

Saudi Arabia and Iran

	Saudi Arabia	Iran
Population	: 33,000,000	80,945,718
Area	: 870,000 sq mi	636,372 sq mi
Religion	: 100% Islam (90% Sunni 10% Shia)	98% Islam (90% Shia, 10% Sunni, 2% other)
GDP	: \$748 billion	\$438 billion
GDP per capita:	\$22,649	\$5,383
*For comparison, US GDP per capita is \$59,531		

Who supports whom



The Effectiveness of Sanctions: Iran and the JCPOA

Research question: to what extent did economic sanctions lead to Iran signing the JCPOA?

- **Background**
 - 2002 largely regarded as start to the Iran nuclear crisis
 - 2003 first round of talks
 - 2005 talks collapse – election of Ahmadinejad
 - 2012 return to negotiations
 - 2015 July the JCPOA reached in Vienna
- **What are sanctions?**
 - Types of sanctions
 - What they are used for
- **Pre-JCPOA sanctions**
 - **US**
 - Since 1979
 - Trade embargo
 - Energy Sector
 - Firms, individuals, banks
 - **UN**
 - Four rounds (2006, 2007, 2008, 2010)
 - **EU**
 - Banks, firms, or people linked to the nuclear program
 - Trade of tech and materials related to nuclear program
- **Sanctions relief under JCPOA**
 - **Lift all UN sanctions**
 - All except arms and ballistic missile tech embargo
 - **US more selective**
 - Sanctions in place for non-nuclear reasons stayed in place
 - **Lift all EU sanctions**
 - All except arms and ballistic missile tech embargo
- **Other work**
 - Most people say that experts consider them as not working
 - Do work but not clear because of selection bias
 - Do not work how they are intended
 - Negative consequences

The Lack of Nuclear Capabilities in the Middle East

Research Question: What are the causes for the overall lack of nuclear proliferation and capabilities in the region and is there a trend on the regional level? What would a nuclear capable Middle East look like?

- State Level
 - Nuclear Facts: History, capabilities, treaties
 - Outside Facts: economy, stability, conflicts, regime etc.
- Regional Level
 - Are there trends based on the facts at a regional level?
 - Are these facts actually factors for non-proliferation?
Support from other studies?
- The Future
 - Peaceful programs: Beneficial?
 - What would the region look like with increased nuclear capabilities?

Has Nuclear Proliferation Created Double Standard for Human Rights?

- Research questions:
 - Why did the US decide to deploy nuclear weapons? What were the alternatives? What was the justification for the civilian casualty rate?
 - Why doesn't the US signal its commitment to human rights by signing the Rome Statute?
 - To what extent are US military operations subject to international review?
 - What constitutes a war crime?
 - What are the details of the Geneva Conventions? Has the US violated it?
 - How do the crimes tried at the international Military Tribunal for the Far East. compare to atrocities committed by the US?
- The US is the only NATO member that has not ratified the Rome Statute. Russia and a few other authoritarian regimes also refuse to sign.
- The goal of this project is to understand the states' opposition towards joining the global community in their commitment to justice for human rights violations, and to determine what influence nuclear proliferation has on this stance.

THE FRENCH-ISRAELI NUCLEAR RELATIONSHIP

- October 18, 1945: French Atomic Energy Commission formed
- June 1952: Israeli Atomic Energy Commission established
- Reed and Stillman 2010: “Nasser’s actions in 1955 and 1956 lit the torch that welded French and Israeli interests into military partnership and nuclear alliance” (74).
- October 1956: Suez Crisis



NUCLEAR NON-PROLIFERATION IN UKRAINE:

- IN 1990, BEFORE UKRAINE GAINED INDEPENDENCE, THEY SUPPORTED THE EFFORTS TO JOIN THE NONPROLIFERATION TREATY (NPT).
- DECEMBER 5, 1996 UKRAINE SIGNED THE NPT.
- LAST WEAPON DELIVERED TO RUSSIA ON JUNE 1, 1996
- 2008 THERE IS A RESURGENCE OF DESIRE TO PROLIFERATE
- 2014 RUSSIA CLAIMS ANNEXATION OF CRIMEA.
- THE SECURITY ASSURANCES FROM THE BUDAPEST MEMORANDUM ARE BASICALLY USELESS.

Rethinking Sanctions in the Context of Nuclear Development

Kasey Gantner

Miller (2014):

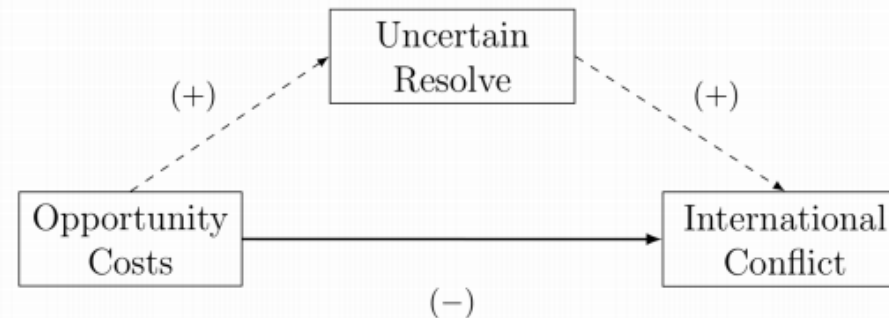
- States dependent on the U.S. (militarily and economically) are less likely to pursue nuclear programs because they would be most harmed by sanctions
- Validity of the dependence measure?

