STRATEGIC LOGIC OF NUCLEAR PROLIFERATION

Nuno P. Monteiro, Alexandre Debs

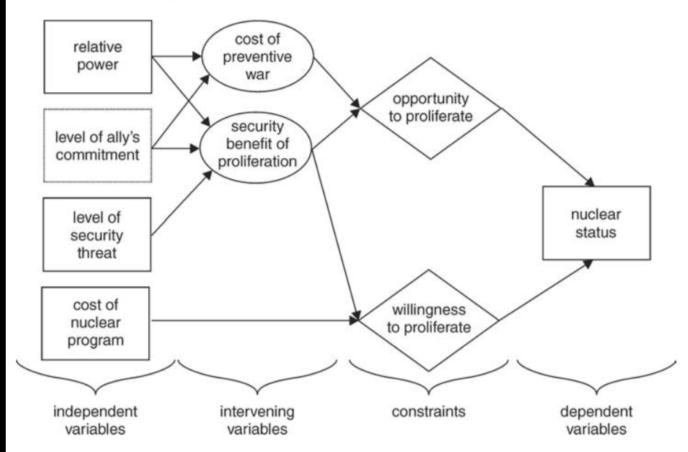
INTRODUCTION

- Security-based theory of proliferation
- "This interaction is shaped by the potential proliferator's ability to deter a
 preventive strike on its nuclear program prior to acquiring the bomb. This
 ability, in turn, hinges on the proliferator's relative power and whether it
 benefits from the protection of a powerful ally."
- Five patterns of nuclear proliferation
 - State with no high security threat do not have the bomb
 - Weak states that do not have a powerful ally do not have the bomb
 - States with powerful allies do not have the bomb
 - US threats of abandonment are effective
 - End of the Cold War slowed the spread of nuclear weapons

STRATEGIC THEORY

- Need to label a willingness constraint to develop weapons
- Need to overcome an opportunity constraint to develop capabilities
- Security benefit of proliferation is higher than cost of war
- If a strong ally will commit to a potential proliferators security, then the state will not nuclearize
- Potential proliferator could find that the ally is not committed enough or they could have "broader security interest"
- Sticks and Carrot–stick relies on powerful ally's threat of abandonment. Carrot is when an ally boosts a commitment to the potential proliferator

Figure 1. The Strategic Logic of Nuclear Proliferation



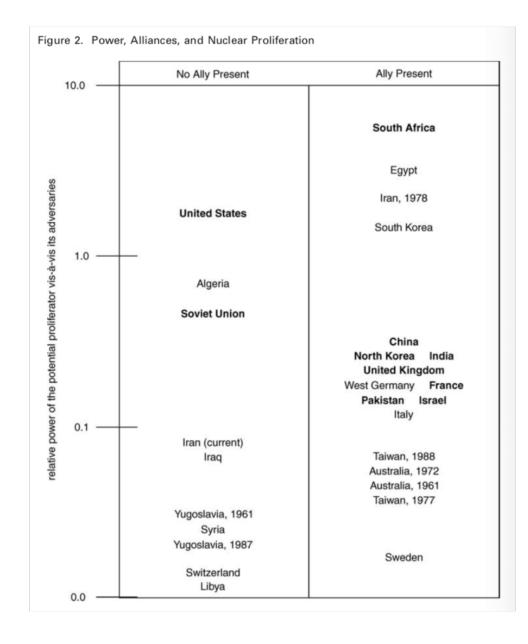
NOTE: The dotted lines refer to the effect of alliances on proliferation.

