### 1

#### 1] Interpretation – Reduce means to annul.

Black’s Law 90 Black’s Law Dictionary 2ND ED. “Reduce” <https://dictionary.thelaw.com/reduce/> //Elmer

In Scotch law. **To rescind or annul**.

#### That means the Aff has to cancel IP protections in their entirety, they can’t just modify it.

Black’s Law 90 Black’s Law Dictionary 2ND ED. “Annul” <https://thelawdictionary.org/annul/>

//Elmer

**To cancel**; **make void ; destroy.** To annul a judgment or judicial proceeding is to **deprive it of all force and operation**, either a6 initio or prospectively as to future transactions. Wait v. Wait, 4 Barb. (N. Y.) 205; Woodson v. Skinner, 22 Mo. 24; In re Morrow’s Estate, 204 Pa. 484, 54 Atl. 342.

#### 2] Violation – They “delay enforcement” which is a modification, not a complete annulment

#### 3] Standards –

#### a] Neg Ground – Core Neg Generics like Innovation and Biotech Heg are predicated on scope of effect – minor modifications in how long a patent lasts for or what it effects allows the 1AR to minimize our links to zero which destroys being Neg on a Topic w/ very little Generic Ground.

#### b] Limits – Allowing Affs to make patent modifications explodes Aff ground by three-fold because for all four intellectual property protections for every medicine MULTIPLIED by different time modifications, different scope modifications which makes predictable preparation and in-depth clash impossible.

#### 4] TVA – eliminate the enforcement of all cannabis patents – solves their offense.

#### 5] Paradigm Issues –

#### a] Topicality is Drop the Debater – it’s a fundamental baseline for debate-ability.

#### b] Use Competing Interps – 1] Topicality is a yes/no question, you can’t be reasonably topical and 2] Reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation.

#### c] No RVI’s - 1] Forces the 1NC to go all-in on Theory which kills substance education, 2] Encourages Baiting since the 1AC will purposely be abusive, and 3] Illogical – you shouldn’t win for not being abusive.

### 2

#### Interpretation – Marijuana isn’t a Medicine

Mosley 20, Mark. "Medical Marijuana Is a Dangerous Lie." Emergency Medicine News 42.8 (2020): 2-3. (Dr. Mark Mosley is an emergency medicine physician in Wichita, Kansas and is affiliated with Wesley Healthcare Center. He received his medical degree from University of Oklahoma College of Medicine and has been in practice for more than 20 years.)//Elmer

**Marijuana is not a medical drug.** It is a **slang term for** a **plant of the Cannabis family that contains more than 60 different cannabinoid substances and more than 80 biologically active compounds**. Using the term marijuana in place of THC would be like using willow tree in place of acetylsalicylic acid, the active ingredient in aspirin.

#### FDA and CDC definitions prove.

CDC ’18 (CDC; Centers for Disease Control and Prevention; 3-7-2018; “**Is marijuana medicine**?”; CDC; <https://www.cdc.gov/marijuana/faqs/is-marijuana-medicine.html>; Accessed: 9-4-2021; AU)

The marijuana plant has chemicals that may help symptoms for some health problems. More and more states are making it legal to use the plant as medicine for certain conditions. But there isn’t **enough research** to show that the whole plant works to treat or cure these conditions. Also, the U.S. Food and Drug Administration (FDA) **has not recognized** or **approved** the marijuana plant **as medicine**. Because marijuana is often smoked, it can damage your lungs and cardiovascular system (e.g., heart and blood vessels). These and other damaging effects on the brain and body could make marijuana more harmful than helpful as a medicine. Another problem with marijuana as a medicine is that the ingredients aren’t exactly the same from plant to plant. There’s no way to know what kind and how much of a chemical you’re getting.

#### **Violation – the resolution calls for reductions on IP protections for medicines, but the aff prevents future patents for cannabis-derived products.**

#### Vote neg for limits and ground. Expanding the definition of “medicine” to anything that could be used in a medical setting floods the neg with cases to prep for – everything from new methods of chemo to upgrading stethoscopes becomes topical.

#### Excluding Marijuana from the Topic is good for Limits – there’s infinite advantage areas like Cartels, Treaties, Medical Research, Cotton, Terror, Education, and Competitiveness – an area that could be a Topic by itself – adds on 1/5 of an entire College Debate Topic to thousands of medicines.

#### At best – they’re extra-T since Cannabis isn’t intrinsically medicinal, it just has medicinal uses so they would reduce Recreational Marijuana patents too which isn’t topical and explodes limits.

Johnson 20 Ian Johnson 1-20-2020 "Cannabis Patents 2000 – 2019: Trends Following Legalization" <https://plantlaw.com/2020/01/20/cannabis-trends-medical-recreational/> (Registered Patent Agent, Plant & Planet Law Firm)//Elmer

These findings correspond to the overall increase in **cannabis-related patents** and demonstrate that the recreational patent sector is growing at an even greater rate than cannabis patents generally. This supports the theory that recreational markets and expansion of legal personal use of cannabis have resulted in an increase in patent activity in the industry. Again, publication totals are not necessarily the most accurate reflection of patent behavior by cannabis businesses. Therefore, it is useful to examine filing and provisional trends for recreational patents. These results are subject to the same 18-month delay problems noted above, and therefore actual and projected values are provided. Using actual filing data for 2017, there has been a 181% increase in filing activity since 2012. Using projected filing data for 2019, there has been a 257% increase in recreational filing activity since 2012. Using actual priority claims for 2017, there has been a 196% increase in provisional filing activity since 2012. Using projected priority claims for 2019, there has been a 289% increase in recreational provisional filing activity since 2012. The following charts demonstrate recreational filing trends from 2012 to 2019. Patents **that could be classified as recreational** **made up approximately 53% of all filings** between 2000 and 2011. However, **following legalization** the percent of patents and applications considered recreational has **increased to** approximately **77% of filings in 2018**. The chart below demonstrates the growth of the recreational sector’s share of cannabis patent activity.

#### C/A Paradigm Issues

### 3

#### Interpretation – the Affirmative must present a delineated enforcement mechanism for the Plan. There is no normal means since terms are negotiated contextually among member states.

WTO No Date "Whose WTO is it anyway?" <https://www.wto.org/english/thewto_e/whatis_e/tif_e/org1_e.htm> //Elmer

**When WTO rules impose disciplines** on countries’ policies, **that is the outcome of negotiations among WTO members.** The rules are **enforced** **by** the **members themselves** **under agreed procedures that they negotiated**, **including the possibility of trade sanctions**. But those sanctions are imposed by member countries, and authorized by the membership as a whole. This is quite different from other agencies whose bureaucracies can, for example, influence a country’s policy by threatening to withhold credit.

#### Violation: they don’t

#### Standards

#### 1] Shiftiness- They can redefine the 1AC’s enforcement mechanism in the 1AR which allows them to recontextualize their enforcement mechanism to wriggle out of DA’s since all DA links are predicated on type of enforcement i.e. sanctions bad das, domestic politics das off of backlash, information research sharing da if they put monetary punishments, or trade das.

#### 2] Real World - Policy makers will always specify how the mandates of the plan should be endorsed. It also means zero solvency, absent spec, states can circumvent the Aff’s policy since there is no delineated way to enforce the affirmative which means there’s no way to actualize any of their solvency arguments.

#### ESpec isn’t regressive or arbitrary- it’s an active part of the WTO is central to any advocacy about international IP law since the only uniqueness of a reduction of IP protections is how effective its enforcement is.

