

Revisionist Ally in Crisis Bargaining: To Support or Not to Support

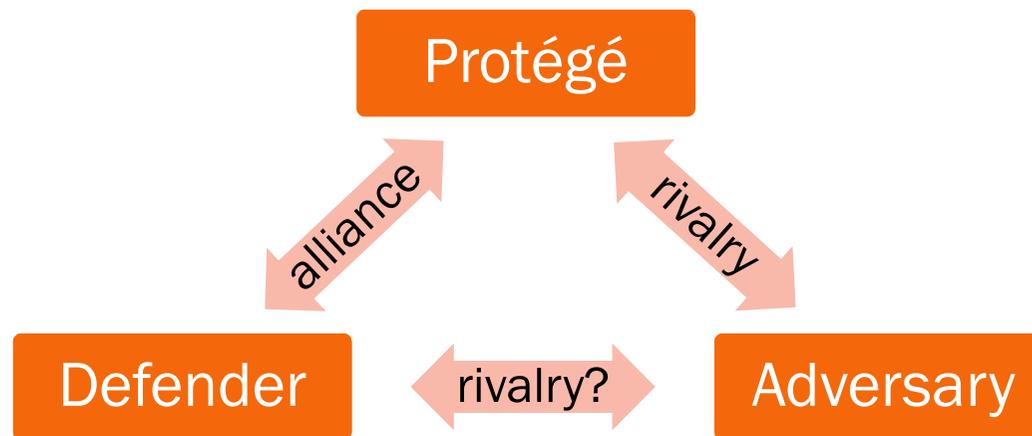
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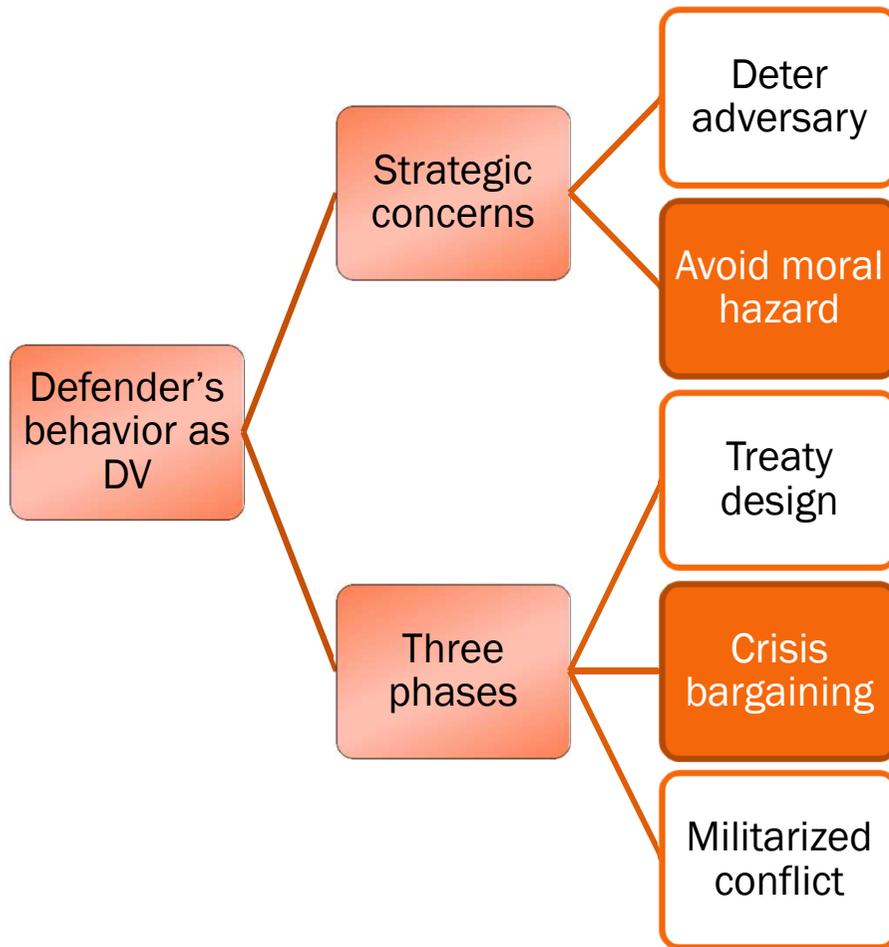
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Research Question

- ∞ When does a defender support or abandon a revisionist protégé who initiates a crisis?



