

# Superpower Collusion and the NPT

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# Our questions

- ① What are the origins of the NPT?
- ② What explains its stability during the Cold War?

# Two common answers

- ① A “grand bargain” between nuclear haves and have-nots
  - non-nuclear weapons states (NNWS) forego acquisition
  - nuclear weapons states (NWS) give energy assistance, security assurances, and promise to disarm eventually
  - inspections regime to reassure all states; self-enforcing
  
- ② A nuclear “cartel” among recognized NWS
  - preserves advantages to nuclear oligopoly
  - NNWS bribed and/or extorted for compliance
  - inspections regime for enforcement by cartel

Some gaps in these explanations

# A new model - game theoretic set up

States care about:

- their policies, other states' policies, security

States vary in:

- ideal policies
- value seen in allying with either superpower
- perceived value in possessing nuclear weapons

Each smaller state can ally with a superpower:

- superpower gives increased security
- smaller-state client makes policy concessions
- depends on bargaining power and exit options

# Perceived consequences of proliferation

When a smaller state acquires nuclear weapons, this has two effects:

- ① For the superpower, either tactically advantageous or strategically risky
- ② For the client state, improves exit option, so less willing to make policy concessions

The key element is what the superpowers believe about proliferation. Two possibilities:

- ① allies with their own nuclear weapons means significant military advantages and low political costs
- ② or, it means to serious strategic risks and high political costs

# Transition of Superpower beliefs in 1960's

Which of these beliefs was actually the case?

- early 1960's - Each superpower saw tactical advantage in some clients' possession of nuclear weapons, were willing to assist.
  - US and the MLF, Russia and China.
- after mid-1960's - both superpower began to serious strategic risk and political costs to clients' proliferation.
  - After France and China tested nuclear weapons, they regained considerable autonomy from their patrons

# Superpower collusion

- Each superpower can apply pressure to try to halt client proliferation by suspending security benefits until client stops.
- But .... doing so could lead other superpower to encroach on client and lure them away.
- If encroachment is expected, then neither side will actually pressure their clients

**Pressure only makes sense if it is collusive**

# NPT as revelation mechanism

Maintaining collusion requires a mechanism...

NPT meets three of the requirements for a non-proliferation equilibrium:

- ① IAEA inspections enable superpowers to detect a small state's development of nuclear weapons
- ② also allows each superpower to detect other's cheating on collusion
- ③ coordinates expectations of all states on non-proliferation



# Hypotheses

- *H1*: The superpowers will seek to cooperate on nonproliferation concerns and press one another to comply with collusion terms.
- *H2*: Each superpower will seek to convince its own allies to join the NPT. The superpower will focus efforts on cases where pressures are likely to work, and where such pressures are needed.
- *H3*: The superpowers will act to prevent their allies or non-aligned states from pursuing a nuclear weapons capability. The opposing superpower will not offer a nuclear aspirant assistance or protection within its own alliance.

# H1: Observable superpower collusion

Do we actually see the US and USSR engaging in collusive behavior?

- Cases: periods of likely private contact b/w superpowers
- Looking at: type of interaction between superpowers

Instances of private superpower cooperation on nonproliferation issues:

- During NPT negotiations
- Responding to a third party nuclear aspirant
- In the eyes of other states

## H2: Superpower pressure for NPT membership

How to the superpowers convince states to join the NPT? Which states do they focus on?

- Cases: States the superpowers assessed as technologically advanced.
- Looking at: superpower views on likelihood of signature and superpower behavior towards state.

*Superpower behavior will vary based on perceived intent of smaller states:*

## H2: Superpower pressure for NPT membership

- ① superpowers have clear information about state's intentions to join NPT (eg. Canada, Italy, Sweden, Poland)
  - Evidence: in all cases, the superpowers apply mild pressure, or none.
- ② superpowers have doubts about state's intentions to join NPT (eg. West Germany, Japan, Israel, India)
  - Evidence: in most cases, superpowers apply explicit pressure, in some cases partial support, one case against

### H3: Superpower enforcement of nonproliferation

How do the superpowers enforce the NPT? Do we observe them policing their own clients?

- Cases: States that pursued nuclear weapons options after the NPT.
- Looking at: Superpower response to nuclear program in smaller state.

*Each superpower will police its own allies and non-aligned states, and not interfere in the allies of the opposing superpower.*

# H3: Superpower enforcement of nonproliferation

- ① US allies or aligned states (ROK, Taiwan, Israel, Pakistan)
  - Evidence: In most cases, US intervenes to stop program. Questionable evidence in Pakistan case, where intervention seems minimal.
- ② USSR allies or aligned states (North Korea)
  - Evidence: Intervention by USSR.
- ③ Non-aligned states (South Africa, India)
  - Evidence: Partial support for our story, see some policing by the US and USSR, especially in South Africa case.

# Conclusions

“Grand bargain” may explain why some states joined NPT

- but not all
- and not why treaty membership was stable

Not a nuclear “cartel” but instead a nuclear duopoly

- UK, France, and China had little to do with persuading states to join
- and little to do with enforcing the treaty

Shift in superpowers’ perceived consequences of proliferation led to NPT

- occurred after France and China had weapons
- explains why NPT happened in 1970 rather than 1950s

*NPT, and underlying superpower collusion, really did lessen proliferation*

# In the works...

“Middle powers” – not superpowers, but have nuclear weapons

- behavior with respect to NPT and proliferation varied
- model suggests they trade weapons assistance for influence
- creates a competitive dynamic with superpowers

Post-Cold War – a superpower becomes a middle power

- no more collusion; just another competing middle power
- model can predict where “setbacks” will occur
- and analyze possibility of new equilibria
- also predicts which states will support which revisions to NPT