### 4

#### Mexico is peaceful – Global Peace Index is best indicator.

IEP 21 Institute for Economics & Peace. Mexico Peace Index 2021: Identifying and Measuring the Factors That Drive Peace, Sydney, May 2021. Available from: http://visionofhumanity.org/resources (accessed Date Month Year). //Elmer

The 2021 report is the eighth edition of the **Mexico Peace Index** (MPI), produced by the Institute for Economics and Peace (IEP). It **provides** a **comprehensive measure of peacefulness in Mexico**, including trends, analysis and estimates of the economic impact of violence on the country. The MPI is **based on** the **G**lobal **P**eace **I**ndex, the **world’s leading measure of global peacefulness**, produced by IEP every year since 2007. **Mexico’s peacefulness improved by 3.5 percent in 2020.** After four years of successive deteriorations, this marks a change in trend following the sharp increases in violence recorded between 2015 and 2018. This change can be traced to well before the onset of the COVID-19 pandemic. **Homicide and firearms** crime rates peaked in July 2018 and have since been gra**dually declining**. Other crime rates began to fall in mid-2019, which also preceded the pandemic. While improvements were occurring prior to the onset of COVID-19, further reductions in specific types of violence in 2020 followed the implementation of public health measures and stay-at-home orders. Crimes typically associated with people’s everyday movements — such as robberies, assaults, kidnappings and extortion — all recorded notable improvements in 2020. To highlight the changing trend in peacefulness in Mexico, the MPI finds that falls in peacefulness have historically occurred in most of the states. Between 2015 and 2019, 25 of the 32 states recorded deteriorations in peacefulness. However, in 2020, **22 states improved**, while only ten deteriorated. **Violence** in Mexico has become **increasingly concentrated**, particularly along key drug trafficking routes. In these areas, rival groups are engaged in violent contests over territory that continue to drive the high homicide rates. In 2020, just six states accounted for more than half of all homicides: Guanajuato, the state of México, Baja California, Chihuahua, Jalisco, and Michoacán.

#### Growth of legalized cannabis markets decks illegal imports and cartel revenues

Bier 18 David J. (David J. Bier is a research fellow with a focus on immigration at the Cato Institute. He is an expert on legal immigration, border security, and interior enforcement.\_, 12-19-2018, "How Legalizing Marijuana Is Securing the Border: The Border Wall, Drug Smuggling, and Lessons for Immigration Policy," Cato Institute, <https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons> mvp