Spaniel and Malone (2019):

- Trade has competing effects on the likelihood of conflict (it increases opportunity costs, but also increases uncertainty of resolve)
- Similar phenomenon with sanctions?

TABLE 5. US nonproliferation sanctions episodes

	Type	Years	Outcome
South Africa	Threat	1975	Failure
South Africa	Imposition	1975–82	Failure
South Korea	Threat	Early 1975	Failure
South Korea	Threat	Late 1975	Success
Taiwan	Threat	1976	Failure
Taiwan	Threat	1977	Success
Pakistan	Threat	1976	Failure
Pakistan	Imposition	1977–78	Failure
Argentina	Threat	1978	Failure
Argentina	Imposition	1978–82	Failure
Brazil	Threat	1977	Failure
Brazil	Imposition	1978–81	Failure
Pakistan	Threat	1979	Failure
Pakistan	Imposition	1979–80	Failure
Iran	Threat	1992	Failure
Iran	Imposition	1992–	Failure (so far) ^a
North Korea	Threat	1993–94	Failure ^b
Libya	Threat	1996	Failure
Libya	Imposition	1996–2004	Success
North Korea	Threat	2002	Failure
North Korea	Imposition	2002–	Failure



What made Japan to nonproliferate?

TABLE 5
Dogs That Didn't Bark? Countries That Did Not Seriously
Explore the Nuclear Option . . . but Should Have

Country	Years of Maximum Predicted Hazard
Saudi Arabia	Mid-1980s to mid-1990s
West Germany	Mid-1950s to early 1960s
Japan	Mid-1950s to 1960s
Turkey	Late 1960s to 2000
Bulgaria	1950s
Spain	1960s to early 1970s
Greece	1960s and 1980s
Italy	1950s to early 1960s
Syria	Various

- High economy
- Credible American security guarantee



- What is the economy playing role?
- Where is the evidence for credibility?
- How is NTP effective?
- What other factors contributed?



Possibility in Japan's nuclear armament

Economic Growth and Foreign Investment– Possible Affects

- ▶ To pursue a nuclear program through legitimate channels a state needs a GDP of roughly \$50 billion USD
- ▶ Currently three countries in Africa who meet that criteria have expressed interest to the IAEA to do so→ Egypt, Algeria and Kenya (12 total African States currently have a GDP of around \$50 billion USD or greater)
- ▶ Outside of the IAEA itself two of the largest exporters of nuclear materials are India and China→ other notable exporters are USA and Russia
- ▶ China and India are also two of the largest outside investors in Africa

Nuclear proliferation risk in the Middle East

- Plans
 - Predictive model for nuclear proliferation
 - Analysis of scores vis-à-vis the Iran-Saudi conflict
- Progress:
 - Sources
 - Locating datasets
- Challenges:
 - Data
 - Limited open source information

**Kingdom of Saudi Arabia vs Islamic Republic of Iran :
a proxywar in the Middle East**



Origins of the PRC's Nuclear Proliferation

直播

1. Motivations to pursue path of Proliferation

- Latter stages of Korean War
- French-Indochina/Vietnam War
- Sino-Soviet Split
- Talk of détente and test-ban treaties in the sixties
- Republic of China and American support

2. Access to fissionable material

- First samples obtained from France

3. Technical know-how

- Initially derived mostly from Soviet engineers and scientists
- Core group of Chinese scientists like Qian Xuesen, Deng Jiaxian, and Qian Sanqiang

4. Nuclear Troika

- Development of various delivery vehicles and methods such as ICBMs, SLBMs, Long-range bombers, etc.

Citations:

1. Halperin, Morton H. *China and Nuclear Proliferation*. University of Chicago (Center for Policy Study), 1967.
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3. N/A, N/A. "China." Nuclear Threat Initiative - Ten Years of Building a Safer World, Jan. 2019, www.nti.org/learn/countries/china/.
4. Harris, Stuart. *China's Foreign Policy*. Polity Press, 2014.
5. Tan, Qingshan. *The Making of U.S. China Policy: from Normalization to the Post-Cold War Era*. L. Rienner, 1992.
6. Kissinger, Henry. *On China*. Penguin, 2012.

MIRV-capable DF-31AG ICBM

(dated: July 30th, 2017 on the 90th Anniversary of the founding of the PLA)

Characteristics of Proliferated Countries & Variables of Nuclear Proliferation

- **Main Idea:** Comparing & contrasting variables in 3 case studies about the characteristics & proliferation of the countries (India, Pakistan, Israel)
 - See how and when these variables arise and how they affect the potential or ability of a country to proliferate when faced with direct nuclear security threat
- **Variables:**
 - Economic forces (sanctions), Political forces (Domestic Unrest), Relationships with/to other countries, Regime Type

India:

- Foreign conflict/threats from China & Pakistan
- Domestic unrest
 - Public opinion issue
- Internal bureaucratic pressures

Pakistan

- Turbulent beginning → lack of support for nuclear program
- Unstable political system, lack of infrastructure/economic means
- Foreign conflict with India

Israel

- “Strategic ambiguity” policy
- Unsophisticated country → lacked technological/material resources
- Existential threat from Arab neighbors



Why
Japan
Should
Proliferate

