



Section 2: Bargaining model of war

ELEMENTS OF THE 41ST COMBINED ARMS ARMY
YELNYA, RUSSIA – NOVEMBER 9, 2021

Approximately 350 tanks, self-propelled howitzers, towed artillery, multiple launch rocket systems (MRLSs), surface-to-air missiles (SAMs), short-range ballistic missiles (SRBMs), and support vehicles present

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Crisis in Ukraine

- Build-up of Russian forces along border with Ukraine
- Russia ultimatum to USA
 1. Ban Ukraine from NATO
 2. Pull all troops and NWs from former Soviet republics
- USA rejected key demands but ongoing negotiations

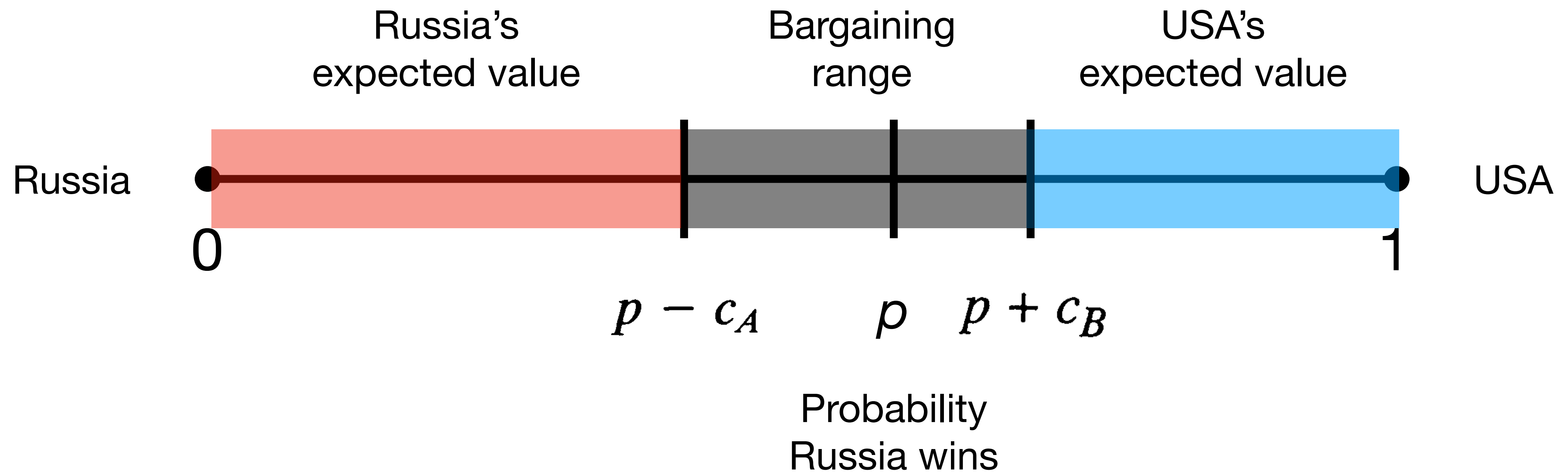
Will bargaining succeed or fail?



Verbalize: Bargaining model of war

- Assumptions
 - States are rational actors with complete information
 - Fighting a war is costly
- The **bargaining range** is a set of deals that states mutually prefer to war
 - Size of bargaining range increases with the **costs of war**
 - **Probability of victory** (relative power) influences how much one can get

Visualize: Bargaining model of war



Visualize: Application

U.S. Considers Backing an Insurgency if Russia Invades Ukraine

Conversations about how far the United States would go to subvert Russia in the event of an invasion have revived the specter of a new Cold War.

Both Defense Secretary Lloyd J. Austin III and Gen. Mark A. Milley, the chairman of the Joint Chiefs of Staff, have warned their Russian counterparts in recent telephone calls that any swift Russian victory in Ukraine would probably be followed by a bloody insurgency similar to the one that drove the Soviet Union from Afghanistan. In discussions with allies, senior Biden officials have also made clear that the C.I.A. (covertly) and the Pentagon (overtly) would both seek to help any Ukrainian insurgency.

Source: Helene Cooper, NYT, <https://www.nytimes.com/2022/01/14/us/politics/russia-ukraine-biden-military.html> (1/14/22)

Draw two bargaining models: one before and the other after a warning indicating support for an insurgency.

Would committing to back a potential Ukrainian insurgency affect the bargaining range? If so, how?