The Defender's Behaviors: What do We Miss?



Phase \ Concern	Deter adversary	Avoid moral hazard
Treaty design	Majority of research	A few
Crisis bargaining		?
Militarized conflict		Consistent with treaties?

The Model

∞ Players: Protégé (P); Adversary (A); Defender (D);

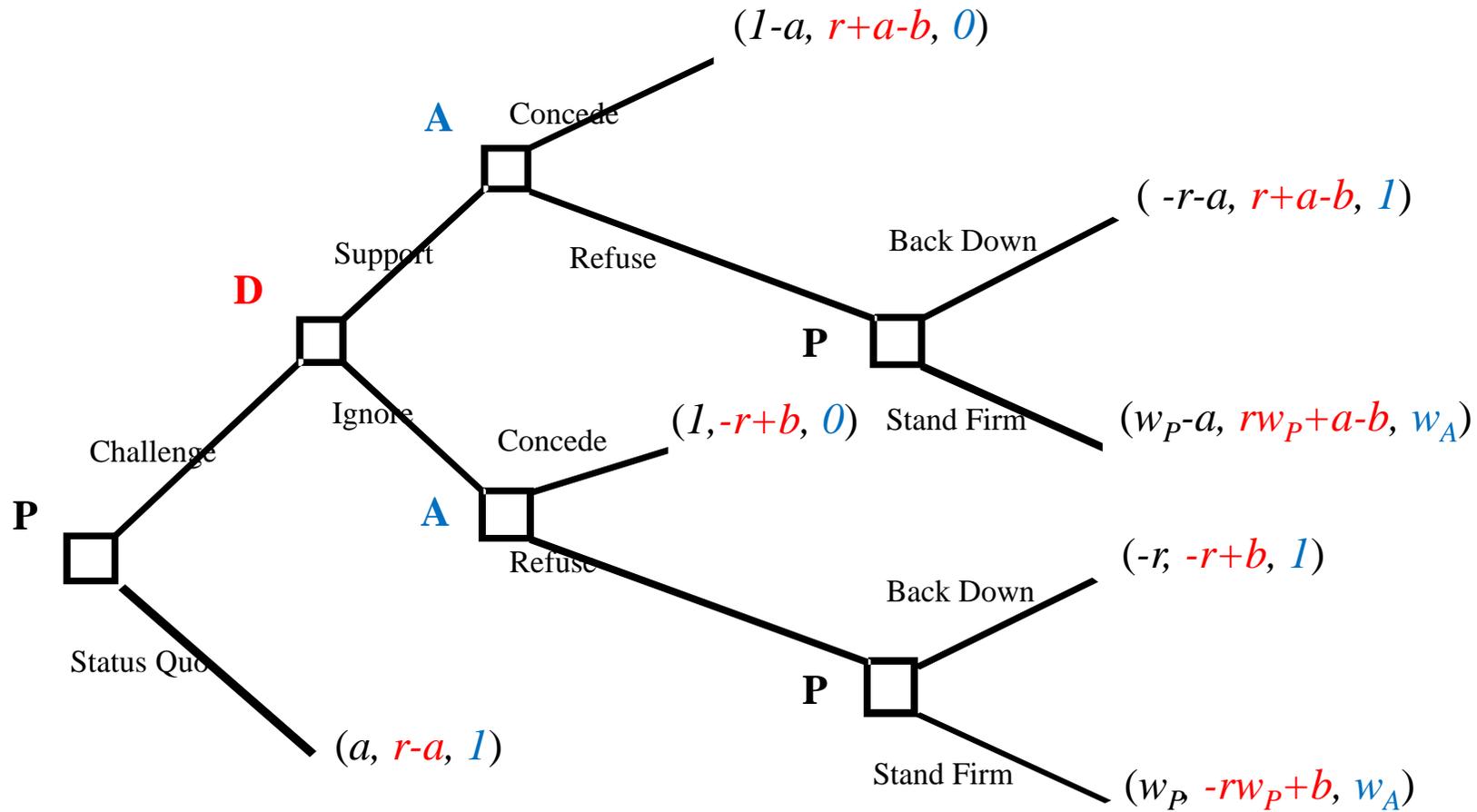
∞ Parameters

- a : the benefits exchanged between P and D ($0 < a < 1$)
- b : D's benefits from an improved relationship with the Adversary ($0 < b < 1$); They are not necessarily enemies!
- r : reputation among allies, i.e. credibility of honoring commitment ($0 < r < 1$)
- w_P and w_A : the expected utility of war for P and A, respectively.