Legalized markets directly affect the illegal markets for marijuana. Not only is it easier to obtain domestically produced cannabis today, legal marijuana is also more uniform and of much higher quality than the illegal Mexican product.[14](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-014) One study for the Colorado Department of Revenue found that a “comparison of inventory tracking data and consumption estimates signals that Colorado’s preexisting illicit marijuana market for residents and visitors has been fully absorbed into the regulated market.”[15](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-015) Marijuana legally grown in states where it is legalized often supplies consumers in states where marijuana is still outlawed. In 2014, 44 percent of marijuana sales in Denver were to residents of other states.[16](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-016) The Colorado study found that “legal in‐​state purchases that are consumed out of state” are likely occurring.[17](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-017) This places further downward pressure on prices and has prompted lawsuits by prohibitionist states against Colorado.[18](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-018) A prelegalization study estimated that after legalization, it would likely be more expensive to smuggle marijuana from Mexico to every state in the continental United States except Texas than to have it sent from Colorado and Washington.[19](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-019) This competition appears to be affecting Mexican marijuana prices. Mexican growers have reported that marijuana prices in Mexico have recently fallen between 50 and 70 percent after U.S. legalizations.[20](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-020) According to the DEA, overall domestic American production has grown because of the new state‐​approved marijuana markets.[21](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-021) Customs and Border Protection (CBP) itself has hypothesized that one explanation for the decline could be that “legalization in the United States [h]as reduced demand” for Mexican marijuana.[22](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-022) The fact that some cartels have taken to using drug tunnels to smuggle migrants — who are less profitable and more readily identifiable — is further evidence of the effects of legalization.[23](https://www.cato.org/policy-analysis/how-legalizing-marijuana-securing-border-border-wall-drug-smuggling-lessons#endnote-023) Efforts to Combat Drug Smuggling Drug interdiction has a long history in the United States, dating back to alcohol prohibition. During the 1920s, the interdiction of bootleggers served as a principal justification for the creation of the Border Patrol. Labeling them “unscrupulous” and their traffic “nefarious,” government reports repeatedly called on Congress for more agents, money, and aircraft to interdict alcohol.24 From 1926 to 1934, agents intercepted nearly 2 million quarts of liquor.25 Nonetheless, only the end of Prohibition brought about the collapse of the bootleg trade, which dropped 90 percent from 1930 to 1934 and finally disappeared entirely in 1935. After alcohol prohibition, smuggling of other prohibited drugs has taken over as justification for increasing Border Patrol spending. Since 1951, the Border Patrol’s annual reports have highlighted its contributions to the “drive against narcotics,” particularly its seizures of Mexican marijuana.26 While Mexico has also prohibited the cultivation of the plant since the 1920s, the relative lack of enforcement, the good growing climate, and the differences in economic development between that country and the United States have led Mexico to become the main supplier for its northern neighbor.27 But in 1937, Congress effectively banned the sale of marijuana.28 Today, the Department of Homeland Security (DHS) has the primary responsibility for interdicting drug traffickers entering the United States. DHS divides its efforts between four agencies: the Coast Guard, which patrols the coasts of the United States; the Office of Field Operations (OFO), which inspects travelers entering legally through ports of entry; Border Patrol, which surveils the northern and southern borders; and Air and Marine Operations (AMO), which supports Border Patrol’s efforts between ports of entry with aircraft and marine vessels. OFO, Border Patrol, and AMO are all divisions of Customs and Border Protection (CBP). Together, these four agencies dedicate $4.2 billion annually specifically to drug interdiction.29 Since 1965, Congress has invested $64 billion to secure the border from illegal immigration as well as drug smuggling.30 Some 82 percent of the spending has occurred in the last two decades alone. Border Patrol has a force of nearly 20,000 agents, a fivefold increase over the level in 1992.31 AMO has an expansive fleet of 286 vessels, 246 aircraft, and 9 unmanned aerial drones designed to spot and interdict traffickers.32 Since 2000, Border Patrol has constructed nearly 600 miles of border fencing and barriers.33 In addition, CBP has nearly 1,500 canine teams used to detect drugs.34 The agency has deployed an extensive system of surveillance equipment between ports of entry, including drones and towers, and adopted new scanners and other technology at ports of entry.35 Despite these purchases, the DHS inspector general concluded in 2016 that the department “could not ensure its drug interdiction efforts met required national drug control outcomes nor accurately assess the impact of the approximately $4.2 billion it spends annually on drug control activities.”36 Similarly, none of its spending had any noticeable effect on the amount of drug smuggling prior to the legalization of marijuana in several states in 2014. The White House has proposed several additional measures to deter drug smuggling along the border. These measures include a southwestern border wall with Mexico, which carries an estimated price tag of at least $22 billion to construct.37 In addition, the administration has requested that Congress fund the hiring of an additional 5,000 Border Patrol agents to patrol the southwest border.38 President Trump and the White House have repeatedly connected these efforts to build a border wall with drug smuggling, in particular, the smuggling of opioids like fentanyl and heroin.39 Measuring Drug Flows Because illicit marijuana moves in the black market, no consistent and reliable data exist on the quantities that smugglers bring into the United States each year. The best available proxy for estimating changes in the flow is the amount that the government seizes at the border. This measure does not provide a reliable predictor of the absolute amount being smuggled, but it can capture trends in the flow. Although the total amount that makes it into the country is likely many times greater than the amount that the government seizes, a relationship will exist between seizures and inflows that allows an approximation of the trends up or down in total flows. In the absence of any other changes that significantly improve or hamper the effectiveness of smuggling or enforcement, more drug smuggling will generally result in greater seizures. The main possibility that could make seizures a poor proxy for relative flows between years is if the effectiveness of enforcement or smuggling is wildly inconsistent, resulting in a wide variance in the amounts of drugs that agents discover. For example, if most drugs seized at the border came from only a few seizures, or most drugs smuggled came from only a few attempts, the amounts could fluctuate so widely that they would be worthless in assessing changes in the level of smuggling over time. But because the marijuana seized crossing the border is spread out over many seizures — more than 12,000 annually — chance is less of a factor in these overall trends.40 Moreover, as seen in Figure 2 in the following section, the amount each agent seized was quite consistent before 2014 at an average of 115 pounds per year. Prior to legalization, the average year‐​over‐​year change from 2003 to 2013 was almost zero, compared to 25 percent declines from 2014 to 2018 — greater than one standard deviation downward from the prelegalization trend each year.41 Other data stretching back to the early 1990s support the conclusion that each agent has consistently seized a similar amount.42 Variation in the effectiveness of enforcement or smuggling cannot explain the sudden and persistent decline in seizures over the last five years. Another issue is that increased enforcement would likely lead to more seizures. It is possible, however, to control for the level of enforcement by focusing on the quantity seized per agent, rather than the aggregate amount for the entire agency (Figure 2). One difficulty with the per‐​agent measurement is that the effectiveness of agents could decrease with each new hire, so the result could measure just the declining utility of the marginal hire rather than a real decline in smuggling. When the agency doubled its labor force from 2003 to 2011, however, the rate of seizures per agent remained flat, while the agency slightly reduced the number of agents during the period of declining seizures from 2014 to 2018. These facts suggest that the decline in seizures per agent is not an effect of diminishing returns from increasing the size of the force.43 In the immigration context, researchers often use the number of apprehensions of border crossers per agent to estimate year‐​to‐​year trends in total inflows of illegal crossers of the southwest border.44 The validity of this measure has recently received support from a 2017 DHS report that used survey data to estimate the number of total successful crossings for the 17‐​year period from 2000 to 2016.45 Comparing these estimates to the per‐​agent apprehension figures during this time indicates that 86 percent of the variance in successful entries can be predicted by the number of apprehensions per agent, making apprehensions a very strong predictor of the year‐​to‐​year trends in successful illegal crossings. Given the similarities between illegal entry of people and the illegal entry of drugs, the same is likely true for drug seizures and smuggling. Seizures also fail to capture policy changes that could direct agents to prioritize or deprioritize marijuana smuggling, though it is not clear how Border Patrol could, as a technical matter, target a specific illicit drug without also seizing other drugs in the process. In any case, formal policy on marijuana smuggling has not changed during the relevant period, and there has been no apparent change in informal policy priorities. Moreover, the decline in marijuana seizures has occurred across multiple agencies and administrations. These factors make informal policy priorities an unlikely explanation for the trends. Less Marijuana Smuggling State‐​level marijuana legalization has undercut demand for illegal Mexican marijuana, which in turn has decreased the amount of drug smuggling into the United States across the southwest border. Because it is so much more difficult to conceal than other drugs, marijuana prior to legalization was, according to the DEA, “predominately smuggled between, instead of through, the ports of entry.”46 For this reason, the most important agency for marijuana interdiction is the Border Patrol, which patrols the areas between ports of entry. Figure 2 reports the number of pounds of marijuana seized annually per Border Patrol agent and compares these figures to the total length of the border fences in a year. From FY 2003 to FY 2009, Border Patrol doubled its workforce and constructed hundreds of miles of fences, yet this increased enforcement did not reduce marijuana smuggling.47 Each agent annually seized virtually the same quantity of marijuana through 2013, indicating roughly the same overall inflow of the illegal substance.48 From 2013 to 2018, however, the amount of marijuana each Border Patrol agent seized declined by 78 percent. Even within FY 2018, the first three months of the fiscal year — before California legalized sales in January — were 29 percent above the next eight months.49 Marijuana smuggling has also not shifted toward entering through ports of entry. The total quantity of marijuana seized by the OFO, the agency that handles admissions at ports of entry, has dropped by 34 percent from 2013 to 2018 (Table 1).50 Seizures have decreased over water and airborne smuggling routes. While numbers for FY 2018 are not available yet, Air and Marine Operations interdicted 42 percent fewer pounds of marijuana in 2017 than in 2013.51 Likewise, the Coast Guard has seen a 65 percent decline in marijuana seizures during that period.52 Overall, all DHS agencies seized 56 percent less marijuana in 2017 than 2013. Full legalization of marijuana in several states dramatically increased the amount of marijuana sales that occur legally in the United States. A relatively small amount of legal marijuana sales had occurred prior to 2014 under the auspices of legal medicinal use, and in 2013 and 2014, four states — Massachusetts, New Hampshire, Illinois, and Maryland — legalized medical marijuana. But these states account for just 4 percent of medical marijuana users nationwide, so it is unlikely that they changed the trends substantially.53 Full legalization increased the amount of legal sales from about $1.5 billion to $9.7 billion from 2013 to 2017.54 This increase coincided with a 66 percent drop in the street value of all DHS marijuana seizures — a decline from $2.3 billion in 2013 to $765 million in 2017 (Figure 3).55 The street values of a pound of marijuana estimated by CBP also highlight the increased availability of domestic marijuana. From 2012 to 2017, the average street value of a pound of marijuana seized by CBP declined by 40 percent, dropping from $794 per pound in 2012 to just $474 per pound in 2017.56 Legal marijuana is competing with the drug cartels and lowering prices, which undercuts the financial incentive to smuggle across the border. Other Drug Smuggling Mexican drug cartels have responded to their declining share of the marijuana market by smuggling other drugs through ports of entry but have failed to make up for the decline in marijuana smuggling. Most drugs other than marijuana are smuggled through ports of entry because traffickers can more easily conceal them. For this reason, Figure 4 presents seizures both between and at ports of entry.57 In FY 2013, marijuana accounted for 98 percent of all border and customs drug seizures — both between and at ports of entry — by weight. By FY 2018, that percentage had declined to 84 percent.58 While non‐​marijuana drug seizures have increased — indicating that cartels may attempt to compensate by switching drug type — the decline in marijuana seizures has resulted in a 68 percent overall decline in pounds seized per agent of all drugs since FY 2013. Marijuana may still dominate by weight, but other drugs — methamphetamine (meth), heroin, cocaine, and fentanyl — are much more valuable per pound. Estimating the value of drug seizures is difficult because drug prices vary widely throughout the United States and no government agency consistently estimates a national average. Moreover, CBP does not report the purity of the drugs it seizes, making it impossible to use outside estimates to value its seizures. However, while the agency does not report the collective value of all the drugs it seizes, it does regularly issue press releases that value individual seizures based on “the latest DEA statistics.”59 Aggregating this information provides the best estimate of how the agency values drug seizures.60 CBP reports the “street value” of a drug.61 Street prices inflate the absolute values of drug seizures because drugs obtain those values only after crossing the U.S. border and arriving at their destinations.62 However, the relative values between the different drugs and between different years are still useful for the purpose of comparison.63 The tables in the Appendix contain the valuations, seizure amounts, and number of agents and officers at ports of entry and between ports of entry. Figure 5 presents the street value of drug seizures made by both Border Patrol agents between ports of entry and by CBP officers at ports of entry, again showing the average amount seized per agent. By value, marijuana has fallen from about 57 percent of seizures to just 18 percent from FY 2013 to FY 2018. The absolute value of marijuana seizures at and between ports of entry has declined 79 percent from $1.8 billion in FY 2013 to be on pace for just $380 million in FY 2018. Overall, the total value of all drug seizures per agent (or officer) has declined by 34 percent from FY 2013 to FY 2018. Marijuana legalization appears to have cut overall drug smuggling. All the decline in the value of drug seizures occurred between ports of entry. The value of all drug seizures between ports of entry fell by 70 percent on a per‐​agent basis from FY 2013 to FY 2018, while those at ports of entry increased by just 3 percent (Figure 6). In 2018, the drugs seized by OFO officers at ports of entry were three times more valuable than those seized by Border Patrol between ports of entry, while Border Patrol agents seized more valuable drugs in 2013. In 2018, the average inspector at a port of entry seized drugs valued at almost $71,000 compared to about $23,000 for Border Patrol agents between ports of entry. This fact significantly undermines the argument for more Border Patrol agents or a wall to interdict drug smuggling between ports of entry.

