

Great Decisions 2019



Class #3: "Nuclear negotiations: back to the future?"

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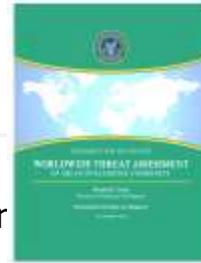
Website
Coffeynotes.com

- Trump's new approach – dropping Iran & Russian deals, talking to North Korea, and establishing US Space Force
- Do nuclear weapons truly matter, and if so, how and why?
- Should we worry more or less?

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Worldwide Threat Assessment



- Russia and China seek to shape international system exert influence all over the world
- China & Russia now more aligned than since mid-1950s
- Some US allies seeking greater independence from US
- Post-World War II international system increasingly strained by: continuing cyber and WMD proliferation, competition in space, regional conflicts and terrorism
- Migration likely to continue to fuel tensions
- Iran's adversarial behavior, turbulence in Afghanistan, and rise of nationalism in Europe will stoke tensions



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Nuclear security situation



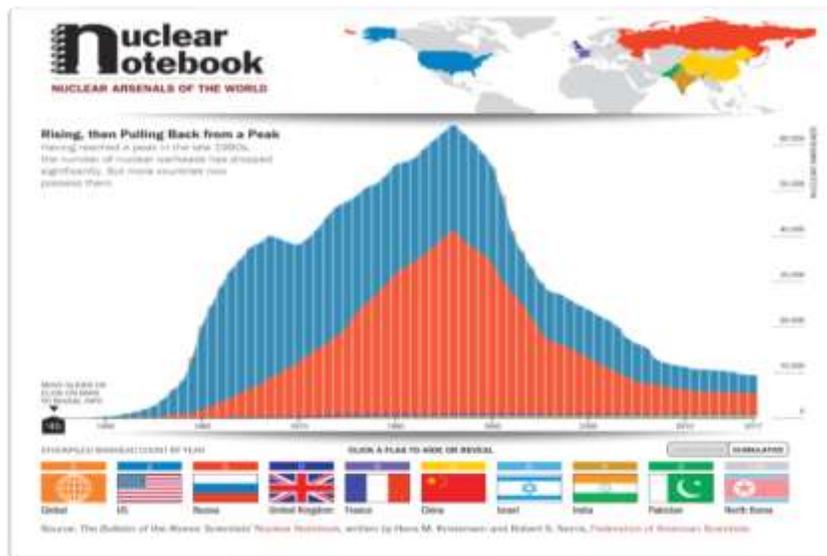
- No nuclear bombs dropped for 70 years, but threat continues
- US & Russia still have 95% of world's nukes
- Bombs today have 80 times power of Hiroshima
- Now have smaller and more mobile nukes
- Blurred distinction of nuclear energy and weapons
- Major dangers: India versus Pakistan, controversial Iran deal, North Korea, and terrorism
- Public complacency and high cost of modernization



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US & Russia dominate warheads, down from 1980s peak, but more countries now have



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Basics of NPT



- Began in 1970 and extended indefinitely in 1995
- Five states recognized as nuclear-weapon states: US, Russia, UK, France, and China (Permanent members of UN Security Council)
- Four others possess nuclear weapons: India, Pakistan, North Korea and Israel
- Non-nuclear-weapon states agree never to acquire
- Nuclear-weapon states agree to share peaceful nuclear technology and work toward elimination

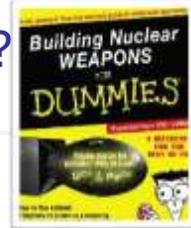
https://en.wikipedia.org/wiki/Treaty_on_the_Non-Proliferation_of_Nuclear_Weapons



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Why, despite NPT, proliferation?