∞ Information structure

- P and D know w_P while A knows w_A .
- The distribution functions of w_P and w_A are common knowledge
- a , b , and r are common knowledge.

Game Tree



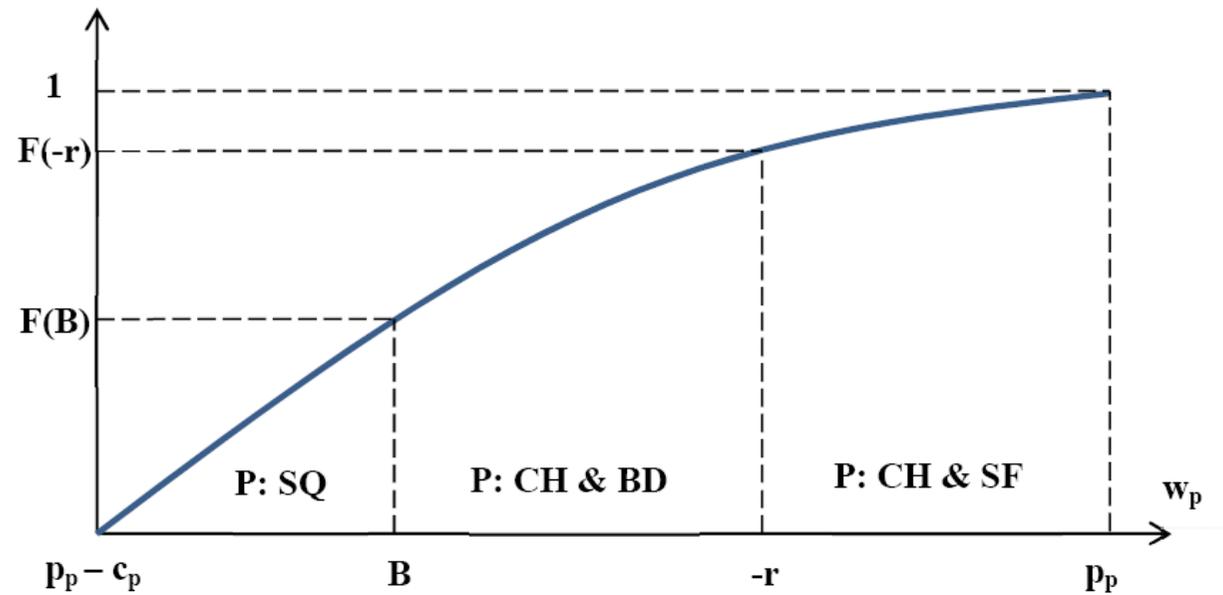
Solving the game...

∞ Backward induction

∞ Cut-point strategy

- Incomplete information
- Each player has a continuum of types.
- The cut-point of types (hence strategies) is the key to the solution .
- For example, we shall look for a Bayesian equilibrium in which the Protégé challenges if w_P exceeds some critical value and keeps status quo otherwise, and the same for the other players.
- These strategies are usually called cut-point strategies; that is, given an interval of types, there exists a special type (the cut-point) such that all types to the left do one thing, and all types to the right do another.

