thomas, and Wiseman (2020), Grillo and Nicolo (2025).
- **Reputation and delegation:** Holmstrom (1982), Kreps and Wilson (1982), Padro i Miguel and Yared (2012), Lipnowski and Ramos (2020).

Model

Primitives

- Two Players: (D)onor and (R)eciever
- $t = 1, 2, 3, \dots, T$, discounted by δ
- Receiver types: $\theta \in \{s, w\}$, $Pr(\theta = s) = \mu$
- Tactical state: $\omega \in \{"rain" \text{ or } "shine"\}$, $Pr(shine|\theta) = s_\theta$

Play

1. Nature determines Receivers's type (for the entire war)
2. Donor funds or not
3. Nature determines weather (in a given period)
4. Receiver chooses offense or defense

Utilities

$$U_i(\sigma_d, \sigma_R | \omega_t) = \sum_{t=0}^T \delta^t u_i(\sigma_D, \sigma_R | \omega_t)$$

The Donor sees actions but not payoffs until the end of the game.

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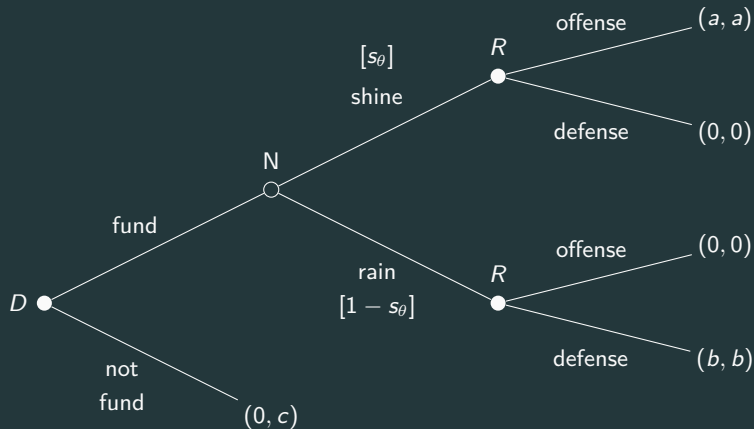
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Stage game



Assumptions on payoffs:

$$s_1 a > c > s_0 a + (1 - s_0) b \text{ and } \delta(s_0 a + (1 - s_0) b) > b$$

Optimal fighting strategies

Definition 1

A Receiver is said to play **optimally** in period t if and only if the Receiver plays offense when it shines and defends when it rains.

Definition 2

A Receiver plays a **monotonic strategy** if and only if they always choose an offensive tactic when it shines, and for all μ the probability that they play defense in the rain is increasing in μ .

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Equilibrium w/o commitment

Suppose $\delta < s_0$. Then there exists a perfect Bayesian equilibrium with $\bar{\mu}_t$ and μ_t^* such that:

1. D plays a cut-off strategy where they support the Receiver whenever $\mu \geq \bar{\mu}_t$.
2. R plays a monotone strategy where they play the optimal tactic if $\mu > \mu_t^*$ and go on the offensive if $\mu \in [\bar{\mu}_t, \mu_t^*)$ and $t \neq T$.
3. Off the path of play, D believes R is “weak.”

So, both strong and weak types of R play sub-optimally, and aggressively, when the Donor's belief in their ability is shaky, extending the Donor's participation, making everyone worse off.

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The nature of support

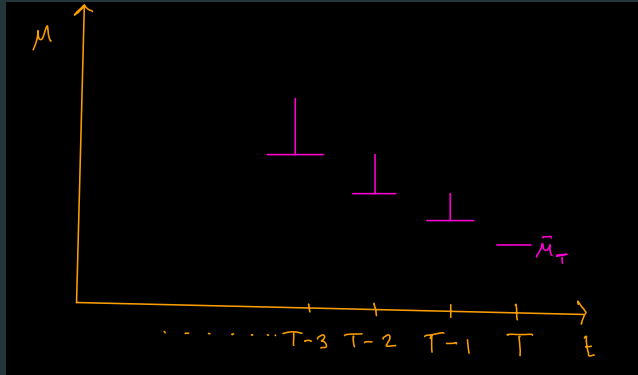


Figure 1: Changing cutpoints and reputational play region

As we reach the end of the war, the Donor is less demanding because the long run cost of supporting weak types is lower

Additional results

1. For infinitely long wars, Donors and Recipients get trapped in inefficient strategies.
2. Suppose D can commit support for $k > 1$ periods, then only “long” commitments induce optimal tactics.
3. Suppose weak type's opportunities for attack decrease over time, then, reputational concerns increase, and strong types need to attack in the rain even after weak types would stop because defending is a stronger signal of weakness over time.
4. (conjecture) If each period the war ends with probability p , then the higher the probability of termination, the more permissive the Donor and, therefore, the more optimal the tactic.

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Conclusion

- We show that dependence on an external ally's support can affect military decision-making, leading to tactical decisions by the recipient of aid that are aimed at maintaining donor support.
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