EMPIRICAL PATTERNS OF NUCLEAR PROLIFERATION

- Identify security threats and significance of the threats
- Four general empirical claims
 - Presence of significant threat is necessary for development of a bomb
 - Strong correlation between a state without a powerful ally and developing a bomb
 - States with ensured protection from powerful ally means a weapon won't be developed
 - Power ally more successful in ensuring nonproliferation with extra security commitments or threat of abandonment
- 28 out of 31 cases of development involved a significant threat, three cases that did not are Argentina, Brazil and Romania
- Measure relative power of security alliances- use Correlates of War dataset, new index of alliances for all cases of development

EMPIRICAL PATTERNS

- Strong states have willingness to nuclearize if there is a lack of a powerful ally
- Weak states have less of a chance to development even without a strong ally
- End of Cold War- lowered the benefit of nuclearization due to decreased threat and decreased ability to nuclearize among non-US allies



HISTORICAL CASES

- Soviet Union- Preventative strike on USSR by the US would have required a conventional war and caused retaliation by USSR
- Iraq- Weak state with high-level threats with willingness to acquire but no opportunity. Strong threats in Iran and Israel in region. Attempts to acquire the bomb made Iraq weak towards outside threats like the US.
- Pakistan- Foreign policy aimed to deter India and US saw Pakistan as a bulwark against communism spreading. Potential unreliable US support and Soviet invasion of Afghanistan were reasons to develop.
- South Korea- Mutual defense treaty with the US and US employed tactical nuclear weapons in 1957. 1960's saw threat of North Korean army buildup and the US Guam Doctrine, causing the US to pull out troops. Interest in developing a bomb but US threatened to pull out more troops if development continued. Ultimately, South Korea kept in check on development due to US alliance through renewed commitments.
- West Germany- Doubt of US commitments in the 50's and threat of Soviet Union.
 Program ended but willingness to acquire weapons was still high. MLF helped
 eliminate West Germany's want for its own weapons but saw that it could control
 weapons with it. Fear of US-USSR collusion over risks of German nuclearization and
 attempt to create nonproliferation regime.

CONCLUSION

- Security-base theory associated with a state, allies, and enemies
- Two states that acquire the bomb- powerful and threatened states, and weak states with unreliable ally

CRITIQUES

- Empirical evidence used but not shown
- More examples could be provided

WHY DO STATES BUILD NUCLEAR WEAPONS?: THREE MODELS IN SEARCH OF A BOMB

Scott D. Sagan

INTRODUCTION

- Goal of the article: Contend with the idea of nuclear proliferation
- Nuclear weapons are political and military weapons
- Three models of proliferation: Security Model, Domestic Politics Model, and the Norms Model

SECURITY MODEL

- Relies on realist perspective of international relations
- Explaining Nuclear Restraint- South Africa destroying its arsenal due to risk/fear of Soviet invasion
- Policy Implications- nonproliferation treaties can slow down the spread, not prevent it.
- Post- Cold War US nuclear treaties less reliable, "proliferation begets proliferation"
- Problems and Evidence- History depends on the states of decision-makers and the time where a threat is perceived and weapons are developed

DOMESTIC POLITICS MODEL

- Focus on domestic actors who discourage or encourage the creation of the bomb
- No theory related to domestic influence on weapons proliferation, but reliable sources from Soviet and American bureaucratic politics
- Bureaucratic politics can determine the size of an arsenal, for example
- Proliferation Revisited (India)- No consensus among Indian officials that deterrent was needed in response to Chinese success in 1964. Produced bureaucratic battle about whether to develop weapons
- Development and Denuclearization-South African bomb was not deliverable and there were internal political fears that the bomb could fall into the hands of white extremists
- Policy Implications- Would US not give up nuclear weapons under treaty conditions due to domestic political opinions?

NORMS MODEL

- Nuclear weapons as symbols and shaping a state's identity
- "Nuclear symbolism"
- Sociological argument that technological development strengthens the state and its internal image
- Proliferation Revisited (France)- Realist theory claims France developed the bomb to combat potential Soviet aggression. French belief that possession of nuclear weapons was linked to a state's position in the international system.
- French grandeur- the bomb was a symbol of French independence
- Restrain Revisited (NPT and Ukraine)- Separate foreign policy from USSR to break from Moscow, avoid "rogue state" status, US and NATO pressure, easier to accept US economic inducements
- Policy Implications- Adjustment to US policies could cause others to adjust as well, more optimistic model of nonproliferation

CONCLUSION

- No single policy can help proliferation problems
- Must go on case-by-case basis, as illustrated that the countries of focus in the paper all pursued their policies for different reasons

CRITIQUES

• No empirical evidence