#### Decreasing cartel revenue causes cartel lash-out and diversification.

Murray et al 11 Chad Murray et al 11, Ashlee Jackson Amanda C. Miralrío, Nicolas Eiden Elliott School of International Affairs/Inter-American Drug Abuse Control Commission: Capstone Report April 26, 2011 “Mexican Drug Trafficking Organizations and Marijuana: The Potential Effects of U.S. Legalization” //re-cut by Elmer

Mexican DTOs would likely branch into other avenues of crime. Perhaps the most obvious short-term effect of marijuana legalization is that this would rob the Sinaloa and Tijuana cartels of up to half of their total revenue.117 The economic strain placed on the Sinaloa cartel and Tijuana cartel may not necessarily help Mexico in the short term. The short-term effects of legalization could very well create chaos for Mexico. “The cartels compensate for their loss of drug revenue by branching out into other criminal activities--kidnapping, murder-for-hire, contraband, illegal ¶ 29 ¶ immigrant smuggling, extortion, theft of oil and other items, loan-sharking, prostitution, selling protection, etc.”118 This means that if the social and economic environment remains the same then “they are not going to return to the licit world.”119 If the Sinaloa cartel and the Tijuana cartel turn towards activities like kidnapping, human trafficking and extortion, it could lead to a spike in violence that would prove to be destabilizing in those organizations‟ areas of operation. ¶  *The Sinaloa cartel and Tijuana cartel might splinter into smaller groups.* In addition, the loss of more than 40% of revenue would probably force them to downsize their operations. Like any large business going through downsizing, employees will likely be shed first in order to maintain profitability.120 These former DTO operatives will likely not return to earning a legitimate income, but rather will independently find new revenue sources in a manner similar to their employers. Therefore it is possible that the legalization of marijuana in the United States could cause territories currently under the control of the Sinaloa cartel and Tijuana cartel to become more violent than they are today. This is troubling, as Sinaloa, Baja California, Sonora, and Chihuahua states are already among the most violent areas of Mexico.121

#### Mexican DTO instability spills over into Latin American instability

Soumaya 20 [Paula Soumaya, 2-7-2020, "The Role of Global Governance in Curtailing Mexican Cartel Violence," E-International Relations, https://www.e-ir.info/2020/02/07/the-role-of-global-governance-in-curtailing-mexican-cartel-violence/ || belle]

* DTOs = drug trafficking organizations

The reach of Mexican cartels’ dealings has expanded as the world has become more globalized. Globalization and digitalization have facilitated international communication which is imperative to the international trafficking of drugs. Mexican cartels notoriously transport drugs to the United States through their shared border. According to the 2018 National Drug Threat Assessment, Mexico is the primary source of heroin, methamphetamine, fentanyl, and other synthetic opioids in the United States (U.S. Department of Justice and Drug Enforcement Administration 2018, pp.vi). To facilitate the movement of product, cartels maintain a domestic presence within countries of destination. DTOs, such as the Sinaloa Cartel, have a pervasive reach in the USA which can bring cartel related violence into foreign countries. Competition for drug routes into the United States has expanded cartel violence into foreign land. Border cities between Mexico and the United States, such as Tijuana and Ciudad Juarez, constituted the most violent municipalities in Mexico in 2018 due to competition for dominance over smuggling routes (Justice in Mexico 2019: 4, Teixeira 2016:7, 33-35). Violence instigated by cartels expands southward to Central and South America as well. Mexican DTOs use Central American corridors to move South American drugs, further destabilizing the region as their dominance over the continent’s narcotics trade grows (United Nations Office on Drugs and Crime 2007: 44-48, Global Governance and the challenge of transnational organized crime: the role of the constructive Powers, 2012: 5-8, Reveles, Lara Klahr and Spiller, 2013: 149-153) . The reach of Mexican cartels and the violence they instigate raises international peace and security concerns.

#### Latin American instability goes nuclear

Krepinevich & Lindsey 13 [Dr. Andrew F. Krepinevich, Jr. is the President of the Center for Strategic and Budgetary Assessments, which he joined following a 21- year career in the U.S. Army. He has served in the Department of Defense 􀂶s 􀀲􀌇ce of 􀀱et Assessment, on the personal sta􀌆 of three secretaries of defense, the 􀀱ational Defense Panel, the Defense Science Board Task Force on Joint Experimentation, and the Defense Policy Board. He is the author of 7 Deadly Scenarios: A Military Futurist Explores War in the 21st Century and The Army and Vietnam. A West Point graduate, he holds an M.P.A. and a Ph.D. from Harvard University—AND—Eric Lindsey is an analyst at the Center for Strategic and Budgetary Assessments (CSBA). His primary areas of interest concern U.S. and world military forces, both current and prospective, and the future strategic and operational challenges that the U.S. military may face. Since joining CSBA in 2009, Eric has contributed to a number of CSBA monographs. He most recently co-authored The Road Ahead, an analytical monograph exploring potential future challenges and their implications for U.S. Army and Marine Corps modernization. In conjunction with his research and writing, Eric has helped design and conduct dozens of strategic and operational-level wargames exploring a wide variety of future scenarios. He holds a B.A. in military history and public policy from Duke University and is pursuing an M.A. in strategic studies and international economics from the Johns Hopkins School of Advanced International Studies (SAIS). “Hemispheric Defense in the 21ST Century, 2013]

