## 1

#### Interpretation: “Appropriation of outer space” by private entities refers to the exercise of exclusive control of space.

TIMOTHY JUSTIN TRAPP, JD Candidate @ UIUC Law, ’13, TAKING UP SPACE BY ANY OTHER MEANS: COMING TO TERMS WITH THE NONAPPROPRIATION ARTICLE OF THE OUTER SPACE TREATY UNIVERSITY OF ILLINOIS LAW REVIEW [Vol. 2013 No. 4]

The issues presented in relation to the nonappropriation article of the Outer Space Treaty should be clear.214 The ITU has, quite blatantly, created something akin to “property interests in outer space.”215 It allows nations to exclude others from their orbital slots, even when the nation is not currently using that slot.216 This is directly in line with at least one definition of outer-space appropriation.217 [\*\*Start Footnote 217\*\*Id. at 236 (“Appropriation of outer space, therefore, is ‘the exercise of exclusive control or exclusive use’ with a sense of permanence, which limits other nations’ access to it.”) (quoting Milton L. Smith, The Role of the ITU in the Development of Space Law, 17 ANNALS AIR & SPACE L. 157, 165 (1992)). \*\*End Footnote 217\*\*]The ITU even allows nations with unused slots to devise them to other entities, creating a market for the property rights set up by this regulation.218 In some aspects, this seems to effect exactly what those signatory nations of the Bogotá Declaration were trying to accomplish, albeit through different means.219

#### Private appropriation of extracted space resources is distinct from appropriation “of” outer space. Despite longstanding permission of appropriation of extracted resources, sovereign claims are still universally prohibited.

Abigail D. Pershing, J.D. Candidate @ Yale, B.A. UChicago,’19, "Interpreting the Outer Space Treaty's Non-Appropriation Principle: Customary International Law from 1967 to Today," Yale Journal of International Law 44, no. 1

II. THE FIRST SHIFT IN CUSTOMARY INTERNATIONAL LAW’S INTERPRETATION OF THE NON-APPROPRIATION PRINCIPLE Since the drafting of the Outer Space Treaty, several States have chosen to reinterpret the non-appropriation principle as narrower in scope than its drafters originally intended. This reinterpretation has gone largely unchallenged and has in fact been widely adopted by space-faring nations. In turn, this has had the effect of changing customary international law relating to the non-appropriation principle. Shifting away from its original blanket application in 1967, States have carved out an exception to the non-appropriation principle, allowing appropriation of extracted space resources.53 This Part examines this shift in the context of the two branches of the United Nation’s customary international law standard: State practice and opinio juris. A. State Practice The earliest hint of a change in customary international law relating to the interpretation of the non-appropriation clause came in 1969, when the United States first sent astronauts to the moon. As part of his historic journey, astronaut Neil Armstrong collected moonrocks that he brought back with him to Earth and promptly handed off to the National Aeronautics and Space Administration (NASA) as U.S. property.54 Later, the USSR similarly claimed lunar material as government property, some of which was eventually sold to private citizens. 55 These first instances of space resource appropriation did not draw much attention, but they presented a distinct shift marking the beginning of a new period in State practice. Having previously been limited by their technological capabilities, States could now establish new practices with respect to celestial bodies. This was the beginning of a pattern of appropriation that slowly unfolded over the next few decades and has since solidified into the general and consistent State practice necessary to establish the existence of customary international law. Currently, the U.S. government owns 842 pounds of lunar material.56 There is little question that NASA and the U.S. government consider this material, as well as other space materials collected by American astronauts, to be government property.57 In fact, NASA explicitly endorses U.S. property rights over these moon rocks, stating that “[l]unar material retrieved from the Moon during the Apollo Program is U.S. government property.”5 The U.S. delegation’s reaction to the language of the 1979 Moon Agreement further cemented this interpretation that appropriation of extracted resources is a permissible exception to the non-appropriation clause of Article II. Although the United States is not a party to the Moon Agreement, it did participate in the negotiations.59 The Moon Agreement states in relevant part: Neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or nongovernmental organization, national organization or nongovernmental entity or of any natural person.60 In response to this language, the U.S. delegation made a statement laying out the American view that the words “in place” imply that private property rights apply to extracted resources61—a comment that went completely unchallenged. That all States seemed to accept this point, even those bound by the Moon Agreement, is further evidence of a shift in customary international law.62 B. Opinio Juris: Domestic Legislation Domestic law, both in the United States and abroad, provides further evidence of the shift in customary international law surrounding the issue of nonappropriation as it relates to extracted space resources. Domestic U.S. space law is codified at Section 51 of the U.S. Code and has been regularly modified to expand private actors’ rights in space.63 Beginning in 1984, the Commercial Space Launch Act provided that “the United States should encourage private sector launches and associated services.”64 The goal of the 1984 Act was to support commercial space launches by private companies and individuals.65 It did not, however, specifically discuss commercial exploitation of space. The first such mention of commercial use of space appeared in 2004, with the Commercial Space Launch Amendments Act.66 This Act specifically aimed at regulating space tourism but did not explicitly guarantee any private rights in space.67 The most significant change in U.S. space law came with the passage of the Spurring Private Aerospace Competitiveness and Entrepreneurship (SPACE) Act in 2015. As incorporated into Section 51 of the Code, this Act provides: A United States citizen engaged in commercial recovery of an asteroid resource or a space resource under this chapter shall be entitled to any asteroid resource or space resource obtained, including to possess, own, transport, use, and sell the asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of the United States.68 Whereas the idea that private corporations might go into space may have seemed far-fetched to the drafters of the Outer Space Treaty, the SPACE Act of 2015 was the first instance of a government recognizing such a trend and officially supporting private companies’ commercial rights to space resources under law. With the new 2015 amendment to Section 51 in place, U.S. companies can now rest assured that any profits they reap from space mining are firmly legal—at least within U.S. jurisdictions. Although the United States was the first country to officially reinterpret the non-appropriation principle, other countries are following suit. On July 20, 2017, Luxembourg passed a law entitled On the Exploration and Utilization of Space Resources with a vote of fifty-five to two.69 The law took effect on August 1, 2017.70 Article 1 of the new law states simply that “[s]pace resources can be appropriated,” and Article 3 expressly grants private companies permission to explore and use space resources for commercial purposes.71 Official commentary on the law establishes that its goal is to provide companies with legal certainty regarding ownership over space materials—a goal that the commentators regard as legal under the Outer Space Treaty despite the non-appropriation principle.72 The next country to enact similar legislation may be the United Arab Emirates (UAE). According to the UAE Space Agency director general, Mohammed Al Ahbabi, the UAE is currently in the process of drafting a space law covering both human space exploration and commercial activities such as mining.73 To further this goal, in 2017 the UAE set up the Space Agency Working Group on Space Policy and Law to specify the procedures, mechanisms, and other standards of the space sector, including an appropriate legal framework.74 C. Opinio Juris: Legal Scholarship Other major space powers are also considering similar laws in the future, including Japan, China, and Australia. 75 Senior officials within China’s space program have explicitly stated that the country’s goal is to explore outer space and to take advantage of outer space resources.76 The general international trend clearly points in this direction in anticipation of a potential “space gold rush.” 7 Mirroring the shift in State practice and domestic laws, the legal community has also changed its approach to the interpretation of the nonappropriation principle. Whereas at the time of the ratification of the Outer Space Treaty the majority of legal scholars tended to apply the non-appropriation principle broadly, most legal scholars now view appropriation of extracted materials as permissible.78 Brandon Gruner underscores that this new view is historically distinct from prior legal interpretation, noting that modern interpretations of the Outer Space Treaty’s non-appropriation principle differ from those of the Treaty’s authors.79 In contrast to earlier legal theory that denied the possibility of appropriation of any space resources, scholars now widely accept that extracting space resources from celestial bodies is a “use” permitted by the Outer Space Treaty and that extracted materials become the property of the entity that performed the extraction.80 Stressing the fact that the Treaty does not explicitly prohibit appropriating resources from outer space, other authors conclude that the use of extracted space resources is permitted, meaning that the new SPACE Act is a plausible interpretation of the Outer Space Treaty.81 However, scholars have been careful to cabin the extent to which they accept the legality of appropriation. For instance, although Thomas Gangale and Marilyn Dudley-Rowley acknowledge the legality of private appropriation of extracted space resources, they nonetheless emphasize that “[o]wnership of and the right to use extraterrestrial resources is distinct from ownership of real property” and that any such claim to real property is illegal.82 Lawrence Cooper is also careful to point out this distinction: “[t]he [Outer Space] Treaties recognize sovereignty over property placed into space, property produced in space, and resources removed from their place in space, but ban sovereignty claims by states; international law extends this ban to individuals.”83 Although there remain some scholars who still insist on the illegality of the 2015 U.S. law and State appropriation of space resources generally,84 their dominance has waned since the 1960s. These scholars are now a minority in the face of general acceptance among the legal community that minerals and other space resources, once extracted, may be legally claimed as property. 85 Taken together, the elements described above—statements made in the international arena, de facto appropriation of space resources in the form of moon rocks, the adoption of new national policies permitting appropriation of extracted space resources, and the weight of the international legal community’s opinion— indicate a fundamental shift in customary international law. The Outer Space Treaty’s non-appropriation clause has been redefined via customary international law norms from its broad application to now include a carve-out allowing appropriation of space resources once such resources have been extracted.

#### Common usage also concludes appropriation is the taking of or exercise of control over property

Bohm 13 [JEFF BOHM, Chief Judge. In re Cowin, 492 B.R. 858 (Bankr. S.D. Tex. 2013).] TDI

1. Application of the Facts in the Instant Disputes to Embezzlement under Section 523(a)(4)

(i) "The Debtor appropriated funds." "Appropriation" is defined as "the exercise of control over property; a taking of possession." BLACK'S LAW DICTIONARY 98 (7th ed. 1999). In connection with its analysis under the TTLA in section C.2.b., supra, this Court has determined that the Debtor appropriated the excess proceeds from the foreclosure sales of the Countrywide Property, the Chase Property, and the WMC Property that rightfully belonged to the Plaintiffs. Not only did the Debtor control the disposition of the excess proceeds via the WCL and Dampkring Deeds of Trust, but he ensured that the proceeds were deposited to Perc and TRH, entities controlled by his co-conspirator Allan Groves. Thus, the first element is satisfied.

(ii) "The appropriation was for the Debtor's use or benefit." This element does not require a showing that the Debtor himself personally benefitted by the amounts that the Plaintiffs were damaged. For example, in affirming a bankruptcy court's decision that a debt was nondischargeable due to embezzlement under section 523(a)(4), the Sixth Circuit stated:

#### Court precedent affirms appropriation is permanent occupation not temporary use.

Marshall 82 [JUSTICE MARSHALL delivered the opinion of the Court. Loretto v. Teleprompter Manhattan CATV Corp., 458 US 419 - Supreme Court 1982] TDI