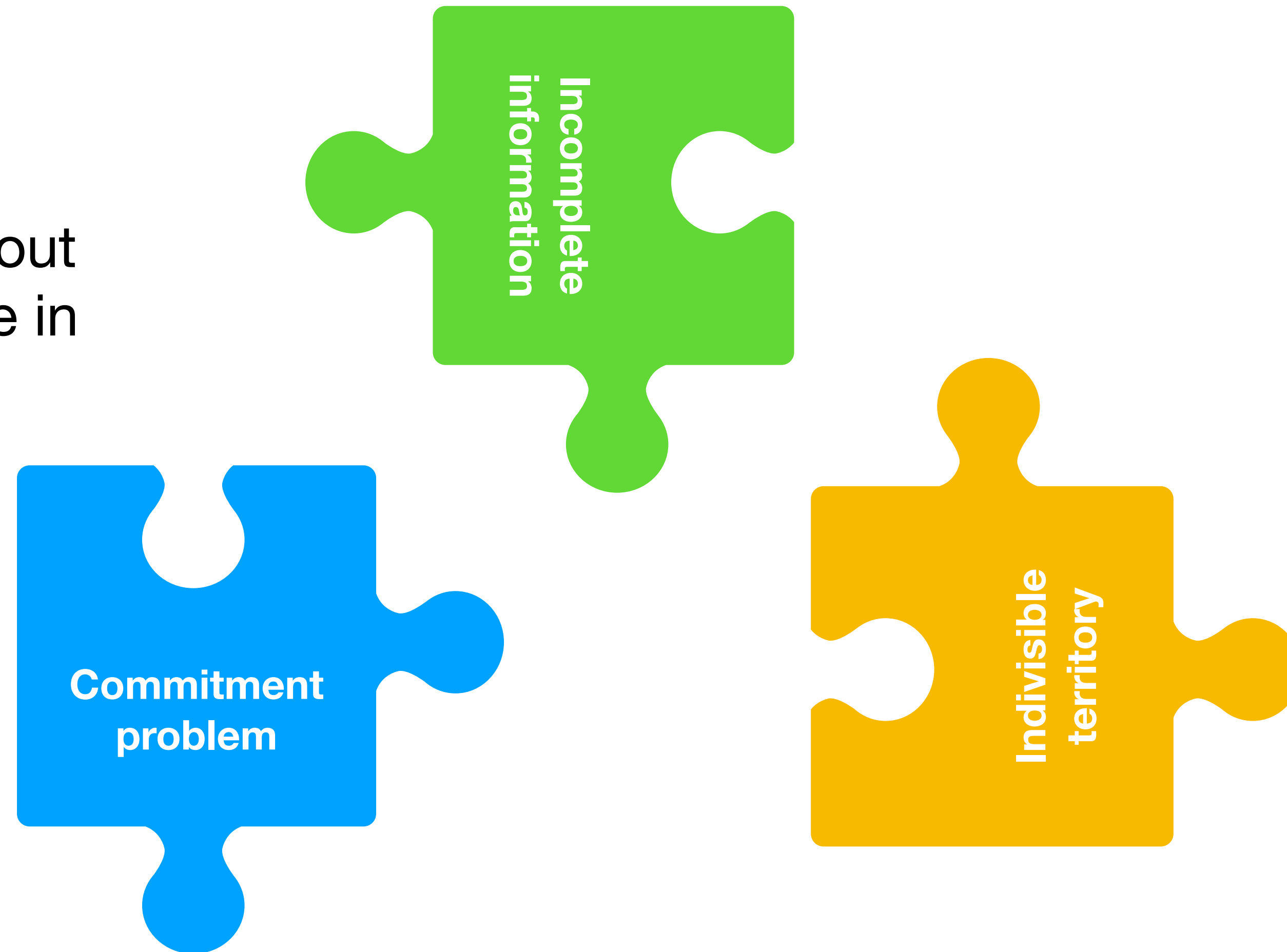
Mathematize: Bargaining model of war

- Scenario: In bargaining, Russia demands x from USA. There is 1 unit of resource at stake. If USA rejects the demand, Russia will invade Ukraine, which is won by Russia with probability p . In the event of war both Russia and the USA pay cost c .
- Will there be war?
 - Condition 1: $x \geq p - c$ (Russia prefers deals at least as valuable as war)
 - Condition 2: $1 - x \geq 1 - p - c$ (USA prefers deals at least as valuable as war)
 - Condition 2 (simplified): $x \leq p + c$
 - If $x \in [p - c, p + c]$, both sides accept, o/w one side rejects and war

Inefficiency Puzzle of War

1. Describe the explanation for war.

2. What does your explanation predict about what we might observe in the crisis in Ukraine?



Explanations for war

	Description	Potential Applications
Incomplete information	States have private information about resolve and incentives to misrepresent this info; this can lead states to make demands that are outside of the “true” bargaining range	Austria-Hungary and Serbia/Russia in July 1914, Iraq War of 2003
Commitment problem	State cannot credibly commit to not taking advantage of a potential power shift	Germany and Russia in 1914, Iraq War of 2003, crisis in Ukraine (?)
Indivisible territory	Actors can’t bargain b/c there’s no way to divide up the pie for symbolic (?) reasons	Jerusalem, Ulster

This section was brought to you by Ambassador Bonnie D. Jenkins, PhD

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- Special Envoy and Coordinator for Threat Reduction Programs in Bureau of International Security and Nonproliferation (2009-2017)
- Founder, Executive Director, and Board Chair of Women of Color Advancing Peace and Security
- PhD in International Relations from University of Virginia



Ambassador Bonnie Jenkins, Ph.D.
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It is my pleasure to attend the P5 meeting in Paris.



Philippe Bertoux  @phbertoux · Dec 3, 2021

P5 Principals meeting Day 2 in Paris . Working hard on our messages and deliverables for the #RevconNPT #NPT #P5