As the previous chapter demonstrates, for the past two hundred years the principal cause of concern for U.S. defense policymakers and planners thinking about Latin America has been the prospect that great powers outside the Western Hemisphere could exploit the military weakness and internal security challenges of the states within it to threaten U.S. security. While there is reason for optimism about the future of Latin America,58 there is also cause for concern. The region faces enduring obstacles to economic59 and political development60 as well as signi􀂿cant internal security challenges. As General John Kelly, the commander of U.S. Southern Command (SOUTHCOM)61 noted in his March 2013 posture statement before Congress, Latin America: 􀀾I􀁀s a region of enormous promise and exciting opportunities, but it is also one of persistent challenges and complex threats. It is a region of relative peace, low likelihood of interstate con􀃀icts, and overall economic growth, yet is also home to corrosive criminal violence, permissive environments for illicit activities, and episodic political and social protests.62 The instability and non-traditional security challenges that General Kelly cites provide potential opportunities for the United States’ major rivals to (borrowing a term from Monroe’s declaration) “interpose” themselves into the region and, by so doing, threaten regional stability and U.S. security. Two discernible trends suggest that current and prospective Eurasian rivals could seek to exploit regional conditions and dynamics in ways that could impose immense costs on the United States and divert its attention from more distant theaters overseas. The first trend is a return to a heightened level of competition among the “great powers” following two decades of U.S. dominance. The second trend concerns the growing cost of projecting power by traditional military means due to the proliferation of “anti-access/area-denial” (A2/AD) capabilities in general, and precision-guided munitions (PGMs) in particular. These trends suggest that, despite a possible decline in relative U.S. power, external forces will continue to 􀂿nd it beyond their means to threaten the hemisphere through traditional forms of power projection. Far more likely is a return of a competition similar to that which the United States engaged in with the Soviet Union during the Cold War. During that period both powers sought to avoid direct con􀃀ict with the other, given the risks of escalation to nuclear con􀃀ict. Instead each focused primarily on gaining an advantage over the other through the employment of client states and non-state groups as proxies. Proxies were employed for reasons other than avoiding a direct clash, such as gaining positional advantage (e.g., enabling the sponsor to establish bases in its country, as the Soviets did in Cuba). Proxies were also employed as a means of diverting a rival’s attention from what was considered the key region of the competition and to impose disproportionate costs on a rival (e.g., Moscow’s support of 􀀱orth Vietnam as a means of drawing o􀌆 U.S. resources from Europe). This chapter outlines trends in the Western Hemisphere security environment that outside powers may seek to exploit to advance their objectives in ways that threaten regional stability and U.S. security. This is followed by a discussion of how these external powers might proceed to do so. Seeds of Instability Crime, Illicit Networks, and Under-Governed Areas Latin America has a long history of banditry, smuggling, and organized crime. As in the case of Pancho Villa and the 1916-1917 Punitive Expedition, these activities have occasionally risen to a level at which they in􀃀uence U.S. national security calculations. Rarely, however, have these activities been as pervasive and destabilizing as they are today. Although a wide variety of illicit activity occurs in Latin America, criminal organizations conducting drug tra􀌇cking are the dominant forces in the Latin American underworld today, accounting for roughly 􀀇􀀗0 billion per year63 of an estimated 􀀇100 billion in annual illicit trade.6􀀗 Since the Colombian cartels were dismantled in the 1990s, this lucrative trade has been dominated by powerful Mexican cartels whose operations extend across the length and breadth of Mexico, as well as up the supply chain into the cocaine-producing regions of the Andean Ridge and through their wholesale and retail drug distribution networks across the United States.65 The cartels, along with countless smaller criminal organizations, comprise what the head of SOUTHCOM has described as, 􀀾a􀁀n interconnected system of arteries that traverse the entire Western Hemisphere, stretching across the Atlantic and Paci􀂿c, through the Caribbean, and up and down 􀀱orth, South, and Central America . . . 􀀾a􀁀 vast system of illicit pathways 􀀾that is used􀁀 to move tons of drugs, thousands of people, and countless weapons into and out of the United States, Europe, and Africa with an e􀌇ciency, payload, and gross pro􀂿t any global transportation company would envy.66 That being said, the drug tra􀌇cking underworld is by no means a monolithic entity or cooperative alliance. Rather, it is a fractious and brutally competitive business in which rival entities are constantly and literally 􀂿ghting to maximize their share of the drug trade and for control of the critical transshipment points, or plazas, through which it 􀃀ows. To attack their competitor’s operations and protect their own operations from rivals and the Mexican government’s crackdown that began in 2006, the cartels have built up larger, better armed, and more ruthless forces of hired gunmen known as sicarios. Using the billions of dollars generated by their illicit activities, they have acquired weapons and equipment formerly reserved for state armies or state-sponsored insurgent groups, including body armor, assault ri􀃀es, machine guns, grenades, landmines, anti-tank rockets, mortars, car bombs, armored vehicles, helicopters, transport planes, and—perhaps most remarkably—long-range submersibles.67 The cartels’ pro􀂿ts have also enabled them to hire former police and military personnel, including members of several countries’ elite special operations units68 and, in several cases, active and former members of the U.S. military.69 These personnel bring with them—and can provide to the cartels—a level of training and tactical pro􀂿ciency that can be equal or superior to those of the government forces they face. As a result of this pro􀂿ciency and the military-grade weapons possessed by the cartels, more than 2,500 Mexican police o􀌇cers and 200 military personnel were killed in confrontations with organized crime forces between 2008 and 2012 along with tens of thousands of civilians.70 In the poorer states of Central America, state security forces operate at an even greater disadvantage.71 While their paramilitary forces enable the cartels to dominate entire cities and large remote areas through force and intimidation, they are not the only tool available. The cartels also leverage their immense wealth to buy the silence or support of police and government o􀌇cials who are often presented with a choice between plata o plomo—“silver or lead.” According to the head of the Mexican Federal Police, around 2010 the cartels were spending an estimated 􀀇100 million each month on bribes to police.72 By buying o􀌆 o􀌇cials—and torturing or killing those who cannot be corrupted—the cartels have greatly undermined the e􀌆ectiveness of national government forces in general and local police in particular. This, in turn, has undermined the con􀂿dence of the population in their government’s willingness and ability to protect them. Through these means and methods the cartels have gained a substantial degree of de facto control over many urban and rural areas across Mexico, including major cities and large swathes of territory along the U.S.-Mexico border. In many of these crime-ridden areas the loss of con􀂿dence in the government and police has prompted the formation of vigilante militias, presenting an additional challenge to government control.73 Meanwhile, in the “northern triangle” of Central America (the area comprising Guatemala, Honduras, and El Salvador through which the cartels transship almost all cocaine bound for Mexico and the United States) the situation is even more dire. Approximately 90 percent of crimes in this area go unpunished, while in Guatemala roughly half the country’s territory is e􀌆ectively under drug tra􀌇ckers’ control.7􀀗 Further south, similar pockets of lawlessness exist in coca-growing areas in Colombia, Venezuela, Ecuador, Peru, and Bolivia. In Colombia and along its borders with Venezuela, Ecuador, and Peru, much of the coca-growing territory remains under the control of the Revolutionary Armed Forces of Colombia, or FARC. A guerrilla organization founded in the 1960s as a Marxist-Leninist revolutionary movement dedicated to the overthrow of the Colombian government, the FARC embraced coca growing in the 1990s as a means of funding its operations and has subsequently evolved into a hybrid mix of left-wing insurgent group and pro􀂿t-driven cartel.76 This hybrid nature has facilitated cooperation between the FARC and ideological sympathizers like the Bolivarian Alliance, Hezbollah, Al Qaeda in the Islamic Maghreb, and other extremist groups77 as well as with purely criminal organizations like the Mexican cartels. Although the FARC has been greatly weakened over the past decade and no longer poses the existential threat to the Colombian government that it once did, it remains 􀂿rmly in control of large tracts of coca-producing jungle, mostly straddling the borders between Colombia and FARC supporters Venezuela and Ecuador. In summary, organized crime elements have exploited under-governed areas to establish zones under their de facto control. In so doing they pose a signi􀂿cant and growing threat to regional security in general and U.S. interests in particular. As SOUTHCOM commander General Kelly recently observed: 􀀾T􀁀he proximity of the U.S. homeland to criminally governed spaces is a vulnerability with direct implications for U.S. national security. I am also troubled by the signi􀂿cant criminal capabilities that are available 􀀾within them􀁀 to anyone—for a price. Transnational criminal organizations have access to key facilitators who specialize in document forgery, trade-based money laundering, weapons procurement, and human smuggling, including the smuggling of special interest aliens. This criminal expertise and the ability to move people, products, and funds are skills that can be exploited by a variety of malign actors, including terrorists.78 Hezbollah and the Bolivarian Alliance Hezbollah in Latin America 􀀱on-state entities recognized by the U.S. as terrorist organizations also operate in the region, most notably Lebanon-based Hezbollah, an Iranian client group. Hezbollah maintains an active presence in the tri-border area (TBA) of South America— the nexus of Argentina, Brazil, and Paraguay—stretching back to the 1980s. The TBA has traditionally been under-governed and is known by some as “the United 􀀱ations of crime.”79 Eight syndicate groups facilitate this activity in South America’s so-called “Southern Cone,” overseeing legitimate businesses along with a wide range of illegal activities to include money laundering, drug and arms traf- 􀂿cking, identity theft and false identi􀂿cation documents, counterfeiting currency and intellectual property, and smuggling. 􀀱ot surprisingly they are linked to organized crime and to non-state insurgent and terrorist groups, such as the FARC.80 Estimates are that over 􀀇12 billion in illicit transactions are conducted per year, a sum exceeding Paraguay’s entire GDP by a substantial amount.81 Hezbollah achieved notoriety in the region in 1992 when it bombed the Israeli embassy in Argentina. This was followed with the bombing of the AMIA Jewish community center in Buenos Aires two years later. Like many other terrorist organizations, as Hezbollah expanded it established relationships with drug cartels82 that it supports in a variety of ways. For example, the cartels have enlisted Hezbollah, known for its tunnel construction along the Israeli border, for help in improving their tunnels along the U.S.-Mexican border. In 2008, Hezbollah helped broker a deal in which one of Mexico’s major drug cartels, Sinaloa, sent members to Iran for weapons and explosives training via Venezuela using Venezuelan travel documents. 