Since these early cases, this Court has consistently distinguished between flooding cases involving a permanent physical occupation, on the one hand, and cases involving a more temporary invasion, or government action outside the owner's property that causes consequential damages within, on the other. A taking has always been found only in the former situation. See United States v. Lynah, 188 U. S. 445, 468-470 (1903); Bedford v. United States, 192 U. S. 217, 225 (1904); United States v. Cress, 243 U. S. 316, 327-328 (1917); Sanguinetti v. United States, 264 U. S. 146, 149 (1924) (to be a taking, flooding must "constitute an actual, permanent invasion of the land, amounting to an appropriation of, and not merely an injury to, the property"); United States v. Kansas City Life Ins. Co., 339 U. S. 799, 809-810 (1950). In St. Louis v. Western Union Telegraph Co., 148 U. S. 92 (1893), the Court applied the principles enunciated in Pumpelly to a situation closely analogous to the one presented today. In that case, the Court held that the city of St. Louis could exact reasonable compensation for a telegraph company's placement of telegraph poles on the city's public streets. The Court reasoned: "The use which the [company] makes of the streets is an exclusive and permanent one, and not one temporary, shifting and in common with the general public. The ordinary traveler, whether on foot or in a vehicle, passes to and fro along the streets, and his use and occupation 429\*429 thereof are temporary and shifting. The space he occupies one moment he abandons the next to be occupied by any other traveller. . . . But the use made by the telegraph company is, in respect to so much of the space as it occupies with its poles, permanent and exclusive. It as effectually and permanently dispossesses the general public as if it had destroyed that amount of ground. Whatever benefit the public may receive in the way of transportation of messages, that space is, so far as respects its actual use for purposes of highway and personal travel, wholly lost to the public. . . . ..... ". . . It matters not for what that exclusive appropriation is taken, whether for steam railroads or street railroads, telegraphs or telephones, the state may if it chooses exact from the party or corporation given such exclusive use pecuniary compensation to the general public for being deprived of the common use of the portion thus appropriated." Id., at 98-99, 101-102 (emphasis added).[6] Similarly, in Western Union Telegraph Co. v. Pennsylvania R. Co., 195 U. S. 540 (1904), a telegraph company constructed and operated telegraph lines over a railroad's right of way. In holding that federal law did not grant the company the right of eminent domain or the right to operate the lines absent the railroad's consent, the Court assumed that 430\*430 the invasion of the telephone lines would be a compensable taking. Id., at 570 (the right-of-way "cannot be appropriated in whole or in part except upon the payment of compensation"). Later cases, relying on the character of a physical occupation, clearly establish that permanent occupations of land by such installations as telegraph and telephone lines, rails, and underground pipes or wires are takings even if they occupy only relatively insubstantial amounts of space and do not seriously interfere with the landowner's use of the rest of his land. See, e. g., Lovett v. West Va. Central Gas Co., 65 W. Va. 739, 65 S. E. 196 (1909); Southwestern Bell Telephone Co. v. Webb, 393 S. W. 2d 117, 121 (Mo. App. 1965). Cf. Portsmouth Harbor Land & Hotel Co. v. United States, 260 U. S. 327 (1922). See generally 2 J. Sackman, Nichols' Law of Eminent Domain § 6.21 (rev. 3d ed. 1980).[7] More recent cases confirm the distinction between a permanent physical occupation, a physical invasion short of an occupation, and a regulation that merely restricts the use of property. In United States v. Causby, 328 U. S. 256 (1946), the Court ruled that frequent flights immediately above a landowner's property constituted a taking, comparing such overflights to the quintessential form of a taking: "If, by reason of the frequency and altitude of the flights, respondents could not use this land for any purpose, their loss would be complete. It would be as complete as if the United States had entered upon the surface of the land and taken exclusive possession of it." Id., at 261 (footnote omitted). 431\*431 As the Court further explained, "We would not doubt that, if the United States erected an elevated railway over respondents' land at the precise altitude where its planes now fly, there would be a partial taking, even though none of the supports of the structure rested on the land. The reason is that there would be an intrusion so immediate and direct as to subtract from the owner's full enjoyment of the property and to limit his exploitation of it." Id., at 264-265. The Court concluded that the damages to the respondents "were not merely consequential. They were the product of a direct invasion of respondents' domain." Id., at 265-266. See also Griggs v. Allegheny County, 369 U. S. 84 (1962). Two wartime takings cases are also instructive. In United States v. Pewee Coal Co., 341 U. S. 114 (1951), the Court unanimously held that the Government's seizure and direction of operation of a coal mine to prevent a national strike of coal miners constituted a taking, though members of the Court differed over which losses suffered during the period of Government control were compensable. The plurality had little difficulty concluding that because there had been an "actual taking of possession and control," the taking was as clear as if the Government held full title and ownership. Id., at 116 (plurality opinion of Black, J., with whom Frankfurter, Douglas, and Jackson, JJ., joined; no other Justice challenged this portion of the opinion). In United States v. Central Eureka Mining Co., 357 U. S. 155 (1958), by contrast, the Court found no taking where the Government had issued a wartime order requiring nonessential gold mines to cease operations for the purpose of conserving equipment and manpower for use in mines more essential to the war effort. Over dissenting Justice Harlan's complaint that "as a practical matter the Order led to consequences no different from those that would have followed the temporary acquisition of physical possession of these mines by the United States," id., at 181, the Court reasoned that "the Government did not occupy, 432\*432 use, or in any manner take physical possession of the gold mines or of the equipment connected with them." Id., at 165-166. The Court concluded that the temporary though severe restriction on use of the mines was justified by the exigency of war.[8] Cf. YMCA v. United States, 395 U. S. 85, 92 (1969) ("Ordinarily, of course, government occupation of private property deprives the private owner of his use of the property, and it is this deprivation for which the Constitution requires compensation").

#### Violation: they ban asteroid mining

#### Standards:

#### 1] Limits and ground: the aff interpretation explodes the topic to allow any aff about extracting resources which structurally alters the neg research burden because there’s a qualitative difference between appropriation of outer space and of resources. That alters neg ground because it means the aff can defend trivial middle grounds that go beyond just exclusive appropriation unbalancing the topic.

#### 2] Precision: Proper construction of Article XII OST provides rights *to* property in outer space, not appropriation *of* outer space. Construction of A. XII OST to provide in-situ property rights is absurd.

Michelle L.D. Hanlon, LLM Air and Space Law @ McGill, JD magna cum laude Georgetown Law Center, BA Political Science @ Yale, ‘18, "The Space Review: Our fear of “heritage” imperils our future," No Publication, <https://www.thespacereview.com/article/3450/1>

Nor are the landing sites protected under international law. Current space treaties do not cover historic preservation or cultural heritage. Sure, Article VIII of the Outer Space Treaty and the Return and Rescue Agreement confirm that all space objects remain the possession of the State to whom they belong. If found, they must be returned. This does not protect the sites themselves, or the artifacts that scientists, engineers, and archaeologists would like to analyze in situ. Article III of the Liability Convention states that entities can be liable “in the event of damage being caused to a space object,” but how is damage defined in respect of an already nonoperational space object?

And what about the sites?

Article XII of the Outer Space Treaty suggests that states retain some control over their “stations, installations, equipment and space vehicles” but that such sites shall be open to others on the basis of “reciprocity.” But taken literally and to the extreme, this could mean that a state can essentially claim sovereignty over any area in which its equipment is strewn. Surely this is not the intent of the law?

#### Precision outweighs—determines what we prepare for which controls the internal link to any pragmatic benefits of the activity

#### Topicality is a voting issue because topicality indicts the aff’s entire advocacy.

#### Competing interpretations: reasonability is arbitrary and causes a race to the bottom because the neg doesn’t know what constitutes a “reasonable” interp when doing prep. It also collapses to competing interps because you use offense defense to determine that reasonability is good.

#### No RVIs—T is an aff burden just like inherency. It also causes a chilling effect on legitimate topicality arguments which causes proliferation of questionably topical cases.

T> 1ar theory—indicts the aff and abuse is self inflicted—outweighs on nomrsetting only 2 monmths—not highest layer

## 2

#### Biden passes Build Back Better using his PC to secure a narrow majority.

---time running out, Christmas deadline to pass it through the Senate

---Focus link---Biden has to focus his efforts on Manchin, the plan trades off

---Good faith link---lobbying spurred by the plan drives a wedge between Dems that undermines good faith negotiation

---AT: “Manchin won’t cooperate” Yes he will, he said himself negotiations are going well and agreed to follow up, which also proves PC is key in those upcoming meetings.

---AT: “Behind schedule” - No, Schumer himself predicted this week would be when Senate would go deep into it

Fedor & Politi 12-13 [Lauren\*, US Political Correspondent @ FT, James\*\*, Washington Bureau Chief @ FT; December 13, 2021; “White House scrambles to salvage $1.75tn Build Back Better bill by Christmas,” <https://www.ft.com/content/91c5f083-b783-4293-a007-9802ac9ad1f8>] brett

The White House is rushing to save its plans to pass Joe Biden’s $1.75tn Build Back Better bill by the end of the year, with time running low to win over Democratic holdouts worried about excessive spending and persistent inflation.

On Monday afternoon, the US president spoke with Joe Manchin, the Democratic senator from West Virginia who has proved a frequent obstacle to passing Biden’s domestic agenda.

“The president and Senator Manchin had a good, constructive phone call and agreed to follow up with one another in the coming days,” Andrew Bates, a White House spokesperson, told the Financial Times.

Manchin told reporters on Monday that he had a “good conversation” with the president and remained “engaged” in negotiations.

“We are still talking about different iterations, that’s all,” the senator said. When asked whether a deal could still be done by Christmas, Manchin replied: “Anything is possible.”

The call marked the president’s latest attempt to reach a deal on his flagship economic proposal, which directs large-scale government investment into safety-net programmes and measures to fight climate change.

But the fate of the legislation, which would be paid for largely with tax rises on the wealthy and big businesses, is still uncertain with less than two weeks to go until Democrats’ self-imposed deadline to pass it before Christmas.

Charles Schumer, the Senate majority leader, had initially suggested the upper chamber of Congress would begin poring over the bill this week after the House of Representatives passed it last month.

But many in Washington remain sceptical the bill will arrive on the president’s desk before the end of the year, given Manchin’s resistance.

“I know people have been in a hurry for a long time to do something, but I think basically we are seeing things unfold,” Manchin told reporters on Capitol Hill earlier on Monday. “I basically go and have conversation whenever the president calls me or wants to visit . . . we talk genuinely, as person to person, as two people who have had the experience of being in the Senate.”

Jen Psaki, White House press secretary, said the Biden administration remained “fully supportive” of Schumer’s effort to pass the legislation by the end of the month, and said speculation that the negotiations might stretch into next year was premature.

She was also upbeat about Biden’s relationship with Manchin, saying their “conversations have always operated in good faith”.

Democrats are looking to pass the Build Back Better plan without Republican support using a Senate procedure called reconciliation, which would allow them to bypass the 60-vote filibuster threshold. But because Democrats control the chamber by the narrowest of margins — 50-50, with vice-president Kamala Harris able to cast the tiebreaking vote — they need the support of all 50 Democratic senators.

#### The plan trades off -- ratification requires PC and floor time.

---even if popular, even some opposition ensures immense floor time due to Senate procedures.

Kelley & Pevehouse 15 [Judith G.\*, Duke Sanford School of Public Policy; AND Jon C.W.\*\*, University of Wisconsin-Madison; International Studies Quarterly (2015); “An Opportunity Cost Theory of US Treaty Behavior,” <https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/12521/isqu12185.pdf?sequence=1>] brett

An Opportunity Costs Theory

Although existing theories about veto players and political ideology explain the fate of some treaties, they leave some questions open. To complement these theories, we draw on economic theory to offer an opportunity cost theory of treaty ratification. In economics, the opportunity cost of a resource refers to the value of the nexthighest-valued alternative use of that resource. Scholars of domestic legislation have applied this concept to the time and resources of individual policymakers (Schiller 1995) but also to the fixed chamber time. For example, Koger refers to “[T]he foregone uses of the same [chamber] time for legislators as individuals as well as for the chamber collectively” (Koger 2010:22). Indeed, the Senate’s chamber time is not only fixed, but also scarce. A vast portion of its time goes to required routine business. This leaves little opportunity for discretionary activities (Walker 1977). Given that international policy matters have to draw on exactly the same remaining discretionary floor time as domestic policy, we argue that the United States sometimes delays or derails treaty ratification simply because political capital and Senate floor time are fixed and entail opportunity costs (Heitshusen 2013:4). As Koger (2010:33) argues more generally for legislation, “The expected gains from making a proposal must exceed the time and effort legislators invest in preparing it, organizing and coalition to support it, and taking the time of the chamber to debate and pass it.”

For a treaty to progress, the opportunity cost logic thus would mean that the net gains of the treaty must outweigh the opportunity costs of the advice and consent process. Thus, if the President or some Senators assign only low political value to a particular treaty or if they believe that passage of the treaty will take a lot of Senate floor time, they may decide that they would rather spend their political capital on other matters. If they think they have to fight a war of attrition to overcome opposition, this cost in terms of time and resources may tip the scales against moving the treaty forward. Under these conditions, the opportunity cost of processing the treaty may be too high for the treaty to gain attention, even if the President or more than the required two-thirds of the Senators think the treaty yields some benefits. As a result, whether or how fast a treaty makes it through the process depends on whether it has sufficient support to pass the constitutional process and on whether its value to politicians outweighs the opportunity cost of their political resources: legislative floor time and political capital.

The Fixed Political Agenda Space and Policy Priorities

Why do treaties incur these opportunity costs? Opportunity costs arise when resources are fixed and fully employed. Political agenda space is such a resource; there are only so many policy priorities a President can promote, and only so much Senate floor time to consider them. The media will pay attention to only so many issues on the Washington agenda. Both the President and the Senate must protect their legislative opportunities. They each face opportunity costs.

For the President, the transmittal process is not simple. If the United States signs an international agreement that falls under Article II of the Constitution, the President must transmit it to the Senate for advice and consent before the United States can ratify it. This process entails an analysis of the implications of the treaty including possible implementation legislation required, and the writing of a transmittal letter that serves as a report to the Senate Foreign Relations Committee (SFRC). Because of these requirements, usually there has to be some push from the White House (Halloran 2011), and this can take precious time away from domestic legislative priorities. Thus, transmittals can be costly, especially in the face of expected opposition. Indeed, in 1995 when President Clinton wanted to transmit the UN Convention on the Rights of the Child to the Senate, Jessie Helms, who chaired the SFRC, and 26 cosponsors introduced a resolution urging him to not transmit the Convention. Such opposition can be distracting or politically harmful for the President. Furthermore, because the President usually endorses the treaty in the transmittal letter, he may incur a reputational cost by transmitting treaties that stall (Krutz and Peake 2009:140). Dealing with treaties thus involves political costs, and withholding transmittal can conserve political capital.