Updating Belief

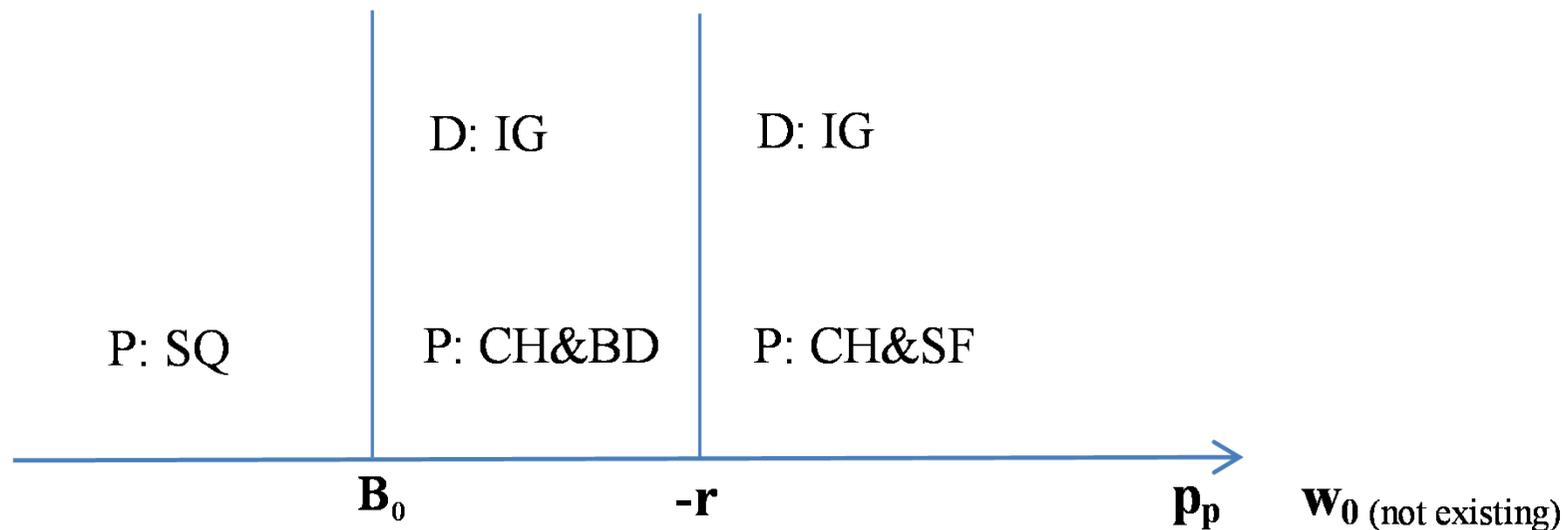


- ∞ These strategies are usually called cut-point strategies; that is, given an interval of types, there exists a special type (the cut-point) such that all types to the left do one thing, and all types to the right do another.
- ∞ $\Pr(\text{back down} \mid \text{challenge}) = ?$

Overview of Equilibrium

- ∞ The Protégé: B is the cutpoint between challenge and status quo; $-r$ is the cutpoint between back down and stand firm.
- ∞ The Adversary: make decisions by updating the belief about the Protégé standing firm *after* observing the Defender's action.
- ∞ The Defender: choose strategy with respect to the relative value of a .
 - Recall: share information with the Protégé
 - When the Protégé stands firm, choose a cutpoint of w_p for support
 - *Since $w_p \geq -r$, a must be greater than a critical value (a -high bar); otherwise, the Defender will support even when the Protégé backs down.*
 - When the Protégé backs down, choose another cutpoint for support
 - *Then we have another critical value (a -low bar), under which the Protégé receives no support when it backs down.*

Case 1: Abandoning Troublemaker ($a < \underline{a}$)