- Readily available information and technology
- Preventing acquiring materials difficult because are byproducts of civilian nuclear programs
- Purification uses facilities used to enrich
- A country that can enrich fuel for a nuclear reactor also has ability to obtain highly enriched uranium for nuclear bomb

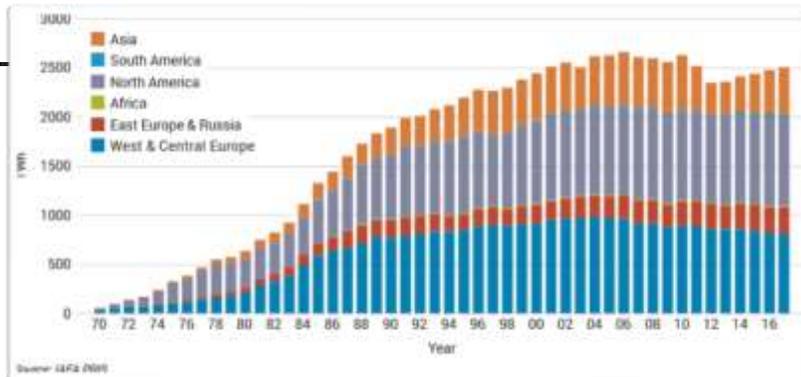
Notes on "Nuclear security: the enduring challenge of nuclear weapons," by Todd S Sechser, topic 8, Great Decisions, 2017



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Peaceful Use: World Nuclear Power flat since 2000



- 11% of world's electricity from 450 reactors
- 50 countries utilize nuclear energy
- US produces more electricity by nuclear than next 3 (France, China & Russia) combined
- US 98 nuclear reactors generate 20% of electricity

world-nuclear.org/nuclear-power-in-the-world-today.aspx



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Do Nuclear Weapons Matter? Disparate views and concerns

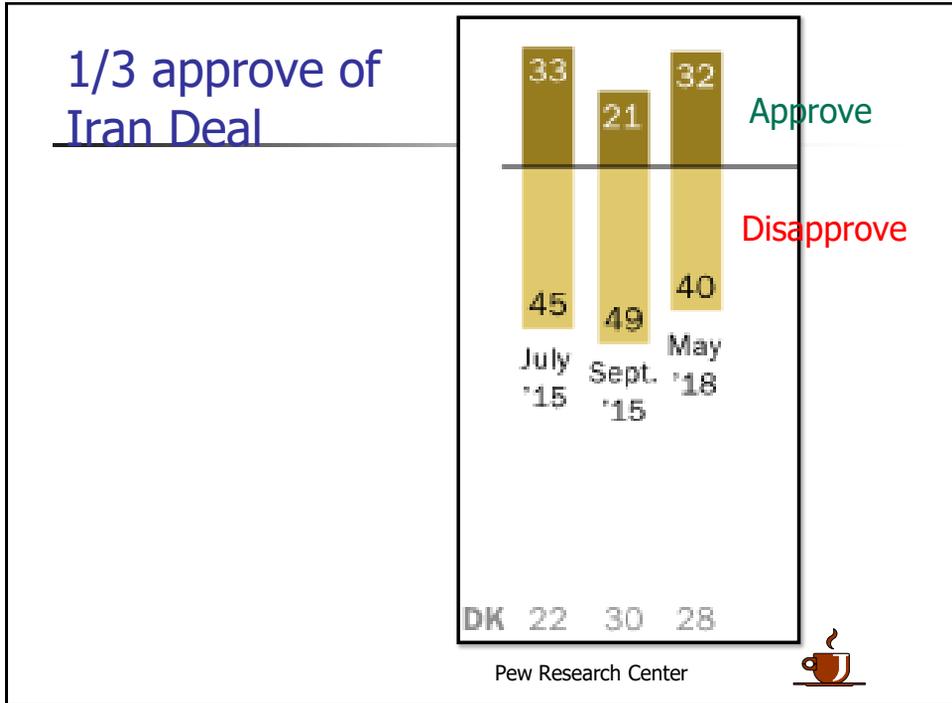


- **Over hyped?** For decades world supposedly on brink of nuclear catastrophe, either lucky or risks overstated
- **Complacency is dangerous:** No catastrophe yet, but close calls, so why continue to play Russian roulette?
- **Real risks are weak US without deterrence:** Takes a modernized arsenal to preserve peace.
- **Accident could happen:** Could slip into a nuclear war because lack of communication and ability to defuse escalation.
- **MAD will deter first strike:** Russia believes major war could result in a massive US nuclear attack, so wants retaliatory capacity to deter a first strike.