For the Senate, floor time is of the essence. After transmittal, the SFRC must hold a meeting on the treaty, and eventually issue its own analysis and recommendation, and (if it has enough support) pass it out of committee. The treaty then has to be scheduled for debate, possible amendments, and a vote. To gain Senate advice and consent, the treaty must pass with at least a two-thirds majority. Crucial to differentiating the opportunity cost argument from a straight veto player model, the Senate rules for debate and passage enable opponents to increase the time expended on a treaty, even if they do not have the ability to vote it down on the floor. Dealing with a treaty thus ties up the SFRC time, but even more importantly, it could potentially take up scarce discretionary time on the Senate floor. Senators seek to maximize their reputational returns from the issues they spend time on, favoring issues that have broad appeal (Walker 1977:430). Before scheduling a treaty for debate and a vote, the relevant actors therefore have to consider the opportunity cost of dealing with the treaty: What else could the Senate accomplish with that time? Even if the Senate is not being productive in terms of passing legislation, what else does the Senate want to be seen focusing on at that moment? Even if there is strong support for a treaty, Senators may hold back if they anticipate serious and potentially time consuming opposition—opposition that can result in any number of procedural maneuvers that could take up costly time in the Senate. This explains why so few treaties ever take up much floor time for debate. If senators expect them to take time, they do not schedule them.

Thus, both the President and the Senate face opportunity costs of fixed resources: Presidents are concerned with “misusing” political capital and opportunities. The Senators are protective of floor time, or how they are seen to be using their time by a public foremost focused on domestic matters. At the same time, the political benefits of treaty ratification are uncertain. Treaty ratification is often invisible, because the media rarely covers such events and whatever benefits treaties may bring may never be attributed to the treaty advocates directly.

The implication of these political calculations is central to our argument: Contrary to standard assumptions of international relations, the decision to push a treaty through the advice and consent process may be less about an isolated examination of costs and benefits of the treaty itself than about the political benefit of spending time on the treaty relative to the benefit of other possible agenda activity that may produce important domestic legislation such as health-care reform, for example. In other words: Senate advice and consent and, by association, transmittal decisions depends on the associated legislative opportunity cost.

The opportunity cost can manifest itself for many types of treaties. Even nondivisive treaties require some Presidential attention and Senate floor time to move through the process (Johnson 2010), and therefore even these may fall by the wayside, which is of course even more likely to occur if they are not considered particularly vital. More important treaties might also be affected by the opportunity cost, however. Even if opponents might not command the requisite 1/3 of Senators to block the treaty, their willingness to obstruct it (even the threat to do so) may impose such high costs in terms of time that supporters are reluctant to spend time on it when they have many competing priorities. In a time-constrained Senate, minimal winning coalitions that reach supermajority status have become less important. Each piece of legislation must compete with all other legislation and having only a minimum backing can deprioritize legislation on the agenda, slowing it down (Oppenheimer 1985:410). And although the Senate can use a cloture vote to end filibustering and technically should be able to do so easily if the treaty commands two-thirds support, Senators may be reluctant to push for treaties that push these boundaries (for example, by objecting to a unanimous consent request (Heitshusen 2013:4)).

#### Opposition is guaranteed. NewSpace companies will lobby for their survival against the plan and smear it as an unworkable doctrine.

GC 17 [GC Magazine; Autumn 2017; Business thinking, In-house management, Published by legal500; “The new space race,” <https://www.legal500.com/gc-magazine/feature/the-new-space-race/>] brett

The upshot is that the ability to engage with legislators and policymakers will be essential for the long-term viability of companies like Planetary Resources.

‘We’re seeing already that with a regulatory framework laid out for a very quickly growing and expanding sector, there’s a lot of opportunity for policy engagement. That’s equally true in other countries too, which are either enacting their first national space laws or overhauling them,’ says Israel.

Before Israel joined the company, Planetary Resources was heavily involved in lobbying the US Congress to support the Spurring Private Aerospace Competitiveness and Entrepreneurship Act – better known as the SPACE Act.

That piece of legislation explicitly granted permission to US entities to ‘engage in the commercial exploration and exploitation of “space resources”.’ But the international community remains divided over whether the SPACE Act runs contrary to the obligations imposed on the US under the Outer Space Treaty.

‘The Americans are a sovereign state and according to their international treaty commitments, it’s hard to say that their domestic law is compatible with international law,’ says Smith.

Lobbying, both at a domestic and international level, stands to become increasingly critical, particularly as the US is in the process of crafting a framework for supervising non-governmental space activities, while ensure conformity with the Outer Space Treaty.

image of cartoon Mars Rover

‘It is incumbent on Congress to use the 50-year anniversary of the Outer Space Treaty to properly determine our actual international obligations, decide if specific articles in the Treaty are self-executing or not, and ensure that our domestic policy moving forward creates an environment that provides certainty for industry while protecting our national security,’ said Senator Ted Cruz, earlier this year.

‘The design and objectives in doing this must not only be to implement the government’s obligations, but to do so in a way that is not unduly burdensome on emerging space activities,’ adds Israel.

‘This is particularly relevant when the exact contours of how the activity will be carried out are not known, which makes it imperative that the regulators do not get too far ahead of the technology and make guesses about how it will be done, what is feasible, then lock in standards that are ultimately irrelevant and unworkable.’

#### Prevents existential climate disaster.

Moncrief ’11-11 [Aliki; 2021; executive director of Florida Conservation Voters; Orlando Sentinel, “Build Back Better Act would help in climate crisis,” https://www.orlandosentinel.com/opinion/guest-commentary/os-op-climate-change-congress-act-now-20211111-44u6bgyn5fdvnp3eqievkebqpe-story.html]

Last week, Congress passed the Infrastructure Investment and Jobs Act. This bipartisan bill will address upgrades to things like our transportation system, rural broadband, public transit, and clean-water infrastructure. These are badly needed, overdue investments that will make our communities more resilient to the climate impacts we are already seeing. But we know much more is needed.

It’s not enough to just respond to extreme weather — we need to cut the pollution driving it in the first place. That’s why Congress must also pass the Build Back Better Act, the most transformational climate and jobs legislation in our nation’s history. By investing in clean energy and things like electric vehicles and more energy-efficient homes and businesses, we can stop making the problem worse and avoid a growing disaster. We don’t have time for half measures, and Floridians know it — more than 75% of registered voters in the state support bold congressional action on climate change.

The Build Back Better Act takes bold steps to dramatically reduce climate pollution for everyone. But it also centers those who have been disproportionately impacted by this crisis by taking steps to address the decades of unchecked environmental injustice, ensuring at least 40% of the benefits of this bill go to those communities hardest hit by pollution and climate change.

Building a clean energy economy is an investment that will pay dividends for families today and for generations to come. Preventing the most catastrophic hurricanes, floods and heat waves will help ensure that we still bring people from all over the world to our beaches, the Everglades, and every amazing destination across our state that supports our multi-billion dollar tourism industry.

And the robust clean-energy investments in the Build Back Better Act will create millions of good-paying jobs for Floridians in every corner of our state. Florida already ranks fourth in the nation for clean-energy employment, and this legislation would help this industry grow exponentially by tapping into the Sunshine State’s solar power potential.

Orlando has some great members of Congress who understand that climate change is an existential threat to our state and they ran on being a part of the solution to this crisis. Now, we are counting on them to take bold action and pass the Build Back Better Act. This is a win-win-win that creates jobs, lowers energy bills for Floridians, and begins to address the climate crisis at the same time.

#### Warming is a much higher risk of war.

Dr. Michael T. Klare 20, Five Colleges Professor of Peace and World Security Studies at Hampshire College, Ph.D. from the Graduate School of the Union Institute, BA and MA from Columbia University, Member of the Board of Director at the Arms Control Association, Defense Correspondent for The Nation, “How Rising Temperatures Increase the Likelihood of Nuclear War”, The Nation, 1/13/2020, https://www.thenation.com/article/archive/nuclear-defense-climate-change/

Climbing world temperatures and rising sea levels will diminish the supply of food and water in many resource-deprived areas, increasing the risk of widespread starvation, social unrest, and human flight. Global corn production, for example, is projected to fall by as much as 14 percent in a 2°C warmer world, according to research cited in a 2018 special report by the UN’s Intergovernmental Panel on Climate Change (IPCC). Food scarcity and crop failures risk pushing hundreds of millions of people into overcrowded cities, where the likelihood of pandemics, ethnic strife, and severe storm damage is bound to increase. All of this will impose an immense burden on human institutions. Some states may collapse or break up into a collection of warring chiefdoms—all fighting over sources of water and other vital resources.

A similar momentum is now evident in the emerging nuclear arms race, with all three major powers—China, Russia, and the United States—rushing to deploy a host of new munitions. This dangerous process commenced a decade ago, when Russian and Chinese leaders sought improvements to their nuclear arsenals and President Barack Obama, in order to secure Senate approval of the New Strategic Arms Reduction Treaty of 2010, agreed to initial funding for the modernization of all three legs of America’s strategic triad, which encompasses submarines, intercontinental ballistic missiles, and bombers. (New START, which mandated significant reductions in US and Russian arsenals, will expire in February 2021 unless renewed by the two countries.) Although Obama initiated the modernization of the nuclear triad, the Trump administration has sought funds to proceed with their full-scale production, at an estimated initial installment of $500 billion over 10 years.

Even during the initial modernization program of the Obama era, Russian and Chinese leaders were sufficiently alarmed to hasten their own nuclear acquisitions. Both countries were already in the process of modernizing their stockpiles—Russia to replace Cold War–era systems that had become unreliable, China to provide its relatively small arsenal with enhanced capabilities. Trump’s decision to acquire a whole new suite of ICBMs, nuclear-armed submarines, and bombers has added momentum to these efforts. And with all three major powers upgrading their arsenals, the other nuclear-weapon states—led by India, Pakistan, and North Korea—have been expanding their stockpiles as well. Moreover, with Trump’s recent decision to abandon the Intermediate-Range Nuclear Forces (INF) Treaty, all major powers are developing missile delivery systems for a regional nuclear war such as might erupt in Europe, South Asia, or the western Pacific.

## 3

#### CP text: The United States federal government and Russia ought to fund a public-private partnership for deep space exploration.

Galeon 17 [(Dom, writer for Futurism), “SpaceX Asks the U.S. To Fund a Public-Private Partnership for Deep Space Exploration,” July 14, 2017, <https://futurism.com/spacex-asks-the-u-s-to-fund-a-public-private-partnership-for-deep-space-exploration>] TDI

SpaceX Asks the U.S. To Fund a Public-Private Partnership for Deep Space Exploration The best chance of success could come from pooling our resources. / Off World/ Deep Space Exploration/ NASA/ Public Private Partnerships SpaceX/Flickr Image by SpaceX/Flickr WORKING TOGETHER Some 10 years back now, the National Aeronautics and Space Administration (NASA) decided to work with private space companies to ferry people and cargo to the International Space Station (ISS). At the time, the space agency perhaps didn’t expect that it was heralding in a new era in space exploration. Both NASA and private agencies like SpaceX and Blue Origin have benefited from the collaboration. The former is able to save on costs, while the latter get to pursue their own individual programs, such as perfecting their reusable rocket technologies for commercial use. Without this partnership, these companies would not have been able to grow and develop at the same rate. Thus far, the joint missions have been limited to just orbital and near-orbit launches, like the Commercial Orbital Transportation Services (COTS) program, but SpaceX wants that to change. At a hearing of the U.S. Senate’s Subcommittee on Space, Science, and Competitiveness on Thursday, SpaceX’s senior vice president for global business and government affairs Tim Hughes asked the U.S. government to open up deep space exploration for similar public-private partnerships. “The principles applied in past programs for low Earth orbit capability can and should be applied to deep space exploration,” he said, referencing the COTS program. ADVERTISEMENT A DEEP SPACE FUTURE In order for the U.S. and for humankind to establish a more permanent presence in space, Hughes asserts that the government should fund a COTS-like program for deep space. It won’t really be a matter of funding the competition, he argued, because the program could run parallel to NASA’s existing deep space exploration plans, such as the Space Launch System (SLS) and the Orion spacecraft. Living Off The Land: A Guide To Settling Mars [Infographic] Click to View Full Infographic “I think [these] can be readily supplemented with public-private partnerships to allow us to sustain a permanent presence in space,” said Hughes. NASA could impose “high level requirements” for this deep space partnership, just like it does with COTS, Hughes added. The partnership could prove particularly beneficial for NASA right now given the recent reports saying it doesn’t have the funding needed for its Mars mission. Of course, as with any change, push back is to be expected. For one, more established aerospace firms that already work with NASA — Lockheed Martin and Boeing, among others — might not be in favor of this idea. The important thing, however, is to realize that deep space exploration is an entirely different ballgame than missions in near-Earth orbit, and the best chance of success may come from pooling our resources.