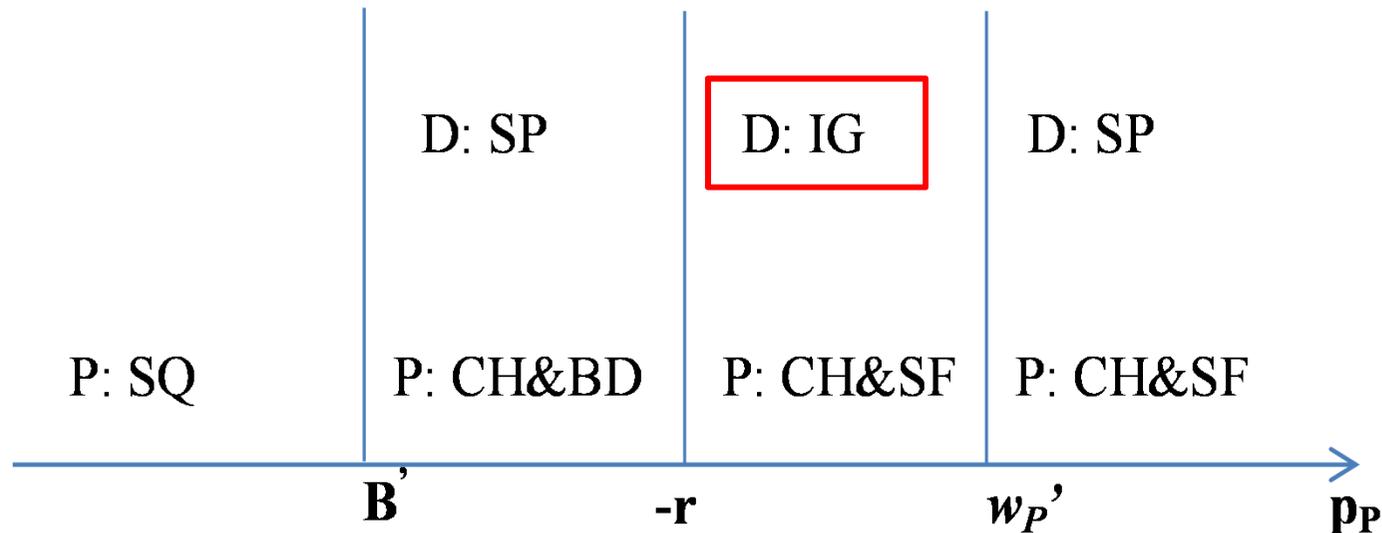
- The Defender never supports the Protégé's challenge.
- Unable to update information, the Adversary will refuse when

$$w_A \geq \frac{F(B_0) - F(-r)}{1 - F(-r)} = k_0$$

Case 1 (cont.)

- ∞ Compare Case 1 with the no-alliance model
- ∞ $B_0 > B$ (the counterpart in the no-alliance model)
 - The Protégé is less likely to initiate challenges when allying with the Defender than without an alliance.
- ∞ Given $B_0 > B$ and $k = \frac{F(B) - F(-r)}{1 - F(-r)}$ in the no-alliance situation, $k_0 > k$
 - The Adversary is more likely to concede with the Defender's presence.

Case 2: Separating Strategies ($\underline{a} \leq a < \bar{a}$)

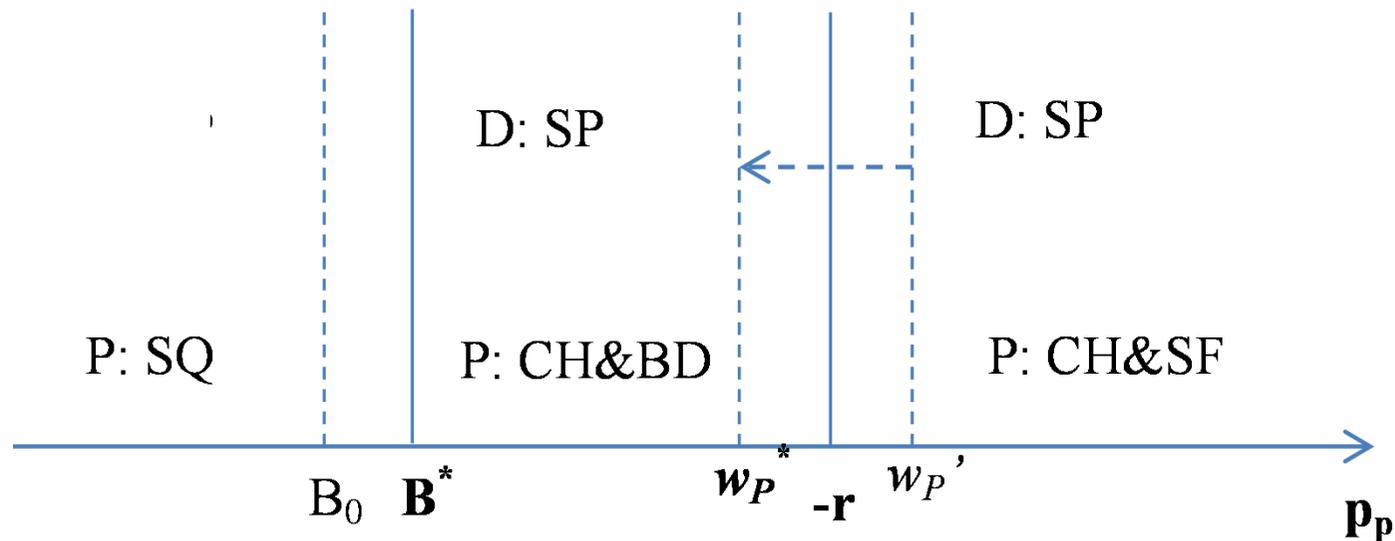


- The Defender supports the Protégé's bluff (CH&BD).
- If the Protégé stands firm, it has the Defender's support only when w_P is sufficiently high ($> w_P'$).
- The Adversary is able to update information.