Source: Do Nuclear Weapons Matter? *Foreign Affairs*, November/December 2018 Issue, By Gideon Rose



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Pros and Cons of Iran Nuclear Deal



- **Pros**
 - Postpones Iran from nuclear weapon for at least 10 years
 - Iran nuclear weapon would undermine nuclear non-proliferation efforts and trigger race with Saudi Arabia
- **Cons**
 - Iran will ultimately establish a strong nuclear infrastructure
 - Inspections process provides ample time for Iranians to cheat
 - Lifting of US sanctions will enable Iran's trade and boost economy
 - Will receive \$50-150 bil of frozen funds which can use to strengthen military and fund terrorism



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North Korea's nuclear program and deception



- North Korea - dangerous, rogue, unpredictable
- May have 100+ weapons and missiles
- Past deals failed
- President Clinton in 1994 agreed to North Korea freezing program in exchange for normalization
- But, North Korea continued; US ended deal in 2002

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Why have Nuclear Weapons if not used?



- For democracies - nuclear weapons have proven their worth by deterring attacks and hedge against rogues, Russia & China
- Authoritarians see nukes as a hedge against regime change from abroad and instill fear in their citizens
- North Korea aware those that gave them up now dead!

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Nuclear Weapon History: Evolving races



1. **Original race:** Against Nazis to build first A-bomb
2. **Vertical race:** Between US & Soviet Union in Cold War
3. **Horizontal race:** After Cuban missile crisis which continues today rogues North Korea and Iran
4. **Race of denial:** Prevent terrorists from acquiring nuclear weapons
5. **New space race:** New cyber and space-based technologies may overcome nuclear deterrence or trigger nuclear war
6. **Resume race with Russia:** Now US withdraws from INF



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US to withdraw from 1987 INF Treaty with Russia



- US announced 1/2/2019 withdraw Intermediate-Range Nuclear Forces (INF) treaty.
- U.S. accuses Russia of violating treaty
- Its suspension raises concerns about a potential arms race
- INF Treaty was signed by Gorbachev and Reagan in 1987, when relations had begun to thaw
- Treaty bans all ground-launched ballistic and cruise missiles with a range of 300 to 3,500 miles.
- China and Iran aren't bound by treaty and each have 1,000

<https://www.newsweek.com/what-inf-treaty-us-russia-nuclear-1314438>, Feb 1, 2018



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Great Decisions – Takeaways



1. Both good & bad news – Nukes not used since 1945, but now more powerful WMDs and rogue nations
2. New tensions and conflicts threaten treaty renewal
3. US spent big on nukes ~ \$6 trillion
4. Saddam & Qadhafi fate sent rogues a message: give up nukes and get killed
5. Iran deal front-loaded with \$100 bil. benefits but weak safeguards
6. Despite arsenal reductions – US & Russia MAD 7X
7. With hypersonic weapons, claims of cheating and rogues – can a new NPT ever happen?



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Nuclear negotiation: Discussion questions



1. What are the political factors driving nuclear production and negotiations today?
2. Why are nuclear weapons still produced if there are treaties in place not to utilize them?
3. How will President Trump's withdrawal impact the US and its allies?
4. What role can US play in disarming North Korea?
5. Is a nuclear-free world possible?

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Nuclear Weapons: The **Good** & **Bad** news

- **Good News**

- Not used since 1945 bombing of Japan
- But Russia & US came too close during Cuban missile crises
- Big reduction in missiles

- **Bad News**

- Rogue nations Iran, N Korea & Pakistan dangerous
- Now much more powerful and new weapons
- Nuclear arsenal promise power, prestige and protection

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Nuclear negotiations: back to the future?