#### The CP turns the aff and prevents stifling of innovation.

Van Burken 20 [(Rebecca, technology policy analyst at Reason Foundation) “Biden Can Utilize Space Companies and Public-Private Partnerships,” December 14, 2020 https://reason.org/commentary/biden-can-utilize-space-companies-and-public-private-partnerships/] TDI

Biden Can Utilize Space Companies and Public-Private Partnerships The commercial space industry is making NASA's operations more cost-effective and encouraging innovation. By Rebecca van Burken December 14, 2020 President-elect Joe Biden will predictably distance himself from many of the Trump administration’s policies and positions, but its openness to commercial space partnerships should not be among them. The expansion of public-private space partnerships that began during the Obama administration has continued during the Trump administration. These public-private partnerships have helped lead to many major space successes, including crewed-launches returning to American soil through SpaceX and the first-ever civilian passenger on a private suborbital spaceflight as part of Virgin Galactic’s 2019 VSS Unity SpaceShipTwo launch. These successes, and others, reflect positively on the U.S. space sector. However, they would not have happened without the entrepreneurial nature of commercial space. Unlike government engineers and scientists, commercial space operations are not constrained by government bureaucracy nor reliant on taxpayer funding. This allows commercial space companies to explore some seemingly far-fetched ideas, like 3D printing of small rockets, a concept being pioneered by the small start-up Relativity. Commercial space companies must also develop and maintain a competitive edge to survive in the market. Significant competition ultimately creates less-costly services that give NASA more bang for its buck when developing new technology. Competitive market pressures have created inspiring innovation exemplified by SpaceX’s reusable rocket technology and proposals for recycling and turning discarded orbiting tanks into space stations. Without the federal government’s continued openness to commercial space, innovation, and invention in the U.S. space industry could be stifled. Commercial space continues to show up when the government needs new services. Over the last few years, we have seen amazing new technologies developed to track environmental and climate concerns. This is, in part, because NASA has entered into deals with private companies like Planet that are able to analyze data collected by satellite imagery. Planet has stakes in defense satellite imagery but has expanded its portfolio to collect data for climate scientists and researchers to use. Its constellation of 120 satellites is at work photographing every portion of the world at least once a day, which provides constant and up-to-date environmental information. By maintaining deals like that with commercial satellite companies, NASA can avoid the costs of creating its own satellite constellation and other remote sensing technology. Additionally, NASA does not need to focus its energies on updating technologies to keep up with new software and technological capabilities. Companies that worry about competition in the market naturally reassess their services and the burden of doing this should be put on private industry, not on the government. Biden’s team should seek out the most effective private partners, hiring new talent in civil programs to use these systems. This would also free up funding for crewed space exploration. In addition to looking to develop new partnerships for space-related efforts, a Biden administration should reassess the government’s old partnerships. Prior to the election, Reuters reported that some Biden associates believe he may try to continue funding the International Space Station (ISS) beyond its planned termination in 2025. Reuters reported: …Biden, on the other hand, would likely call for a delayed moonshot and propose a funding extension for the International Space Station if he wins the White House, according to people familiar with the fledging Biden space agenda.Pushing back the moon mission could cast more doubt on the long-term fate of Boeing Co’s Space Launch System (SLS) rocket, just as Elon Musk’s SpaceX and Jeff Bezos’ Blue Origin scramble to bring rival rockets to market as soon as next year. Extending support for the space station for a decade would also be a major boost for Boeing, whose $225 million annual ISS operations contract is set to expire in 2024 and is at the depths of a financial crisis caused by the COVID-19 pandemic and the 737 MAX grounding after fatal crashes. This directly contradicts the Trump administration’s efforts to cease funding for the archaic space station by 2025. If Biden were to continue funding this aging facility via NASA it would drain funds that could be used for more important space activities, including manned missions. Commercial companies are primed and ready to take over the space station’s functions, and NASA should allow them to do so. If Biden has taxpayers and NASA continue to fund the ISS, it would most likely continue to contract with a company that famous for draining government money—Boeing. The partnerships with Boeing are the types of space policies the incoming Biden administration should be reviewing. It should ask Congress for a Government Accountability Office audit of Boeing’s work on the Space Launch System (SLS). The contract is for the development of a rocket with heavy-lift capacities that is designed to bring humans and cargo to the moon and back. Unfortunately, it has had numerous delays and cost overruns and is still not ready for a test flight, as Bloomberg reported in August: Boeing Co.’s Space Launch System, the largest rocket in NASA’s history, will carry a price tag of at least $9.1 billion — or 30% more than the previous estimate for a key element in the agency’s plan to return to the moon. Additionally, the costs for new ground infrastructure at Florida’s Kennedy Space Center to support the deep-space exploration program has jumped to $2.4 billion, Kathy Lueders, NASA’s associate administrator for human spaceflight, said in a blog post Wednesday. That’s also a 30% increase, the National Aeronautics and Space Administration said in an email Thursday. While we wait for Boeing to reuse obsolete space shuttle hardware on SLS, companies like Blue Origin and SpaceX are continually reusing entire launch boosters. Biden’s administration needs a real review of whether it would be more cost and time effective to work with companies like SpaceX or Blue Origin. SLS is estimated to cost NASA $1 billion or more for each launch, after having already consumed $18.3 billion since 2010. By contrast, SpaceX has had its self-funded heavy-lift rocket Starship in development since 2012 and has been doing successful prototype tests since 2019. Another space entity that will be a key issue for the Biden administration is the military agency, U.S. Space Force, created by President Trump. Reason magazine had detailed the numerous reasons a Space Force should not have been created. Now that it does exist, the Space Force should be viewed as an agency that does not need to spend taxpayers’ money to create its own technology for its missions. Instead, it should use the readily available market of commercial partners ready to contract services. Space News recently reported that Space Force is just now learning of the private sector’s capabilities: [Gen. John “Jay”] Raymond said in years past the only commercially viable services have been space launch and communications provided by geosynchronous satellites. But the Space Force is now becoming aware of other capabilities that are being offered commercially such as space tracking data, weather data and on-orbit satellite servicing. Raymond, chief of operations for Space Force, has previously committed to working closely with commercial satellite companies for space-related missions. Col. Michael “Hopper” Hopkins, commander of NASA’s SpaceX Crew-1 mission, was commissioned into the Space Force and began a new line of Space Force officers expected to launch to the ISS. To facilitate continued partnerships between Space Force and private enterprise, the Biden administration could back an initiative currently proposed to Congress that Space Force acquisitions be “speedy and agile.” Flexibility for Space Force would include pushing acquisition power to the lowest level of management and removing bureaucracy to make its programs more efficient. We are at a pivotal moment in the space industry’s history. The federal government has the opportunity to partner with space industry innovators like Elon Musk, Jeff Bezos, and Richard Branson, and ensure there’s the opportunity for new space startups to emerge and add value to the market. The other path, a government and NASA-centric approach to space, would likely stifle technological developments and breakthroughs by private companies, cost taxpayers a lot more money, and cause the United States to fall behind other nations in a number of key areas.

## Case

### 1NC – Privatization good

#### Privatization is key to space exploration and maximizing public sector efficiency.

Houser 17 [(Kristen, staff writer at Freethink, where she covers science and tech. Her written work has appeared in Business Insider, NBC News and Futurimsm), “Private Companies, Not Governments, Are Shaping the Future of Space Exploration,” June 12, 2017, <https://futurism.com/private-companies-not-governments-are-shaping-the-future-of-space-exploration>] TDI

Private Companies, Not Governments, Are Shaping the Future of Space Exploration The power is in our hands. / Off World/ Blue Origin/ NASA/ Space Race 2 0 SpaceX / Flickr Image by SpaceX / Flickr SPACE RACE 2.0 Sixty years ago, the Soviet Union launched the first artificial satellite into orbit. The event served as the starting pistol in what would come to be known as the Space Race, a competition between the U.S.S.R. and the United States for spaceflight supremacy. In the decades that followed, the first human reached space, a man walked on the Moon, and the first space stations were built. The U.S.S.R. and the U.S. were soon joined by other world powers in exploring the final frontier, and by the time the Soviet Union was dissolved in 1991, the contentious Space Race was something of a distant memory. The World’s Top Space Agencies [INFOGRAPHIC] Click to View Full Infographic In recent years, however, a new Space Race has taken shape—Space Race 2.0. Rather than powerful nations guided by presidents and premiers, however, the competitors in this race are tech startups and private businesses spearheaded by billionaire entrepreneurs. And while the current atmosphere is far less contentious than that of the first Space Race (save the odd tweet or two), the competition is just as fierce. A CROWDED FIELD SpaceX, Blue Origin, Bigelow Airspace, Virgin Galactic, Boeing, Lockheed Martin… Not only has the number of private companies engaged in space exploration grown remarkably in recent years, these companies are quickly besting their government-sponsored competitors. ADVERTISEMENT “We’re starting to see advances made by private entities that are more significant than any advances in the last three years that were made by the government,” Chris Lewicki, CEO and President of Planetary Resources, tells Futurism. Amazon CEO Jeff Bezos’s Blue Origin and Tesla CEO Elon Musk’s SpaceX are arguably the two companies that are setting the pace. In November 2015, the former completed the first successful vertical rocket landing after sending their New Shepard 100 kilometers (62 miles) into the air. SpaceX landed its own rocket a month later, only they did so with a craft twice as heavy as Blue Origin’s and traveled all the way into space first. A month after that, in January 2016, Bezos’s company became the first entity to re-launch and re-land a previously used rocket. SpaceX followed suit in 2017. “The government was never able to [build reusable rockets], but now, two private companies within the space of the same year have done that,” points out Lewicki. Not only are private companies already surpassing their government counterparts, several are poised to widen their lead in the coming months and years. ADVERTISEMENT If all goes according to plan, when SpaceX’s Falcon Heavy launches in September, it’ll take the title of the world’s most powerful rocket away from NASA’s Saturn V. Virgin Galactic is already selling tickets for what it expects to be the first private spaceflights, which will take place aboard the sleek VSS Unity. SpaceX plans to send space tourists to the Moon in 2018, and then in 2024, the company hopes to launch a system that will take people all the way to Mars…roughly 5-15 years before NASA expects to do the same. ALL ON THE SAME TEAM Private companies may be in the lead, but the finish line for this Space Race isn’t exactly clear. The first iteration was arguably “won” when Neil Armstrong took his first steps on the Moon, so does this sequel end when we establish the first Moon base? When a human walks on Mars? When we leave the solar system? Truthfully, the likelihood of humanity ever calling it a day on space exploration is slim to none. The universe is huge, with galaxy estimates in the trillions, so the goalpost will continue moving back (to bring another sport into the analogy). Rather than focusing on competing in what is ultimately an unwinnable race, private and government-backed space agencies can actually benefit from collaboration thanks to their inherent differences. “The way that SpaceX, Planetary Resources, or Virgin Galactic approaches space exploration is going to be very different from NASA or the Air Force,” explains Lewicki. Private companies aren’t beholden to the same slow processes that often stall government projects, and they can secure or reallocate funding much more swiftly if need be. However, unlike agencies like NASA, they do have shareholders to keep happy and a need to constantly pursue profitability. ADVERTISEMENT The two sectors, therefore, have a tremendous opportunity to help one another. Private companies can generate revenue through government contracts —for example, NASA has contracted Boeing to transport astronauts to the International Space Station (ISS), and SpaceX just closed a deal with the U.S. Air Force to launch its secretive space drone. This leaves the government agencies free to pursue the kind of forward-thinking, longer-term research that might not immediately generate revenue, but that can be later streamlined and improved upon in the private sector. Ultimately, Space Race 2.0 has no losers. The breakthroughs happening in space exploration benefit us all, and truly, a little friendly competition never hurt anyone (unless you count the egos bruised by those tweets).