83 As the locus of the drug trade and other illegal cartel activities moved north into Central America and Mexico, Hezbollah has sought to move with it with mixed success. In October 2011, Hezbollah was linked to the e􀌆orts of an Iranian-American to conspire with Iranian agents to assassinate the Saudi ambassador to the United States. The plot involved members of the Los Zetas Mexican drug cartel.8􀀗 The would-be assassin, Mansour Arbabsiar, had established contact with his cousin, a Quds Force85 handler, Gen. Gholam Shakuri. The plot is believed by some to be part of a wider campaign by the Quds Force and Hezbollah to embark on a campaign of violence extending beyond the Middle East to other Western targets, including those in the United States.86 In early September 2012, Mexican authorities arrested three men suspected of operating a Hezbollah cell in the Yucatan area and Central America, including a dual U.S.-Lebanese citizen linked to a U.S.-based Hezbollah money laundering operation. 87A few months later, in December 2012, Wassim el Abd Fadel, a suspected Hezbollah member with Paraguayan citizenship, was arrested in Paraguay. Fadel was charged with human and drug tra􀌇cking and money laundering. Fadel reportedly deposited the proceeds of his criminal activities—ranging from 􀀇50-200,000 per transaction—into Turkish and Syrian bank accounts linked to Hezbollah. In summary, Hezbollah has become a 􀂿xture in Central and Latin America, expanding both its activities and in􀃀uence over time. It has developed links with the increasingly powerful organized crime groups in the region, particularly the narco cartels, along with radical insurgent groups such as the FARC and states like Venezuela who are hostile to the United States and its regional partners. Hezbollah’s principal objectives appear to be undermining U.S. in􀃀uence in the region, imposing costs on the United States, and generating revenue to sustain its operations in Latin America and elsewhere in the world. These objectives are shared by Iran, Hezbollah’s main state sponsor. The Bolivarian Alliance As noted above, geographic, economic, and cultural factors have traditionally helped to prevent the emergence in Latin America of any real military rival to the United States. Although there are no traditional military threats in the region, there are indigenous states whose actions, policies, and rhetoric challenge regional stability and U.S. security. Over the past decade, several states have come together to form the Bolivarian Alliance of the Americas (ALBA), an organization of left-leaning Latin American regimes whose overarching purpose is to promote radical populism and socialism, foster regional integration, and reduce what they perceive as Washington’s “imperialist” influence in the region.89 Since its founding by Hugo Chavez of Venezuela and Fidel Castro of Cuba in December 200􀀗, the Bolivarian Alliance has expanded to include Antigua and Barbuda, Bolivia, Dominica, Ecuador, 􀀱icaragua, and Saint Vincent and the Grenadines. Although the members of the Bolivarian Alliance are militarily weak and pose almost no traditional military threat to the United States or its allies in the region,90 they challenge American interests in the region in other ways. First, they espouse an anti-American narrative that finds substantial support in the region and consistently oppose U.S. efforts to foster cooperation and regional economic integration.91 Second, in their efforts to undermine the government of Colombia, which they consider to be a U.S. puppet, ALBA states provide support and sanctuaries within their borders to coca growers, drug traffickers, other criminal organizations, and the FARC.92 Links to Hezbollah have also been detected.93 Perhaps of greatest concern, they have aligned themselves closely with Iran, inviting it and Syria to participate as “observer states” in the alliance. Other worrisome ALBA activities involve lifting visa requirements for Iranian citizens and hosting large numbers of Iranian diplomats and commercial exchange members that some observers believe to be Iranian intelligence and paramilitary Quds Force operatives.9􀀗 By hosting and cooperating with both foreign agents and violent non-state actors, the ALBA states have come to function as critical nodes in a network of groups hostile to the United States. A Coming Era of Proxy Wars in the Western Hemisphere? History shows that Washington has often emphasized an indirect approach to meeting challenges to its security in Latin America. Yet the United States has not shied away from more direct, traditional uses of force when interests and circumstances dictated, as demonstrated over the past half century by U.S. invasions of the Dominican Republic (1965), Grenada (1983), and Panama (1989) and the occupation of Haiti (199􀀗).Yet several trends seem likely to raise the cost of such operations, perhaps to prohibitive levels. Foremost among these trends is the diffusion of precision-guided weaponry to state and non-state entities. 92 The Second Lebanon War as “Precursor” War A precursor of this trend can be seen in the Second Lebanon War between Israel and Hezbollah.95 During the con􀃀ict, which lasted less than 􀂿ve weeks, irregular Hezbollah forces held their own against the highly regarded Israeli Defense Force (IDF), demonstrating what is now possible for non-state entities to accomplish given the proliferation of militarily-relevant advanced technologies. Hezbollah’s militia engaged IDF armor columns with salvos of advanced, man-portable, antitank guided missiles and other e􀌆ective anti-armor weapons (e.g. rocket-propelled grenades (RPGs) with anti-armor warheads) in great numbers. When the IDF employed its ground forces in southern Lebanon, its armored forces su􀌆ered severe losses; out of the four hundred tanks involved in the 􀂿ghting in southern Lebanon, forty-eight were hit and forty damaged.96 Hezbollah’s defensive line was also well equipped with latest-generation thermal and low-/ no-light enhanced illumination imaging systems, while frontline units were connected to each other and higher command elements via a proprietary, 􀂿ber-optic based communications network, making collection of communications tra􀌇c by Israeli intelligence extremely di􀌇cult. Perhaps most important, Hezbollah possessed thousands of short- and medium- range rockets, often skillfully hidden below ground or in bunkers that made detection from overhead surveillance platforms nearly impossible. During the brief con􀃀ict Hezbollah’s forces 􀂿red some four thousand unguided rockets of various types that hit Israel. Hezbollah’s rocket inventory enabled its forces to attack targets throughout the northern half of Israel. Over nine hundred rockets hit near or on buildings, civilian infrastructure, and industrial plants. Some two thousand homes were destroyed, and over 􀂿fty Israelis died with several thousand more injured. The casualties would undoubtedly been greater if between 100,000 and 250,000 Israeli civilians had not 􀃀ed their homes. Haifa, Israel’s major seaport had to be shut down, as did its oil re􀂿nery.97 Hezbollah also employed several unmanned aerial vehicles for surveillance of Israel, as well as C-802 anti-ship cruise missiles used to attack and damage an Israeli corvette. 98 The G-RAMM Battlefield The brief war between Israel and Hezbollah suggests that future irregular forces may be well-equipped with enhanced communications, extended-range surveillance capabilities, and precision-guided rockets, artillery, mortars and missiles (G-RAMM) 99 able to hit targets with high accuracy at ranges measured from the tens of kilometers perhaps up to a hundred kilometers or more. In projecting power against enemies equipped in this manner and employing these kinds of tactics U.S. forces—as well as other conventional forces— will find themselves operating in a far more lethal battlefield than those in either of the Gulf wars or in stability operations in Afghanistan and Iraq. Moreover, currently constituted conventional forces typically depend on large fixed infrastructure (e.g., military bases, logistics depots, ports, airfields, railheads, bridges) to deploy themselves and sustain combat operations. These transportation and support hubs also serve as the nodes through which internal commerce and foreign trade moves within a country. This key, fixed infrastructure will almost certainly prove far more difficult to defend against irregular forces armed with G-RAMM weaponry. Indeed, had Hezbollah’s “RAMM” inventory had only a small fraction of G-RAMM munitions, say 10-20 percent, it would have been able to in􀃀ict far greater damage than it did historically to Israeli population centers, key government facilities, military installations, and essential commercial assets such as ports, air􀂿elds, and industrial complexes. An irregular enemy force armed with G-RAMM capabilities in substantial numbers could seriously threaten Latin American governments as well as any U.S. (or external great power) forces and support elements attempting a traditional intervention operation. Implications for the U.S. and Other Major Powers The preceding narrative suggests that the combat potential of irregular forces is likely to increase dramatically in the coming years. As this occurs, the cost of operating conventional forces—especially ground forces—and defending key military support infrastructure is likely to rise substantially. Given these considerations the United States and other major powers external to the Western Hemisphere will have strong incentives to avoid the use of conventional forms of military power, particularly large ground forces, in favor of employing irregular proxy forces to advance their interests. Moreover, the high cost and questionable bene􀂿t of the campaigns in Afghanistan and Iraq are likely to create strong domestic opposition in the United States to such operations for some time to come. This must be added to the United States’ greatly diminished 􀂿scal standing that has led to large cuts in planned investments in defense. These factors suggest that Washington will be much less likely to engage in direct military action in Latin America in the coming years than historically has been the case. At the same time, rivals of the United States like China and Russia may be incentivized by these trends, as well as the United States’ overwhelming military dominance in the Western Hemisphere, to avoid the direct use of force to expand their in􀃀uence in Latin America. Instead, like some of the Bolivarian Alliance members, they appear likely to follow the path taken by the Soviet Union during the Cold War and Iran today: supporting non-state proxies to impose disproportionate costs on the United States and to distract Washington’s resources and attention from other parts of the world. This is not to say that Beijing, Moscow, and Tehran would eschew future opportunities to establish bases in Latin America. As in the past, such bases can support efforts to accomplish several important objectives. They can, for example, further insulate a Latin American regime from the threat of direct U.S. military intervention, since Washington would have to account for the possibility that the conflict would lead to a direct confrontation with a more capable and potentially nuclear-armed power .100 Bases in the hemisphere can also enable external powers to conduct military assistance activities, such as training, more easily. Electronic surveillance of the United States and Latin American states could be accomplished more cheaply and e􀌆ectively from forward positions. Finally, certain kinds of military capabilities, such as long-range ballistic missiles and attack submarines, could be pro􀂿tably stationed in Latin America by powers external to that region, particularly if they intended to create the option of initiating con􀃀ict at some future date. These reasons, among others, have made preventing an extra-hemispheric power from establishing bases in Latin America an enduring U.S. priority. Players in a Latin American Great Game Given current trends, several powers external to the region may, either now or over the coming decade, have both the motive and the means to employ both state and non-state proxies in Latin American to achieve their interests. Principal among them is Iran, which is already engaged in supporting proxies against the United States and its partners in the Middle East and has long been developing proxies in Latin America. Additionally, there are reasons to think that China and Russia may be interested in cultivating and supporting Latin American proxies as well.