Case 2 (cont.)

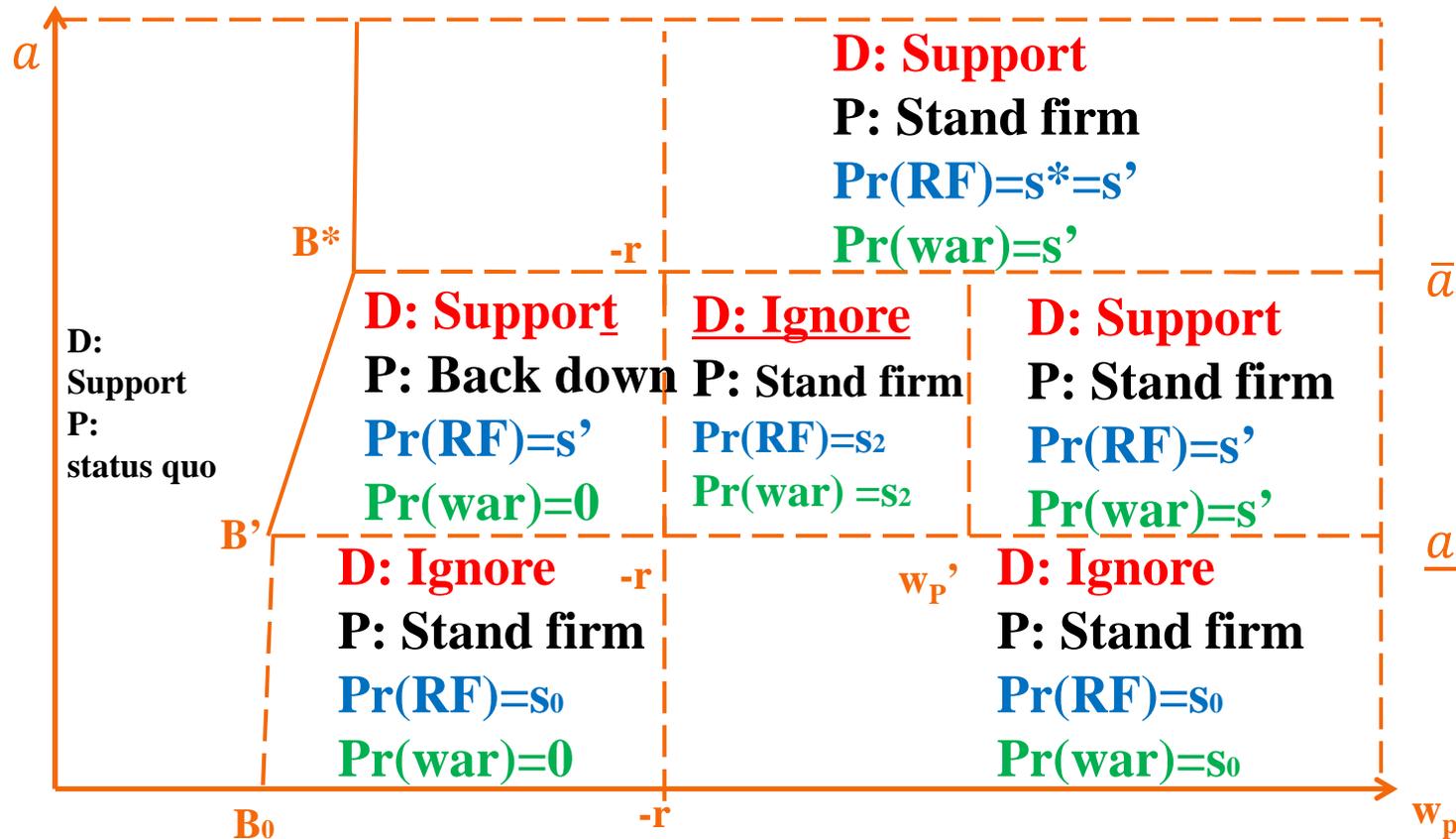
- ✎ Why does the Defender make an empty threat given BD?
 - By supporting the Protégé's bluff, the Defender will gain both benefits from the Protégé and the reputation among other allies.
 - No risk of involving real conflicts against the Adversary
- ✎ Why is the Defender more cautious given SF?
 - The Defender has to face the danger of fighting against the Adversary. Obviously, it does not want to risk wars unless w_p is sufficiently great.
- ✎ $B' > B$
- ✎ $k_0 < k' < k_2$
 - $\Pr(\text{CD}|\text{SP}) = G(k')$; $\Pr(\text{RF}|\text{IG}) = G(k_2) = G(0)$
 - The Adversary is most likely to concede when the Defender ignores the Protégé's challenge.