#### Space exploration fails without private sector leadership.

WAMU 20 [(interviewing Ariel Ekblaw, founder and lead of MIT Media Lab’s Space Exploration Initiative and Charles Bolden, NASA administrator from 2009-2017) “How Private Companies Are Changing The Future Of Space Exploration,” February 6, 2020, https://wamu.org/story/20/02/06/how-private-companies-are-changing-the-future-of-space-exploration/] TDI

How Private Companies Are Changing The Future Of Space Exploration LISTEN SpaceX founder Elon Musk addresses the media alongside NASA Administrator Jim Bridenstine, and astronauts Doug Hurley and Bob Behnken, during a press conference announcing new developments of the Crew Dragon reusable spacecraft, at SpaceX headquarters in Hawthorne, California on October 10, 2019. (Philip Pacheco / AFP) Private companies like SpaceX are testing vehicles for manned space missions. We’ll peer out into the near future and next steps in human space exploration. Guests Ariel Ekblaw, founder and lead of MIT Media Lab’s Space Exploration Initiative. (@ariel\_ekblaw) Charles Bolden, NASA administrator from 2009-2017, and a former astronaut and Marine Corps general. (@cboldenjr) Interview Highlights American astronaut Christina Koch broke the record for the longest-ever space flight by a woman today. Where is human space exploration going next? Ariel Ekblaw: “It’s a huge milestone. Part of her story around the spacesuit, and the sizing of the spacesuits, and the all-female spacewalk is something that we pay a lot of attention to at our group at M.I.T. And then being able to be in space for that length of time provides an invaluable sense of knowledge of what is the human lived experience of space. “How might we better design for her comfort to delight her in space? To now, thanks to standing on the shoulders of groups like NASA and Charlie’s work, think about not just a survivalist mode for space exploration, but what are the artifacts, and the tools, and the experiences that we could design for Christine in the future? Given her experience of this 300-plus-day journey and stay to really delight her for her experience in space exploration. And in the future, scale that to space tourists and others besides astronauts.” On how close we are to regular space tourism Ariel Ekblaw: “I would say we’re both close — we’re dangerously close — and yet so far away. So companies like Blue Origin and Virgin Galactic are racing to be able to send some of the first space tourists into low Earth orbit on some of their crafts, in either this year, or upcoming years. With Axiom and the announcement from NASA about the first commercial space station to be attached to the International Space Station. “We’re beginning to build up that infrastructure that could support real space tourism. There are still, as I’m sure Charlie can also speak to, large unanswered questions about how do you prepare someone if not off the street — A space enthusiast — for the experience of space when they’re not necessarily going to have the same in-depth, extensive training as a NASA astronaut? How do we keep them safe? How do we handle mental health? How do we prepare them for both the excitement and the responsibility that they might have as a member of a crew in a resource constrained environment?” On whether people who aren’t trained as astronauts should be able to go into space Charles Bolden: “Yes, without a doubt. … They’ve got to have some training. But I would say it depends on what the flight is going to be. I haven’t had a chance to talk to Beth Moses from Virgin Galactic. But Beth would be — she’s not a normal person off the street, because she’s the astronaut training officer at Blue Origin. But Beth had an opportunity to fly, and she didn’t go through years of training. You know, I think there’s some fundamental things that you teach someone about mobility. And, ‘don’t touch that.’ And you let them go.” On whether it’s possible to go to Mars without commercial interest involved Ariel Ekblaw: “I think it’s critical to have both. As Charlie and Dava Newman — another colleague of mine — have shown: the path from moon to Mars is going to be a public-private partnership path. And we need the capability that private brings and the inspiration that NASA and that the governments can still bring to the task.” On what it’s like to go to space Charles Bolden: “It’s much more spectacular than the pictures portray. We have great cameras nowadays. They’re better and better than they ever were before, but they just cannot capture what the human eye sees. God’s camera is pretty awesome. The ability to play around with Newton’s law, the fact that, you know, because gravity is overcome by the speed at which you’re going around the planet allows us to seem like we’re floating. And that’s a lot of fun to get to play with. You know, a body at rest stays at rest, a body in motion stays in motion. And for every action, there’s an equal and opposite reaction. It makes all that stuff that you learned in middle school, if you learned it, or if you avoided it, it brings it to life for you. So that’s incredible.” From The Reading List Wall Street Journal: “Space Is Poised for Explosive Growth. Let’s Get It Right.” — “In the 19th century, urban planners wrangled the chaotic metropolises of Paris and New York into “planned cities,” turning warrens of streets into orderly grids, building sewage systems and transit lines, and allowing for new types of architecture, such as apartment buildings. Today, we face a similar inflection point in developing the nearest reaches of space. “The next decade is set to bring explosive commercial growth and more private industry players to low-earth orbit, the area spanning 100 to 1,240 miles above the planet’s surface. SpaceX has proposed a satellite-based internet, and Planet is growing its fleet of Earth-imaging satellites. NASA plans a transition towards commercial management of the international space station. Several startups are developing low-earth orbit advertisements—logos or other designs, visible in the night sky, made from tiny, reflective satellites. Entrepreneurs are making plans for space hotels. “Before we let rampant development go unchecked, we should consider how these efforts might conflict with or complement each other. We still have the chance to intentionally design humanity’s first ‘planned orbit.’” MIT Media Lab: “Democratizing Access to Space” — “The Space Exploration Initiative’s founding mission is to rigorously, vigorously build out the technologies of our sci-fi space future while keeping our innovations and team as open and accessible as possible. When we say we’re ‘democratizing access to space exploration,’ what do we mean? In the context of our blue sky goal — to realize an inclusive, impactful — we approach democratization in four core ways. We are: “1. Democratizing access by inviting and uniting new disciplines in our creative practice] “2. Democratizing access by designing space tools, products, and experiences for all of us, not just the pinnacle of human talent embodied by astronauts. “3. Democratizing access by developing hands-on, widely accessible opportunities to shape the technologies of our space future. “4. Democratizing access through the celebration of new narratives through which we can tell the story of Space Exploration, writ large.” The Verge: “This was the decade the commercial spaceflight industry leapt forward” — “Two years into the decade, on May 25th, 2012, a small teardrop-shaped capsule arrived at the International Space Station, packed with cargo and supplies for the crew living on board. Its resupply mission at the ISS wasn’t remarkable, but the vehicle itself was unique: it was a Dragon cargo capsule, owned and operated by a private company called SpaceX. “Before 2012, only vehicles operated by governments had ever visited the ISS. The Dragon was the first commercial vehicle to dock with the station. The milestone was a crowning achievement for the commercial industry, which has permanently altered the spaceflight sector over the last 10 years. “This decade, the space industry has seen a shift in the way it does business, with newer players looking to capitalize on different markets and more ambitious projects. The result has been an explosion of growth within the commercial sector. It’s allowing for easier access to space than ever before, with both positive and negative results. Such growth is providing the commercial space industry with lots of momentum coming into the 2020s, but it’s unclear if this pace is something that can be kept up.” Axios: “NASA’s murky commercial space future” — “NASA’s plans to create a robust economy in low-Earth orbit where private spaceflight companies can flourish could eventually leave the agency’s astronauts stranded on Earth with nowhere to go. “Why it matters: NASA hopes to play a lead role in developing a private spaceflight economy, including private sector astronauts. The agency sees this as a way to free it up to focus on farther afield goals like bringing humans back to the Moon and, eventually, to Mars.

### AT: War (Sats)---1NC

#### No miscalc from satellite disruptions or space dust -- empirically denied. Also takes out the Russia scenario---their ev casually asserts escalation while we have examples from after their card was written that disprove it.

Mazur 12 (Jonathan Mazur, Manager Engineering at Northrop Grumman, writing in Space & Defense, from the Eisenhower Center for Space and Defense Studies. Past U.S. Actions: Redlines in Space. Space & Defense, Volume 6, Number 1, Fall 2012. https://inss.ndu.edu/Portals/97/Space\_and\_Defense\_6\_1.pdf?ver=2018-09-06-135424-147)

U.S. Reactions To Foreign Disruption Of U.S. Capabilities

In the 1970s, it was suspected that a U.S. maritime communications satellite was turned off by the Soviets when it was outside of the range of U.S. tracking stations.25 There does not appear to be any documented U.S. reaction, and I suspect there was none. In the mid-1990s, satellite hackers in Brazil began hijacking U.S. military communication satellite signals to broadcast their own information, though it took until 2009 for Brazil to crack down on the illegal activity with the support of the DoD.26 In 1998, a U.S.-German satellite known as ROSAT was rendered useless after it turned suddenly toward the sun. NASA investigators later determined the accident was possibly linked to a cyber-intrusion by Russia.

The fallout? Though there was an ongoing criminal investigation as of 2008; NASA security officials have seemed determined to publicly minimize the seriousness of the threat.27 In 2003, a signal originating from Cuba—later determined to be coming from Iranian embassy property— was jamming a U.S. communications satellite that was transmitting Voice of America programming over Iran, which was publicly referred to as an “act of war” by a U.S. official. 28 Press reporting indicates the U.S. administration was [frozen]“paralyzed” about how to cope with the jamming that continued for at least a month, even after U.S. diplomatic protests to Cuba.29 In 2005, U.S. diplomats protested to the Libyan government after two international satellites were illegally jammed disrupting American diplomatic, military, and FBI communications.30 In 2006, press reporting indicates that China hit a U.S. spy satellite with a ground-based laser. This action was acknowledged by the then director of the NRO, though the DoD remained tight lipped about the incident.31

“We’re at a point where the technology’s out there, and the capability for people to do things to our satellites is there. I’m focused on it beyond any single event.” – Air Force Space Command Commander, General Chilton, 2006 32

In 2009, a U.S. commercial Iridium communications satellite—extensively used by the DoD—was accidently destroyed by a collision with a dead Russian satellite.33 The U.S. company, Iridium, was able to minimize any loss of service by implementing a network solution within a few days.34 As of early 2011, no legal action had been taken by the company either because it is not clear who was at fault or because it might be politically problematic for the United States, which is trying to enter into bi-lateral transparency and confidence-building measures (TCBM) with Russia regarding space activities.35 Since August of 2010, North Korea has been intermittently using GPS jamming equipment, which reportedly has been interfering with U.S. and South Korean military operations and civilian use south of the North Korean border.36 Reportedly, only South Korea and the United Nations International Telecommunications Union—at the request of South Korea—have issued letters to Pyongyang demanding the cessation of disruptive communications signals in South Korea.37

It appears that the only time the U.S. military has responded with force to a disruption in U.S. space capabilities was in 2003, a few days after the start of the Iraq war.38 According to U.S. officials, Iraq was using multiple GPS jammers—which supposedly did not affect military GPS functionality. However, the U.S. military bombed the jammers anyway after a diplomatic complaint to Russia.39 The use of military force against the GPS jamming threat was possibly because the United States was already intervening in Iraq, and the bombing probably would not have occurred if the United States was not at war.

#### Congestion induces restraint, not aggression.

Bowen 18 [Bleddyn, Lecturer in International Relations at the University of Leicester; ELN; 20 Februrary 2018; “The Art of Space Deterrence,” <https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/>] brett

Fourth, the ubiquity of space infrastructure and the fragility of the space environment may create a degree of existential deterrence. As space is so useful to modern economies and military forces, a large-scale disruption of space infrastructure may be so intuitively escalatory to decision-makers that there may be a natural caution against a wholesale assault on a state’s entire space capabilities because the consequences of doing so approach the mentalities of total war, or nuclear responses if a society begins tearing itself apart because of the collapse of optimised energy grids and just-in-time supply chains. In addition, the problem of space debris and the political-legal hurdles to conducting debris clean-up operations mean that even a handful of explosive events in space can render a region of Earth orbit unusable for everyone. This could caution a country like China from excessive kinetic intercept missions because its own military and economy is increasingly reliant on outer space, but perhaps not a country like North Korea which does not rely on space. The usefulness, sensitivity, and fragility of space may have some existential deterrent effect. China’s catastrophic anti-satellite weapons test in 2007 is a valuable lesson for all on the potentially devastating effect of kinetic warfare in orbit.

#### Their ev overhypes escalation---be suspect.

Bowen 18 [Bleddyn, Lecturer in International Relations at the University of Leicester; ELN; 20 Februrary 2018; “The Art of Space Deterrence,” <https://www.europeanleadershipnetwork.org/commentary/the-art-of-space-deterrence/>] brett

Space is often an afterthought or a miscellaneous ancillary in the grand strategic views of top-level decision-makers. A president may not care that one satellite may be lost or go dark; it may cause panic and Twitter-based hysteria for the space community, of course. But the terrestrial context and consequences, as well as the political stakes and symbolism of any exchange of hostilities in space matters more. The political and media dimension can magnify or minimise the perceived consequences of losing specific satellites out of all proportion to their actual strategic effect.