- In 1986, were over 70,000 nuclear warheads vs. now 15,000 - appears to be an improvement
- End of the Cold War led to 85% reductions in US and Russian arsenals
- Both agreed to Strategic Offensive Reductions Treaty (SORT, 2003) and the New Start (2010)
- New Start, to expire in 2021, reduces number of strategic missile launchers by 50% and limits each country to 1,550 strategic nuclear warheads
- But new tensions and conflicts threaten the renewal

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Why have nukes if don't use?

- It's "peace through strength" or
- "Lead but hedge"- negotiate while maintaining an arsenal to hedge against unforeseen developments
- While Russia and US have reduced their arsenals they've not eliminated them per NPT
- UK, France and China maintain their arsenals
- Countries outside the NPT possess them: Israel, India, Pakistan and North Korea

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Bad News: Expanding Capacity

- Trump established a US Space Force to counter anti-satellite weapons developed by Russia and China
- Intermediate-range Nuclear Forces Agreement (INF, 1987) being questioned as Russia appears to have violated it
- Trump has met with North Korean leader Kim Jong Un and exchanged verbal warnings

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Economics of nuclear weapons

- US spent \$5.5 trillion on nuclear weapons 1940-98 - 29% of military spending
- US may spend \$0.3 -1 trillion next 30 years to modernize
- After WW II, US turned to nuclear weapons as a cost saving measure-to replace troops with nuclear weapons
- Why should we spend so much money on weapons that are useful only when they're never used?
- Countering argument is that nuclear weapons have proven their worth by deterring attacks – so far
- Some even support the "nuclear peace theory" - that nuclear weapons can induce stability and reduce the chances of a escalation of war

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Despite agreements and coordination – nukes still maintained

- Have not deterred ethnic conflicts around the world
- Only in Syria have nuclear states (US and Russia) backed opposing forces
- But with coordination to avoid likelihood of collision between aircraft
- Hotlines have been established between nuclear powers

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All types states rationalize maintaining nukes

- Smaller states have nuclear weapons under the theory that they will prevent them from attacks from potential adversaries
- Both UK and France have recently reinvested in nuclear arms
- Apparently, nuclear weapons serve a political purpose in democracies as a hedge against rogues, Russia & China
- Authoritarians see nukes as a hedge against regime change from abroad and instill fear in their citizens

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Atoms for peace? Nuclear energy cooperation agreements

- US has nuclear cooperative agreements with non-weapons states to promote peaceful use
- This "Atoms for Peace" program has a mixed legacy - supplied nuclear materials and know-how to India, Pakistan, Iran and Israel which later developed nuclear weapons
- International Atomic Energy Agency (IAEA, 1957) acts as a nuclear watchdog

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NPT is a grand bargain

- Nuclear weapons states promised to negotiate the reduction of their arsenals and refrain from helping nonnuclear states to acquire nuclear weapons
- Non-nuclear states agreed not to build nuclear weapons and place all their nuclear facilities under international safeguards
- Controversies in North Korea, Iraq and Iran started when they denied access to IAEA inspectors
- But in Middle East there's a risk of proliferation-Saudi Arabia has threatened to withdraw from the NPT and develop a nuclear bomb if Iran does
- US has paradoxical interest - preventing nuclear proliferation while creating nuclear business for sale abroad

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Middle East risk of proliferation

- Saudi Arabia has threatened to withdraw from the NPT and develop a nuclear bomb if Iran does
- US has paradoxical and conflicting interests
 - Preventing nuclear proliferation
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Options for alternative nuclear futures: How soon to eliminate?