### Case - Solvency

#### 1] 1AC Kellner undermines aff solvency – it concedes that shortening patent windows will be compensated by increasing profitability, but the aff scenario is reliant on increasing access by lowering prices

#### 2] The card is not saying that delaying enforcement causes innovation – it just incentivizes finding legal loopholes or shutting down the businesses.

Recut Kellner 21 “Mitigating the Effects of Intellectual Property Colonialism on Budding Cannabis Markets” Hughie Kellner [Hughie Kellner came from the small farm town of Uvalde, Texas and received a bachelor’s degree in Physics from the University of Texas at Austin. Upon graduation from the Indiana University Maurer School of Law, Hughie will deploy his physics degree while prosecuting patents in the Frankfurt am Main, Germany office of Leydig, Voit, & Mayer. After Hughie’s first year at Maurer, he worked for a law firm in Thailand as a Stewart Fellow.] Indiana Journal of Global Legal Studies Vol. 28 #1 (Winter 2021) <https://www.repository.law.indiana.edu/ijgls/vol28/iss1/9/> SM //rehighlighted sid

Third, if actors are utilizing technology under such currently unenforceable but soon-to-be enforceable patents, they will have clear notice when they must cease such infringing action, and either close their doors or develop a compliant way of doing business. Thus, actors in the market can establish themselves and then innovate their own means of carrying out business or license it from those who do. This is the exact action patents are meant to incentivize, innovating new solutions to problems, even if the problem here is merely a legal one.110

### Top-Level

#### 1] Big Pharma patent monopolies have failed – their Thailand example proves – the patents were indefinitely banned.

Reuters 19 Staff. “Thailand to Revoke Foreign Patent Requests on Marijuana.” Reuters, Thomson Reuters, 28 Jan. 2019, www.reuters.com/article/us-thailand-cannabis/thailand-to-revoke-foreign-patent-requests-on-marijuana-idUSKCN1PM1FU. //sid

Thailand on Monday effectively revoked all foreign patent requests for the use of marijuana, after fears foreign firms would dominate a market thrown open last month when the government approved the drug for medical use and research. The junta-appointed parliament in Thailand, a country which until the 1930s had a tradition of using marijuana to relieve pain and fatigue, voted to amend the Narcotic Act of 1979 in December in what it described as “a New Year’s gift to the Thai people”. While countries from Colombia to Canada have legalized marijuana for medical or even recreational use, the drug remains illegal and taboo across much of Southeast Asia. But in Thailand, the main controversy with the legalization involved patent requests by two foreign firms, British giant GW Pharmaceuticals and Japan’s Otsuka Pharmaceutical, filed before the change to the law. Thai civil society groups and researchers feared domination by foreign firms could make it harder for Thai patients to get access to medicines and for Thai researchers to get marijuana extracts. ADVERTISEMENT The military government issued a special executive order on Monday enabling the Department of Intellectual Property to revoke all pending patents that involve cannabis, or remove marijuana from those patents, within 90 days. “The pending patent requests are illegal,” Somchai Sawangkarn, a member of parliament responsible for amending the Narcotic Act told Reuters. “This NCPO order is beneficial for Thai people across the country because it prevents a monopolistic contract,” he said referring to the junta by its official name, the National Council for Peace and Order. Reuters did not have contact details for spokesmen for either of the two foreign firms and the companies did not immediately respond to emailed requests for comment.

#### 2] Barnett has no internal to innovation in medical marijuana – it’s specific to farmers not being able to grow weed to sell, not medical research.

#### 3] No impact to marijuana innovation – we don’t need new types of weed. This doesn’t turn our innovation arguments because our link is that reduction in IP chills innovation for all medicine due to fear of spillover

#### 4] No Cannabis Patent enforcement

McNichol 19 William McNichol 6-7-2019 "Courts are Unlikely to Enforce Cannabis Patents" <https://globalcannabiscompliance.bakermckenzie.com/2019/06/07/courts-are-unlikely-to-enforce-cannabis-patents/> (Prof. McNichol has been a member of the faculty since 1999. He brings to the classroom his experience as a leading member of the Intellectual Property bar for 30 years. He has represented clients in patent, trademark, trade secret, and copyright cases in trial courts nationwide, and in the court of appeals. He has lectured throughout Europe, South America, Asia, and the United States on the acquisition and enforcement of intellectual property rights. Prof. McNichol has lectured on Intellectual Property law throughout the US, Asia, South America, and Europe.)//Elmer

Patents play an important role in American business by encouraging innovation and investment. The Cannabis industry, which has obtained thousands of patents, is no exception. At least one owner of Cannabis patents has filed a patent infringement action to enforce those patents against a competitor (United Cannabis Corp. v. Pure Hemp Collective, Inc., Case No. 18-cv-01922(WJM-NYW) D. Colo., filed July 30, 2018). Unfortunately, under a long line of authorities going back to The Highwayman’s Case in 1725, the **illegality of** the **use, possession, and distribution** of these products probably **creates an insurmountable barrier to the enforcement of** most **Cannabis** product or use **patents**. The US PTO has issued patents on Cannabis products, despite Cannabis’ status as a Schedule 1 controlled substance. The PTO has a longstanding policy of issuing patents claiming inventions that may be illegal under federal laws, including the Food Drug and Cosmetics Act (In Re: Brana, 51 F.3d 1560 (Fed Cir 1995)) and the Federal Insecticide, Fungicide, and Rodenticide Act, or which may result in acts of unfair competition (Juicy Whip, Inc. v. Orange Bang, Inc., 185 F.3d 1364, 1366-67 (Fed Cir 1999)). The PTO and the U.S. Court of Appeals for the Federal Circuit take the position that the PTO should defer to the regulatory and law enforcement agencies charged with responsibility in these areas. Those agencies should decide whether the products or uses claimed by these patents are illegal and enforce the laws that are within their particular responsibilities. **Owners of Cannabis patents will face different problems in court**. **Federal courts will not resolve disputes concerning the fruits of illegal activity**, **nor will they enforce rights** or agreements **in furtherance of a crime**. As early as 1886 in Higgins et al. v. McCrea, 116 U.S. 671, the Supreme Court held that a court will not aid a party who founds his action on acts which are “illegal, criminal, and void … [in] a court whose duty it is to give effect to the law which the party admits he intended to violate.” The Higgins decision relied on earlier English decisions, including The Highwayman’s Case, where two highwaymen committed a series of robberies and one sued the other, claiming that he had been cheated out of his share of the proceeds. The Court refused to consider the suit, turned the highwaymen over to the sheriff, and fined their lawyers for bringing a suit “both scandalous and impertinent.” Higgins also relied upon Holman v. Johnson (1775), 1 Cowp. 341, where Lord Mansfield wrote that “If, from the plaintiff’s own stating or otherwise, the cause of action appears to arise ex turpi causa,or the transgression of a positive law of this country, there the court says that he has no right to be assisted. It is upon that ground the court goes; not for the sake of the defendant, but because they will not lend their aid to such a plaintiff.” **This refusal to adjudicate disputes founded in illegality remains a robust feature of American jurisprudence**. In 1961 the Supreme Court held in U.S. v. Mississippi Valley Generating Co., 364 U.S. 520 (1961), that a contract made in violation of a criminal conflict of interest statute would not be enforced. In 1966, the Supreme Court held in U.S. v. Acme Process Equipment Co., 385 U.S. 138 (1966), reh. den. 385 U.S. 1032, that a contract made in violation of the criminal provisions of the Anti-Kickback Act would not be enforced. In 2001 in Formby-Denson v. Dept. of the Army, 247 F.3d 1366 (Fed. Cir 2001), the Federal Circuit (which has exclusive appellate jurisdiction over patent cases) refused to enforce a settlement agreement that would have required the parties to conceal criminal acts from law enforcement, which would itself be a crime.