### AT: Space War

#### No space war—interdependence checks AND commercial entanglement reduces the risk.

Bragg et al 18 [Principle research scientist at NSI, Inc. Lecturer in polisci @ Texas A&M, July 2018. Allison Astorino-Courtois. Robert Elder. Belinda Bragg. “Contested Space Operations, Space Defense, Deterrence, and Warfighting: Summary Findings and Integration Report,” NSI, <https://nsiteam.com/social/wp-content/uploads/2018/11/Space-SMA-Integration-Report-Space-FINAL.pdf>] brett

Everyone needs space While the US may be relatively more dependent on space for national security than are other states, it is far from alone in relying on space. Nuclear armed states are dependent on space for important command and control functions, and major powers are increasingly using space for battlefield situational awareness and communications. China and Russia were identified as having significant (and fairly equal) levels of strategic risk in space (ViTTa Q16), although their regional security priorities and (to date) less spacedependent economies place them at an advantage to the US. They may, therefore, see the strategic risk of conflict is space as lower than does the US. Still, space capabilities remain a source of economic expansion and national pride for both, and their calculations of the cost of conflict involving space may include consideration of these factors. Even now, there is a general consensus that the US and other actors have more to gain from space than they have from the loss of space-based capabilities (ViTTa Q3). This suggests that, although the US is more vulnerable in the space domain than are other states, the likelihood that aggressive action against an adversary’s space assets would be reciprocated may provide a degree of security. It also creates another incentive for actors to use diplomacy and international law to reduce risk and increase transparency in the space domain.

#### Regional blocs are hype - US-Russia space co-op at all-time high and has worked through adversity

Bodner 15 (Matthew, Moscow based journalist focusing on Russian foreign, defense, and space policy. He studied at Miami University of Ohio, and was a junior fellow at the Havighurst Center of Post-Soviet and Russian Studies. “Space remains one place the U.S. and Russia can find common ground”, 12/25/15, <http://rbth.com/science_and_tech/2015/11/25/space-remains-one-place-the-us-and-rusia-can-find-common-ground_544331>, MT)

When NASA Administrator Charles Bolden took the podium at a space science and policy conference in Washington on April 3 of last year, the future of U.S.-Russian space cooperation didn’t look very bright. One day earlier, an email leaked from the U.S. space agency’s headquarters ordered a suspension of contact with the Russian space agency. As part of the U.S. government’s response to Russia’s incorporation of Crimea, all federal agencies were ordered to halt bilateral work with Moscow. There were, however, a few important exceptions: cooperation would continue in nuclear security and counter-terrorism efforts. NASA, too, received an explicit exception from the order for all work pertaining to the operation of the International Space Station (I.S.S.). I.S.S. is the cornerstone of U.S.-Russia space cooperation. A $150 billion outpost in orbit involving a total of 16 nations, the station is the largest international joint project ever undertaken during peacetime. When Bolden spoke, he struck a note of defiance in the face of an increasingly volatile political situation, criticizing what he saw as an effort by political leaders on both sides to draw science into their terrestrial spat. “[T]he limitations on what our relationship is with Russia are at the government level, and we need to remember that. And so my instruction to my team is that unless I tell you otherwise, don’t stop doing anything that you’re doing,” Bolden said. No borders As relations between Russia and the West hit lows unseen since the Cold War, NASA, Roscosmos and its 14 partner nations were considering the future of the I.S.S. program, which under the original multilateral agreement establishing the program was set to wrap up in 2020. NASA had already received permission from the White House to extend the lifetime of the program until at least 2024, and was waiting on Roscosmos to receive a similar go-ahead from the Russian government. One of the 12 lunar modules built for Project Apollo. These crafts were meant to be used in low Earth orbit to test the techniques of separation, rendezvous and docking with the command and service module. Source: NASA Although officials such as Deputy Prime Minister Dmitry Rogozin spent much of 2014 saying Russia would split from I.S.S. in 2020 and pursue the construction of a new Russian national space station — a sort of spiritual successor to the Soviet Mir space station — the rhetoric faded. In July, Roscosmos chief Igor Komarov told reporters gathered at the Baikonur Cosmodrome in Kazakhstan: “I’ve informed our colleagues that the Russian government has approved the operation of I.S.S. until 2024.” Asked how NASA and Roscosmos were able to shield their work from the deep politicization of the Ukraine crisis, NASA’s chief official in Russia Sean Fuller told RBTH simply: “We like to say that in space you can’t see borders and we operate that way on the I.S.S..” Fuller contests that cooperation never truly suffered over the past two years, despite the super-charged political atmosphere surrounding the project at the government level. “Over the past year and a half, the level of cooperation on I.S.S. has increased even further, resulting in unprecedented joint scientific research,” Fuller said, pointing to an ambitious medical science program launched earlier this year. The experiment involved sending U.S. astronaut Scott Kelly and Russian cosmonaut Mikhail Kornienko to live aboard I.S.S. for a full year, giving scientists on both sides an opportunity to study the effects of long-term spaceflight — such as would be seen on an eventual flight to Mars. Technical difficulties Political concerns have not been the only obstacle to achieving this heightened level of cooperation, however. Over the past year, three different resupply missions launched aboard unmanned Russian and American rockets have failed to reach orbit, stretching resources dangerously thin. “But, in spite of those setbacks and through the strengths of the partnership, we have been able to overcome those failures while maintaining the full six-crew presence on I.S.S. and continuing the research,” Fuller said. Polar diary Beauty and the Polar Bear: An Arctic explorer's diary Read more: Beauty and the Polar Bear: An Arctic explorer's diary Pushing through the hardship, Roscosmos and NASA were able to pass an important milestone this month: 15 uninterrupted years of work aboard the space station. This is mainly due to the institutional nature of U.S.-Russia manned space cooperation, which has been built up gradually and periodically since the first joint space mission, the 1975 Apollo-Soyuz test project. The framework for the I.S.S. program was first pioneered during Apollo-Soyuz, and the mechanisms of the partnership are modeled off lessons learned during the Cold War. It is not by chance that NASA officials in Moscow work in the same offices at Roscosmos headquarters and at mission control and that their predecessors did for Apollo-Soyuz. Over time, the two agencies have developed strong ties through recurring and meaningful joint work, rather than the on-again-and-off-again style of bilateral efforts that characterized much of the U.S.-Russia bilateral field two years ago. “I have many colleagues and friends in the Russian space industry, and the different approaches to the same or similar challenges is enlightening and one of the greatest strengths of the I.S.S. partnership,” Fuller said.

#### Legal norms, empirics, costs.

Pavur and Martinovic 19 [James Pavur, DPhil Researcher Cybersecurity Centre for Doctoral Training Oxford University, Ivan Martinovic, Professor of Computer Science Department of Computer Science Oxford University, “The Cyber-ASAT: On the Impact of Cyber Weapons in Outer Space,” 2019 11th International Conference on Cyber Conflict: Silent Battle, <https://ccdcoe.org/uploads/2019/06/Art_12_The-Cyber-ASAT.pdf>] brett

3. STABILITY IN SPACE Given the uncomfortable combination of high dependency and low survivability, one might expect to observe frequent attacks against critical military assets in orbit. However, despite decades of recurring prophesies of impending space war, no such conflict has broken out [14]–[18]. It is true that a handful of space security crises have occurred; most notably, the 2007 Chinese anti-satellite weapon (ASAT) test and the 2008 US ASAT demonstration in response [19]. Moreover, a recent Centre for Strategic and International Studies report suggests increasing interest in attacking US space assets, particularly among the Chinese, Russian, North Korean and Iranian militaries [20]. Overall, however, the space domain has remained puzzlingly peaceful. In this section, we outline three major contributors to this enduring stability: limited accessibility, attributable norms, and environmental interdependence. A. Limited Accessibility Space is difficult. Over 60 years have passed since the first Sputnik launch and only nine countries (ten including the EU) have orbital launch capabilities. Moreover, a launch programme alone does not guarantee the resources and precision required to operate a meaningful ASAT capability. Given this, one possible reason why space wars have not broken out is simply because only the US has ever had the ability to fight one [21, p. 402], [22, pp. 419–420]. Although launch technology may become cheaper and easier, it is unclear to what extent these advances will be distributed among presently non-spacefaring nations. Limited access to orbit necessarily reduces the scenarios which could plausibly escalate to ASAT usage. Only major conflicts between the handful of states with ‘space club’ membership could be considered possible flashpoints. Even then, the fragility of an attacker’s own space assets creates de-escalatory pressures due to the deterrent effect of retaliation. Since the earliest days of the space race, dominant powers have recognized this dynamic and demonstrated an inclination towards de-escalatory space strategies [23]. B. Attributable Norms There also exists a long-standing normative framework favouring the peaceful use of space. The effectiveness of this regime, centred around the Outer Space Treaty (OST), is highly contentious and many have pointed out its serious legal and political shortcomings [24]–[26]. Nevertheless, this status quo framework has somehow supported over six decades of relative peace in orbit. Over these six decades, norms have become deeply ingrained into the way states describe and perceive space weaponization. This de facto codification was dramatically demonstrated in 2005 when the US found itself on the short end of a 160-1 UN vote after opposing a non-binding resolution on space weaponization. Although states have occasionally pushed the boundaries of these norms, this has typically occurred through incremental legal re-interpretation rather than outright opposition [27]. Even the most notable incidents, such as the 2007-2008 US and Chinese ASAT demonstrations, were couched in rhetoric from both the norm violators and defenders, depicting space as a peaceful global commons [27, p. 56]. Altogether, this suggests that states perceive real costs to breaking this normative tradition and may even moderate their behaviours accordingly. One further factor supporting this norms regime is the high degree of attributability surrounding ASAT weapons. For kinetic ASAT technology, plausible deniability and stealth are essentially impossible. The literally explosive act of launching a rocket cannot evade detection and, if used offensively, retaliation. This imposes high diplomatic costs on ASAT usage and testing, particularly during peacetime. C. Environmental Interdependence A third stabilizing force relates to the orbital debris consequences of ASATs. China’s 2007 ASAT demonstration was the largest debris-generating event in history, as the targeted satellite dissipated into thousands of dangerous debris particles [28, p. 4]. Since debris particles are indiscriminate and unpredictable, they often threaten the attacker’s own space assets [22, p. 420]. This is compounded by Kessler syndrome, a phenomenon whereby orbital debris ‘breeds’ as large pieces of debris collide and disintegrate. As space debris remains in orbit for hundreds of years, the cascade effect of an ASAT attack can constrain the attacker’s long-term use of space [29, pp. 295– 296]. Any state with kinetic ASAT capabilities will likely also operate satellites of its own, and they are necessarily exposed to this collateral damage threat. Space debris thus acts as a strong strategic deterrent to ASAT usage.

### 1NC---Circumvention

#### The plan must occur through ratifying a binding treaty, otherwise governments can re-interpret the public trust doctrine in domestic courts to get out of any obligation not to appropriate space.

#### SPACE Act proves states will reinterpret the law however they want if they’re left to implement domestically.

Durrani 19 [Haris A. \*J.D. candidate, Columbia Law School; Ph.D. candidate, Princeton University, Department of History (Program in History of Science). “Interpreting Space Resources Obtained: Historical and Postcolonial Interventions in the Law of Commercial Space Mining” <https://www.jtl.columbia.edu/volume57-3/interpreting-space-resources-obtained-historical-and-postcolonial-interventions-in-the-law-of-commercial-space-mining>] brett

This Note addresses a fundamental ambiguity in the U.S. Commercial Space Launch Competitiveness Act of 2015 (“CSLCA”). It is unclear whether the statute authorizes U.S. citizens to extract natural resources from asteroids and other celestial bodies, as is commonly assumed. Alternatively, the statute can be read to merely entitle citizens to resources that have already been obtained, where the regime for actually obtaining such resources remains undetermined. The Note resolves this issue in favor of the interpretation that best aligns with international law and policy. It first shows that the relevant elements of international law—the Outer Space Treaty of 1967 (“OST”) and customary international law (“CIL”)—do not resolve the issue. The Note then adopts a broader approach by considering the OST’s anti-imperial policy. By engaging scholarship on law, colonialism, and empire, this approach centers Global South States in space law discourse. This approach reveals two ways in which the more commonly accepted interpretation of the CSLCA cuts against the anti-imperial policy of the OST, related to the distinction between private and State extraction and to State conferral of property rights. To avoid contradicting these policy concerns, the CSLCA should be read narrowly, such that it leaves open future determination of the space resources regime. Finally, the Note offers guidance for such a regime. It argues that CIL development based on subsequent legislation or mining would let Global North States asymmetrically shape international law, which would contradict the OST’s anti-imperial policy. Instead, the Note recommends multilateral agreements that employ organizationally diverse models, which mix collective and private ownership. The Note ends by reflecting on lingering questions in the context of development and the Global South.