- I. Moving toward a global ban- eliminating all nuclear weapons
- II. Moving toward a deterrence only posture - fewer and ultimately zero nuclear weapons
- III. Prioritizing modernization – modernize nuclear arsenal's followed by negotiations
 - All three approaches involve nuclear negotiations but at different times: immediately, a little later, and wait until conditions prove satisfactory

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Rethinking the nuclear framework

- For decades, NPT has prevented nuclear war, but now with North Korea and Iran we may be headed to a new nuclear arms race
- In the 1960s, 190 nations signed the milestone NPT- which prohibited the signatories without nuclear weapons from creating them
- Those that didn't have nuclear weapons were able to get nuclear information for domestic peaceful uses only

Notes on Great Decisions video #2 "Rethinking the Nuclear Framework"



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NPT generally successful

- Only 3 countries have acquired nuclear weapons since NPT: India, Pakistan and Israel (plus Libya, Iraq, Iran & N Korea???)
- India thought NPT gave special powers to nuclear nations and worried over Pakistan
- Israel thought needed because so small and existential threat
- North Korea brinkmanship - to intimidate South Korea, Japan or US - even threatened to bomb US territory

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Libya case - Qaddafi gave up weapons, then killed

- Libya was considered a state sponsor of terrorism
- In 2003 Qaddafi gave up his nuclear weapons
- He was afraid what happened to Saddam Hussein might happen to him
- But 8 years after Qaddafi gave up his nuclear weapons he was dead
- Based upon what happened to Saddam Hussein and Qaddafi, others won't likely give up their nuclear weapons – if have nukes won't be attacked

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The Iran deal

- Negotiated over a long 10 years
- US would lift crippling sanctions if Iran would permit inspections and only peaceful use
- Without nuclear weapons, Iran's threat much lower
- Trump said deal gave up too much - US would not be held hostage to nuclear weapons
- Benefits of the deal were front-loaded - for 10-year pause Iran would have sanctions lifted without adequate inspections and receive \$100 bil. windfall

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Race began in WW II in response to Germany's secret program

- US developed a crash Manhattan program and overtook Germany
- Only nuclear weapon to have been used was US upon of Nagasaki and Hiroshima, Japan after Germany was already defeated
- Post WWII many advances in nuclear weapons
- Devastation now would be much greater

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Nuclear weapons alter the view of war

- Stalin thought Russia must match US so began nuclear race
- Soviet nuclear weapons altered the view of Soviets
- US has spent \$5.5 trillion on the nuclear weapons program and plans a trillion more!
- Both countries had MAD-mutually assured destruction
- Not just to combat military but to destroy the world

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Near war over Soviet missiles in Cuba

- Attempt by Soviets to put nuclear weapons in Cuba was closest call of a nuclear war
- This near war was starting point for nuclear control
- In 1970s, US had 25,000 nukes and so did Soviets
- People asked: Do we need all these nuclear weapons?
- Both US & USSR understood MAD extent of nuclear power

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Nuclear weapons control - NPT

- US, UK, and USSR forbid nuclear testing in atmosphere, water and space and signed NPT
- If other countries would not develop nuclear weapons, they would be provided nuclear technology for domestic use
- Many complained NPT not fair to non-nuclear powers
- After fall of USSR, worry about Soviet nukes getting into wrong hands
- Danger especially in Belarus, Kazakhstan and Ukraine where guards at nuclear sites deserted

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Nuclear threat still today

- Nuclear threat awareness little less today than during Cold War - but threat still remains
- US & Russia still can destroy each other 7 times despite reduced nuclear stockpiles
- Keep for deterrence - argue that nuclear weapons best way to decrease danger of war
- Overall, NPT has been beneficial but there still is a new arms race

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START treaty of 1994

- 1994 START treaty limited nuclear warhead deployments on missiles, bombers and submarines
- New START treaty of 2011 expires in 2021, limits both US & Russia to 1,550 warheads and requires inspections
- Putin has offered to extend treaty but Trump has not
- US believes Putin has been violating treaty and so must negotiate further
- NPT also under strain because nuclear states haven't been working toward elimination, just reduction plus problem with rogue North Korea and Iran

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A new arms race?

- Despite reduction in stockpiles, more powerful weapons being developed
- Lasers and hypersonic weapons are very powerful and could be used instead or provoke a nuclear war
- Defiance of Iran and North Korea and with advances in weapon technology raises the question: **Can the NPT survive in this new nuclear age?**

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