Case 3: Constant Support ($a \geq \bar{a}$)



- The Defender supports all actions of the Protégé.
- $B^* > B_0$ and $B^* > B'$
 - The Defender is least likely to be a troublemaker in Case 3. Why?
- The Adversary is still unable to update information.

Equilibrium



∞ In general, $\Pr(\text{RF}) = s = 1 - G(k)$

∞ $s > s_0 > s' = s^* > s_2$

Extension: EITM Framework!

- ∞ Theoretical concepts (and analogues)
 - Strategic interaction, utility maximization
 - Learning, Bayesian updating
- ∞ Statistical concepts
 - Binary logit/probit model
 - Bayesian statistics?
- ∞ Unification (equilibrium → hypotheses)

“Early-morning” Hypotheses...

- ∞ The Protégé is more likely to initiate challenges with an ally than without an ally.
- ∞ If the Protégé initiates challenges, conflicts are more likely to happen when an ally does *not* exist.
- ∞ If the Protégé *with an ally* initiates challenges ,
 - Conflicts are more likely to happen when $a < 2(b-r)$.
 - Given $a > 2(b-r)$, conflicts are less likely to happen when the Defender does not support the Protégé.
- ∞ Potential data
 - The Protégé and the Adversary: enduring rivalries (Thompson 2001)
 - a & b : Affinity of nations (Gartzke 2001), GDELT?
 - r : the Defender’s frequency of honoring commitments; the number of allies the Defender has

Case Studies

Cases	Taiwan's pursuit of independence	North Korean nuclear crisis
Actors	Taiwan (P); the US (D); China (A)	DPRK (P); China (D); the US (A)
<i>a</i> (P-D)	Alliance: <u>not formal</u> ;	Alliance: <u>formal</u> ;
	Geo-: <u>less important</u> ; other allies	Geo-: <u>“lip and teeth”</u> ; the only ally
	Regime type: both are democracy	Regime type: both are authoritarian
	Econ-: trade partner; arms buyer	Econ-: relying on China's aid
		<
<i>b</i> (P-A)	Both are major powers, with some interests overlapped but others contradictory.	≈
<i>r</i>	“Strategic ambiguity”	Less international pressure
		≈
Result	“Abandoning Troublemaker”	“Separating Strategies”

North Korean Nuclear Crisis

- ∞ **Status quo:** the Agreed Framework in 1994; the hostility between the US and North Korea
- ∞ **Challenge:** Pyongyang's restart of the nuclear program and the demand for the normalization of relationships with the US
- ∞ North Korea quitted the six-party talks and launched a long-range missile test and nuclear test in 2006 (**P: CH&SF**)
- ∞ China condemned the tests and voted for the UN Resolution 1695 and 1718 (**D: IG**).
- ∞ The US initiated a bilateral talk with North Korea, agreed to discussion normalization of US-DPRK and would start the process of removing North Korea from its list of terror-sponsoring states (**A: CD**)

Taiwan's Pursuit of Formal Independence

- ∞ Status quo: Taiwan's *de facto* independence and regional stability
- ∞ Challenge: Taiwan pursuing *de jure* independence
 - Referendum on the entry to WHO/UN under the name of “Taiwan”
- ∞ The US: The Bush administration always opposed Taiwan's formal independence, when
 - Chen Shui-bian proposed referendum, which then failed in the legislature in 2004 (CH → BD);
 - Chen and the opposition party both proposed and conducted their own referenda in 2008 (CH → SF).