### 1NC---AT: Rivalrous Orbits

#### Tracking debris exists now and solves collisions.

**Mosher** **’19** [Dave; September 3rd; Journalist with more than a decade of experience reporting and writing stories about space, science, and technology; Business Insider, “Satellite collisions may trigger a space-junk disaster that could end human access to orbit. Here’s How,” <https://www.usafa.edu/app/uploads/Space_and_Defense_2_3.pdf>; GR]

The Kessler syndrome plays center-stage in the movie "Gravity," in which an accidental space collision endangers a crew aboard a large space station. But Gossner said that type of a runaway space-junk catastrophe is unlikely. "Right now I don't think we're close to that," he said. "I'm not saying we couldn't get there, and I'm not saying we don't need to be smart and manage the problem. But I don't see it ever becoming, anytime soon, an unmanageable problem." There is no current system to remove old satellites or sweep up bits of debris in order to prevent a Kessler event. Instead, space debris is monitored from Earth, and new rules require satellites in low-Earth orbit be deorbited after 25 years so they don't wind up adding more space junk. "Our current plan is to manage the problem and not let it get that far," Gossner said. "I don't think that we're even close to needing to actively remove stuff. There's lots of research being done on that, and maybe some day that will happen, but I think that — at this point, and in my humble opinion — an unnecessary expense." A major part of the effort to prevent a Kessler event is the Space Surveillance Network (SSN). The project, led by the US military, uses 30 different systems around the world to identify, track, and share information about objects in space. Many objects are tracked day and night via a networkof radar observatories around the globe. Optical telescopes on the ground also keep an eye out, but they aren't always run by the government. "The commercial sector is actually putting up lots and lots of telescopes," Gossner said. The government pays for their debris-tracking services. Gossner said one major debris-tracking company is called Exoanalytic. It uses about 150 small telescopes set up around the globe to detect, track, and report space debris to the SSN. Telescopes in space track debris, too. Far less is known about them because they're likely top-secret military satellites. Objects detected by the government and companies get added to a catalog of space debris and checked against the orbits of other known bits of space junk. New orbits are calculated with supercomputers to see if there's a chance of any collisions. Diana McKissock, a flight lead with the US Air Force's 18th Space Control Squadron, helps track space debris for the SSN. She said the surveillance network issues warnings to NASA, satellite companies, and other groups with spacecraft, based on two levels of emergency: basic and advanced. The SSN issues a basic emergency report to the public three days ahead of a 1-in-10,000 chance of a collision. It then provides multiple updates per day until the risk of a collision passes. To qualify for such reporting, a rogue object must come within a certain distance of another object. In low-Earth orbit, that distance must be less than 1 kilometer (0.62 mile); farther out in deep space, where the precision of orbits is less reliable, the distance is less than 5 kilometers (3.1 miles). Advanced emergency reports help satellite providers see possible collisions much more than three days ahead. "In 2017, we provided data for 308,984 events, of which only 655 were emergency-reportable," McKissock told Business Insider in an email. Of those, 579 events were in low-Earth orbit (where it's relatively crowded with satellites).

#### The debris propagation model is a process not an event---timeframe is decades and intervening actors check. Err neg -- this is Kessler, the guy who made that model.

Burns Interviewing Kessler **’**13 Corrinne Burns, interviewing Donald Kessler, who made up the concept. [Space junk apocalypse: just like Gravity? 11-15-2013, https://www.theguardian.com/science/blog/2013/nov/15/space-junk-apocalypse-gravity]//BPS

Now? Are we in trouble? Not yet. Kessler syndrome isn't an acute phenomenon, as depicted in the movie – it's a slow, decades-long process. "It'll happen throughout the next 100 years – we have time to deal with it," Kessler says. "The time between collisions will become shorter – it's around 10 years at the moment. In 20 years' time, the time between collisions could be reduced to five years." Fortunately, communications satellites are, in the main, situated high up in geosynchronous orbit (GEO), whereas the risk of collisions lies mainly in the much lower, and more crowded, low Earth orbit (LEO). But that doesn't mean we can relax. "We've got to get a handle on it – we need to prevent the cascade process from speeding up." And the only way to do that is, he says, to begin actively removing junk from space. Charlotte Bewick agrees. She's a mission concepts engineer with the German space technology company OHB System, with special expertise in space junk – specifically, how we can capture it and bring it back to Earth. While agreeing with Kessler that the movie scenario is exaggerated, she remains concerned. "Fragments of junk can naturally re-enter the atmosphere [and so be removed from orbit]. But we're at the stage where the rate of creation of new debris fragments is higher than the rate of natural removal. The orbits most at risk harbour important space assets – satellites for weather forecasting, oil spill and bush fire detection, and polar ice monitoring." Bewick highlights the case of Envisat, a defunct 8,000kg spacecraft circling Earth in an orbit that is very popular with space agencies and, hence, pretty crowded. "If Envisat collides with a piece of debris or a micrometeorite, the fragments could render the whole orbital region unusable." So can we get the junk down, I asked Massimiliano Vasile, part of the Mechanical & Aerospace Department at the University of Strathclyde and co-ordinator of the Stardust network. He told me defunct satellites in the high GEO region have, for some time, been shifted to higher "graveyard orbits" to keep them out of the way. But that's not an option for items in low Earth orbit. For this, he tells me, researchers are looking seriously into active debris removal – in-orbit capture techniques like harpooning, netting and tethering, the use of contactless systems like ion-beams or lasers, and even onboard robotics to position the junk away from high-risk orbital regions. As for middle Earth orbit – well, ideas are welcome, he says. We're in no immediate danger from Kessler syndrome – but it's not a problem that's going away. Despite Gravity's artistic license, Donald Kessler is pleased to see the phenomenon represented on the big screen. "It is very improbable that events would play out as they did in the film," he says. "But if it raises awareness, then that's great."

### 1NC – Russia impact answers

#### No Russia war—no motivation for Russian aggression.

Trenin 18 [Dmitri Trenin is director of the Carnegie Moscow Center. Fears of World War III are overblown. July 20, 2018. https://www.politico.eu/article/donald-trump-vladimir-putin-nato-crimea-fears-of-world-war-iii-are-overblown/]

Europeans fretted about the end of NATO. But seen from Moscow, the military alliance still appears to be very much alive. Trump's harsh words to his allies on spending haven't changed that. Russia is all too aware that the alliance is focused on its eastern flank, and not only rhetorically. Since it rediscovered Russia as a threat in 2014, there have been new deployments, a higher degree of mobility, and more military exercises along the Russian border, from the Barents to the Black Seas. Hardly a boon for Russia. It was clear at last week's NATO summit that allies agree on the need to upgrade the bloc’s military efforts. Germany, Italy, France, the U.S. — they all agree members’ defense spending should go up. Whether by 2 percent of GDP as agreed in Wales, or by 4 percent as now demanded by Trump, is, of course, important. However, with Russia’s GDP often likened to that of Spain, or the state of New York, either figure is considered significant in Moscow, given that the money will be spent with Russia in mind. NATO allies also worry about Trump’s comment this week that it is problematic for the U.S. to come to the defense of smaller NATO allies such as Montenegro. But let’s not forget that at the height of the Cold War it was never 100 percent certain what the U.S. would do in case of an attack on West Germany. Former Chancellor Helmut Schmidt would not have asked for U.S. medium-range missiles in Europe in the 1970s had he had full confidence in NATO's largest member. Nor is NATO enlargement off the table completely. Macedonia has just crossed a major hurdle in its push for membership. Predictions that Trump would recognize Crimea at the Helsinki meeting were also overblown. There was never any question of the U.S. accepting Crimea’s status as part of Russia, or Washington leaning on Kiev to fulfill its side of the Minsk II accords. In Helsinki, Trump and Putin simply acknowledged the issue, and moved on. The U.S. continues to support both Ukraine and Georgia in their conflicts with Russia and to promote their eventual membership in NATO, which most in the West privately regard as increasingly dangerous. NATO is still very much exerting pressure on Russia. It's considered more of an annoyance than an immediate threat in Moscow, but also keeps the country in permanent "war mode" vis-à-vis the U.S. Because Moscow is focused on Washington, this means Europeans usually get a pass. As for Russia’s own intentions, two things are clear. There is no interest in Moscow in attacking the Baltic states or Poland. These countries are as safe now as they were before 2014. Suggestions otherwise simply point to the deep wounds in both nations' psyche, which will not be healed for many decades. Should Ukraine's leaders decide to repeat Mikheil Saakashvili’s mistake in 2008 and launch a major offensive to retake Donbas — however unlikely — the Russian response could indeed be devastating and lead to Ukraine's loss of sovereignty, as Putin recently stated. But does this mean Russia will move on Ukraine unprovoked? Most certainly not. Putin's main concerns are largely domestic. He has an ambitious program that logically calls for more economic ties with the West. To move forward, he is looking to ease tensions with the EU and the U.S. What Putin wanted to get out of Helsinki was mainly to start a dialogue with Washington. Those hopes are now visibly going up in smoke. It is safe to bet that Russia will continue to face the same opposition from a coalition of U.S. and EU interests. The first détente in the hybrid war between Russia and the West was indeed nipped in the bud by Trump's behavior and the vehemence of his domestic critics. So be it. Moscow will not capitulate, and will indeed push back. But it's not likely to take the form of an aggressive, overt military attack. Fears of new wars are far from accurate.

#### No war—deterrence makes Russia war impossible.

Alexander Lanoszka 20. Lanoszka is an Assistant Professor of International Relations at the University of Waterloo. “Thank goodness for NATO enlargement.” https://link.springer.com/article/10.1057/s41311-020-00234-8

Pessimism regarding the defensibility of NATO’s so-called northeastern flank is also unwarranted. To begin with, much of the policy literature on this region concentrates on Russia’s strengths while ignoring its key weaknesses. The Baltic countries would almost surely lose set piece battles against Russia, but deterrence ultimately hinges less on being victorious in a potential war than on imposing unacceptable costs on the adversary. The Baltic states have already begun embracing unconventional strategies intended to boost national resiliency and make occupation difficult (Collins and Beehner 2019). Guerrilla tactics and territorial defense serve to augment their denial capabilities that in turn would complicate Russian efforts to hold territory and pacify the local population. Moreover, Russia may have local escalation dominance, but it does not have global escalation dominance, given the forces that NATO members possess. A large-scale land grab made at the expense of any of the Baltic countries might precipitate escalatory dynamics that it could not control. Nuclear war may be a remote possibility, but it cannot be discounted altogether. One reason why Russia has resorted to so-called hybrid tactics against the Baltic countries—such as political subversion and eforts to foment unrest—is that it does not wish to provoke a reaction that it cannot handle (Lanoszka 2016). Put simply, Russia may believe in NATO’s Article Five collective defense commitment more than NATO members themselves do. Russia’s ability to mount a major assault on the Baltic littoral region should not be exaggerated either. Strategic assets that Russia supposedly has at its disposal can become liabilities. Its one formal defense partner—Belarus—has proved reluctant to accept additional forward deployed military assets and to provide diplomatic support in Russia’s territorial disputes with its neighbors. Because Belarus has potentially much to lose from getting involved in any sort of military confrontation between Russia and NATO, its leaders will be hesitant to offer material support to Russia, especially if they fear becoming the target of NATO countermeasures. Moreover, any massive assault on Poland and the Baltic countries would require extensive stockpiling of military hardware, ammunition, medical equipment, and other supplies, which would provide NATO defense planners with early warning. The Russian exclave of Kaliningrad might also be vulnerable. Swedish researchers have called into question Russian A2/AD capabilities located in Kaliningrad and elsewhere, alleging that its missile systems have much shorter ranges than commonly presumed and may be vulnerable to countermeasures (Dalsjö et al. 2019). NATO militaries like the Polish Armed Forces could hold at risk Kaliningrad. The question should not necessarily be whether the United States would trade ‘Toledo for Tallinn’ but whether Russia would trade Kaliningrad for Vilnius. And indeed, Russia would need the Suwałki Gap as much as NATO would because the area provides a bridge between Belarus and Kaliningrad. Attempts to close it necessarily involve violating Poland’s territorial integrity and would provide justification for NATO to escalate. Partly because of these difficulties associated with a major conventional attack, regional experts and government officials judge the probability of something of this sort happening to be low (Lanoszka and Hunzeker 2019, 29–30, 79). That is not to say Russia is weak; for example, its widening missile advantages still create gaps in NATO’s deterrence posture. But Russia is not a military juggernaut either. Even the use of so-called hybrid tactics may have limited efficacy in the Baltic region. The three Baltic countries have been subject to an intense Russian disinformation campaign since at least 2014. Nevertheless, local public opinion remains largely supportive of NATO and other defense policy measures aimed at boosting deterrence. One reason why these societies may be inoculated against Russian disinformation is that they have grown accustomed to seeing Russia in adversarial terms, thus making average citizens critical of pro-Kremlin narratives (Lanoszka 2019). In addition, the Baltic states have integrated their minority populations far better than is often assumed. Although many Russophones may still lack citizenship rights in Estonia and Latvia and so are more likely to experience political discrimination and economic hardship, they nevertheless retain key benefits associated with living in the European Union (Trimbach and O’Lear 2015). They may have sympathies for aspects of Russian foreign policy, but these sympathies do not translate into a preference to be reunited with Russia (Kallas 2016). Accordingly, Russia faces serious obstacles replicating what it did in Crimea. Russians living in Crimea were generally sympathetic to being part of Russkiy Mir (‘Russian World’), making them more willing to be the objects of an annexation efort (O’Loughlin, Toal, and Kolosov 2016, 761). Further, Russia does not have an existing military presence in the Baltic countries—as it did with the Black Sea Fleet stationed in Sevastopol—that it could leverage to achieve easy faits accomplis and dissuade potential challengers from organizing. In sum, NATO does not need to have a heavy footprint in the Baltic region to deter Russian aggression. Russia would have to overcome major operational challenges if it wished to undertake a successful conquest of the Baltic countries. Of course, none of this is to invite complacency about Baltic security. The Baltic states and Poland should deepen regional cooperation in order to ensure that no key policy differences exist between them (Jermalavicius et al. 2018). They also face potential vulnerabilities at sea and so need to improve the resilience of their undersea and maritime infrastructure (Schaub et al. 2017). Still, the defensibility of the Baltic region helps illuminate why Russia resorts to disinformation campaigns, airspace incursions, vague nuclear threats, and other attempts at subversion. It cannot do much more lest it would provoke an unwanted response.

#### Alt cause—relations irreparable.

Nikolas K. GVOSDEV 17, contributing editor at the National Interest, senior fellow at the Foreign Policy Research Institute [“Damage Done: How Russia Hysteria Has Hurt U.S.-Russia Relations,” *The National Interest*, March 6 17, http://nationalinterest.org/feature/damage-done-how-russia-hysteria-has-hurt-us-russia-relations-19687]

But we should also recognize that the damage is done. The current political climate now guarantees that any sort of pragmatic approach to settling the disputes between the United States and Russia is off the table. There seems no way that U.S.-Russia relations can be easily extracted from the hole in which they currently reside. In turn, those in Russia who were cautiously advocating for exploring areas where Moscow and Washington might cooperate are seeing that position being discredited. Over the past few years, a number of analysts have warned about the creeping strategic partnership between Moscow and Beijing and how closer Russia-China relations create real problems for the United States. The window of opportunity to nudge the Kremlin to adopt a much more equidistant posture between the two—despite all of the slings and arrows Moscow has cast our way—is closing. Getting the U.S.-Russia relationship back to some semblance of a normal bilateral encounter was already going to be difficult, but it now may prove to be nearly impossible.

### 1NC- Readiness

#### You should hold them to what they defend—they have cited one piece of evidence establishing the plan causally increases US military readiness

#### Hegemony is unsustainable – transition key

Ikenberry 18 - theorist of international relations and United States foreign policy, and a professor of Politics and International Affairs in the Woodrow Wilson School of Public and International Affairs at Princeton University (John G. Ikenberry; International Affairs, Volume 94, Issue 1, 1 January 2018; “The end of liberal international order?”; pgs. 7-23)//TS

The foundations of this postwar liberal hegemonic order are weakening. In a simple sense, this is a story of grand shifts in the distribution of power and the consequences that follow. The United States and its allies are less powerful than they were when they built the postwar order. The unipolar moment—when the United States dominated world economic and military rankings—is ending. Europe and Japan have also weakened. Together, this old triad of patrons of the postwar liberal order is slowly dwindling in its share of the wider global distribution of power. This shift is probably not best seen as a transition from an American to a Chinese hegemonic order, the ‘return to multipolarity’ or a ‘rise of the non-West’. Rather, it is simply a gradual diffusion of power away from the West. China will probably not replace the United States as an illiberal hegemon, and the global South will probably not emerge as a geopolitical bloc that directly challenges the US-led order. But the United States—and its old allies—will continue to be a smaller part of the global whole, and this will constrain their ability to support and defend the liberal international order. The political troubles of western liberal democracies magnify the implications of these global power shifts. As noted above, democracies everywhere are facing internal difficulties and discontents. The older western democracies are experiencing rising inequality, economic stagnation, fiscal crisis, and political polarization and gridlock. Many newer and poorer democracies, meanwhile, are beset by corruption, backsliding and rising inequality. The great ‘third wave’ of democratization seems to have crested, and now to be receding. As democracies fail to address problems, their domestic legitimacy is diminished and increasingly challenged by resurgent nationalist, populist and xenophobic movements. Together, these developments cast a dark shadow over the democratic future. During the Cold War, the American-led liberal order was lodged within the western side of the bipolar world system. It was during these decades that the foundations of liberal hegemonic order were laid. With the collapse of the Soviet Union, this ‘inside’ order became the nucleus of an expanding global system. This had several consequences. One was that the United States became the sole superpower—the world entered the unipolar moment. This made American power itself an issue in world politics. During the Cold War, American power had a functional role in the system: it served as a balance against Soviet power. With the sudden emergence of unipolarity, American power was less constrained—and it did not play the same system-functional role. New debates emerged about the character of American hegemonic power. What would restrain American power? Was the United States now an informal empire? The American war in Iraq and the global ‘war on terror’ exacerbated these worries.21 Ironically, the crisis of the US-led liberal order can be traced to the collapse of Cold War bipolarity and the resulting spread of liberal internationalism. The seeds of crisis were planted at this moment of triumph. The liberal international order was, in effect, globalized. It was freed from its Cold War foundations and rapidly became the platform for an expanding global system of liberal democracy, markets and complex interdependence. During the Cold War, the liberal order was a global subsystem—and the bipolar global system served to reinforce the roles, commitments, identity and community that were together manifest as liberal hegemony. The crisis of liberal internationalism can be seen as a slow-motion reaction to this deep transformation in the geopolitical setting of the postwar liberal international project. Specifically, the globalization of liberal internationalism put in motion two long-term effects: a crisis of governance and authority, and a crisis of social purpose. First, with the collapse of the Soviet sphere, the American-led liberal international order became the only surviving framework for order, and a growing number and diversity of states began to be integrated into it. This created new problems for the governance of the order. During the Cold War, the western-oriented liberal order was led by the United States, Europe and Japan, and it was organized around a complex array of bargains, working relationships and institutions. (Indeed, in the early postwar years, most of the core agreements about trade, finance and monetary relations were hammered out between the United States and Britain.) These countries did not agree on everything, but relative to the rest of the world, this was a small and homogeneous group of western states. Their economies converged, their interests were aligned and they generally trusted each other. These countries were also on the same side of the Cold War, and the American-led alliance system reinforced cooperation. This system of alliance made it easier for the United States and its partners to make commitments and bear burdens. It made it easier for European and east Asian states to agree to operate within an American-led liberal order. In this sense, the Cold War roots of the postwar liberal order reinforced the sense that the liberal democracies were involved in a common political project. With the end of the Cold War, these foundational supports for liberal order were loosened. More, and more diverse, states entered the order—with new visions and agendas. The post-Cold War era also brought into play new and complex global issues, such as climate change, terrorism and weapons proliferation, and the growing challenges of interdependence. These are particularly hard issues on which to reach agreement among states coming from very different regions, with similarly different political orientations and levels of development. As a result, the challenges to multilateral cooperation have grown. At the core of these challenges has been the problem of authority and governance. Who pays, who adjusts, who leads? Rising non-western states began to seek a greater voice in the governance of the expanding liberal order. How would authority across this order be redistributed? The old coalition of states—led by the United States, Europe and Japan—built a postwar order on layers of bargains, institutions and working relationships. But this old trilateral core is not the centre of the global system in the way it once was. The crisis of liberal order today is in part a problem of how to reorganize the governance of this order. The old foundations have been weakened, but new bargains and governance arrangements are yet to be fully negotiated.22 Second, the crisis of the liberal order is a crisis of legitimacy and social purpose. During the Cold War, the American-led postwar order had a shared sense that it was a community of liberal democracies that were made physically safer and economically more secure by affiliating with each other. The first several generations of the postwar period understood that to be inside this order was to be in a political and economic space where their societies could prosper and be protected. This sense was captured in John Ruggie's notion of ‘embedded liberalism’. Trade and economic openness were rendered more or less compatible with economic security, stable employment and advancing living standards. The western-oriented liberal order had features of a security community—a sort of mutual protection society. Membership of this order was attractive because it provided tangible rights and benefits. It was a system of multilateral cooperation that provided national governments with tools and capacities to pursue economic stability and advancement. This idea of liberal order as a security community is often lost in the narratives of the postwar era. The United States and its partners built an order—but they also ‘formed a community’: one based on common interests, shared values and mutual vulnerability. The common interests were manifest, for example, in the gains that flowed from trade and the benefits of alliance cooperation. The shared values were manifest in a degree of public trust and ready capacity for cooperation rooted in the values and institutions of liberal democracy. Mutual vulnerability was a sense that these countries were experiencing a similar set of large-scale perils—flowing from the great dangers and uncertainties of geopolitics and modernity. This idea of a western security community is hinted at in the concept of ‘risk society’ put forward by sociologists Anthony Giddens and Ulrich Beck. Their argument is that the rise of modernity—of an advanced and rapidly developing global system—has generated growing awareness of and responses to ‘risk’. Modernization is an inherently unsettling march into the future. A risk society is, as Beck defines it, ‘a systematic way of dealing with hazards and insecurities induced and introduced by modernisation itself’.23 The Cold War intensified this sense of risk, and out of a growing sense of shared economic and security vulnerabilities, the western liberal democracies forged a security community. With the end of the Cold War and the globalization of the liberal order, this sense of security community was undermined. This happened in the first instance, as noted above, through the rapid expansion in the number and variety of states in the order. The liberal order lost its identity as a western security community. It was now a far-flung platform for trade, exchange and multilateral cooperation. The democratic world was now less Anglo-American, less western. It embodied most of the world—developed, developing, North and South, colonial and post-colonial, Asian and European. This too was a case of ‘success’ planting the seeds of crisis. The result was an increasing divergence of views across the order about its members, their place in the world, and their historical legacies and grievances. There was less of a sense that liberal internationalism was a community with a shared narrative of its past and future. The social purposes of the liberal order were further undermined by rising economic insecurity and grievance across the western industrial world. Since the 2008 financial crisis at least, the fortunes of workers and middle-class citizens in Europe and the United States have stagnated.24 The expanding opportunities and rising wages enjoyed by earlier postwar generations seem to have stalled. For example, in the United States almost all the growth in wealth since the 1980s has gone to the top 20 per cent of earners in society. The post-Cold War growth in trade and interdependence does not seem to have directly advanced the incomes and life opportunities of many segments of the western liberal democracies. Branko Milanovic has famously described the differential gains across the global system over the last two decades as an ‘elephant curve’. Looking across global income levels, Milanovic finds that the vast bulk of gains in real per capita income have been made in two very different groups. One comprises workers in countries such as China and India who have taken jobs in low-end manufacturing and service jobs, and, starting at very low wage levels, have experienced dramatic gains—even if they remain at the lower end of the global income spectrum. This is the hump of the elephant's back. The other group is the top 1 per cent—and, indeed, the top 0.01 per cent—who have experienced massive increases in wealth. This is the elephant's trunk, extended upward.25 This stagnation in the economic fortunes of the western working and middle classes is reinforced by long-term shifts in technology, trade patterns, union organization and the sites for manufacturing jobs. Under these adverse economic conditions, it is harder today than in the past to see the liberal order as a source of economic security and protection. Across the western liberal democratic world, liberal internationalism looks more like neo-liberalism—a framework for international capitalist transactions. The ‘embedded’ character of liberal internationalism has slowly eroded.26 The social purposes of the liberal order are not what they once were. It is less obvious today that the liberal democratic world is a security community. What do citizens in western democracies get from liberal internationalism? How does an open and loosely rules-based international order deliver security—economic or physical—to the lives of the great middle class? Liberal internationalism across the twentieth century was tied to progressive agendas within western liberal democracies. Liberal internationalism was seen not as the enemy of nationalism, but as a tool to give governments capacities to pursue economic security and advancements at home. What has happened in the last several decades is that this connection between progressivism at home and liberal internationalism abroad has been broken.