### AT Africa

#### 1] No Africa Legalization Now – it’s all theoretical

#### 2] No evidence Monpolies are in Africa – they have weak IP enforcement anyways – your monopolies ev is all form the US which prove no internal link

#### 3] Ray 11 flips this Advantage – Econ is low now – empirically disproves their argument – it’s from 10 year ago – COVID destroyed Africa’s economy

#### 4] African war won’t escalate

Dr. James A. Schear 16, PhD, Global Fellow with the Africa Program at the Woodrow Wilson, “FORGING SECURITY PARTNERSHIPS IN AFRICA: WHAT LIES AHEAD?”, Wilson Quarterly, Winter, http://wilsonquarterly.com/quarterly/the-post-obama-world/forging-security-partnerships-in-africa-what-lies-ahead/

More than a generation later, the tempo of political violence has greatly subsided across large areas of southern and eastern Africa and, more recently, in parts of coastal west Africa. Tragically, other venues — most notably central Africa’s Great Lakes region, as well as the Maghreb and Sahel to the north — are still riven by deep-set instabilities. And, yes, colonial-era legacies do still exert some malign influences, state fragility poses perennial relapse risks, and new threats are ever-evolving.

Despite these complexities, any geostrategist would have to acknowledge contemporary Africa’s positive features. The continent has not seen a war between sovereign states since the late 1990s, when Eritrean and Ethiopian forces waged large-scale mechanized warfare along their (still) disputed border. Nor is Africa a venue for aggressively overreaching hegemons. None of its largest, strongest countries — Angola, Ethiopia, Kenya, Nigeria, South Africa and Tanzania — are locked into polarizing rivalries with each other, and growing economic interdependencies within and beyond their regions have tended, on balance, to aid local stability. This is all good news, but alas, it is only part of the story.

#### 5] No great power war over Africa---deterrence solves, and resource interests don’t cause escalation

Lloyd Thrall 15, Associate at the RAND Corporation, M.A. in International Studies and Diplomacy, SOAS, University of London, PhD Student in War Studies at King’s College London, "China’s Expanding African Relations Implications for U.S. National Security," 2015, <http://www.rand.org/content/dam/rand/pubs/research_reports/RR900/RR905/RAND_RR905.pdf>

There is little credible potential for a Sino-American conflict over resources in Africa. Contrary to popular and perennial assumptions about resource wars, industry and energy analysis sources project adequate supply of conventional hydrocarbons beyond 2035.6 Given reservoir depletion curves, any tightening of supply would be gradual. The adequacy of supply is further augmented when tertiary production and unconventional sources are considered (such as shale and tar sands). U.S. strength in unconventional sources, and potential energy independence, further reduces the likelihood of a conflict. Even in a future with vastly inflated hydrocarbon prices, these costs pale in comparison to those associated with a Sino-American war, the economic costs of which likely fall more heavily on China than the United States.7 Global hydrocarbon resources are distributed via a fungible global market, with many stakeholders and moderate diversity of supply. This enables importing states to buy a predictable supply of hydrocarbons at reasonable and competing prices over long contracts. African sources do not constitute a majority of this supply chain, and supposed victory in a theoretical great-power resource war would not guarantee security of resource supply. In sum, the potential for either China or the United States to be willing to enter war with a nuclear adversary over African oil, let alone other, less valuable resources, is extraordinarily small.8

#### 6] No us-china war

Abraham Denmark et al 20 is director of the Asia Program at the Woodrow Wilson International Center for Scholars and a former deputy assistant secretary of defense for East Asia, April 16, “SAME AS IT EVER WAS: CHINA’S PANDEMIC OPPORTUNISM ON ITS PERIPHERY”, <https://warontherocks.com/2020/04/same-as-it-ever-was-chinas-pandemic-opportunism-on-its-periphery/>

-- Recent incidents are not unprecedented and have not been particularly escalatory.

--There’s no Chinese post-pandemic strategy of assertiveness. Beijing will continue to rely on grey-zone tactics designed to not provoke U.S. military retaliation.

--China backs down when met with counterpressure. Japan’s response to its defense zone in the ECS, Obama’s red lines in the SCS, activities in Doklam all prove.

While Washington and Beijing’s overheated rhetoric and mutual recriminations amid the ongoing coronavirus pandemic are grabbing headlines, equally important is what has been playing out across China’s eastern and southern peripheries over the past several weeks. At a moment when the Chinese Communist Party has been touting the generosity of its approach to COVID-19, there has been a marked increase in the number of incidents between China and its neighbors. Beijing has used its naval and paramilitary forces as well as its increasingly sophisticated information operations to ratchet up tensions, probe responses, and see how much it can get away with. This raises the question of what exactly China is up to. Has Beijing truly embraced a new approach of cooperation with its neighbors? Is it trying to take advantage of the COVID-19 mess to assert its interests more aggressively? Or is this simply an extension — albeit an opportunistic one — of its pre-pandemic strategy? BECOME A MEMBER The novel coronavirus pandemic has not curtailed geopolitics — in fact, it seems to be intensifying preexisting tensions. Understanding if and how China’s foreign policy has shifted is critical for assessing what is happening along China’s periphery and what Beijing might do next. Answering these questions is necessary for the United States and its allies to fashion a proper response. This, in turn, demands understanding what Beijing was doing before the crisis and thinking through what might actually signal a significant shift toward a more confrontational foreign policy. How Did I Get Here? China’s Latest Moves Chinese ships and aircraft have been involved in a spate of recent incidents across China’s maritime periphery. While there have been no fatalities, lives were certainly put at risk. Considering these incidents have involved two of China’s primary regional rivals — Japan and Vietnam — as well as Taiwan, the possibility that Beijing may see the COVID-19 pandemic as an opportunity to press an advantage during a time of geopolitical distraction and uncertainty should be considered. In mid-March, a group of People’s Liberation Army (PLA) aircraft crossed the median line in the Taiwan Strait — an unofficial demarcation line between Taiwan and China — in an exercise intended to intimidate Taiwan by demonstrating China’s ability to conduct operations at night while also testing Taiwan’s ability to react. While PLA ships and aircraft have been operating within the vicinity of Taiwan for several years, the pace and assertiveness of these activities have noticeably increased in recent years: The latest incident was the fourth time in two months that PLA aircraft forced Taiwan’s air force to scramble and intercept. Considering the impending second inauguration of Taiwan’s leader, President Tsai Ing-wen, as well as dwindling levels of support in Taiwan for Beijing’s “One Country, Two Systems” formulation, these exercises are likely to grow even more common and assertive. In late March in the East China Sea, a Chinese fishing vessel collided with a Japanese destroyer. The collision ripped a hole in the destroyer, but the ship was able to move on its own, and its crew suffered no casualties. Beijing announced that one Chinese fisherman had been hurt and blamed the Japanese vessel for the incident, calling for Japan’s cooperation to prevent future incidents. It is unclear if the Chinese vessel was a part of China’s “maritime militia,” described by the U.S. Department of Defense as “an armed reserve force of civilians available for mobilization” that plays a “major role in coercive activities to achieve China’s political goals without fighting.” The South China Sea has also seen several recent incidents involving Chinese vessels. In early March, a Vietnamese fishing vessel was moored near a small island in the Paracel archipelago — islands claimed by both Vietnam and China, among others — when a Chinese vessel chased it and fired a water cannon, causing the boat to sink after hitting some rocks. The crew was rescued by another Vietnamese fishing boat, with Hanoi claiming that the fishing boat was rammed by the Chinese vessel. The U.S. State Department issued a statement in early April expressing its serious concerns about the incident and calling on China “to remain focused on supporting international efforts to combat the global pandemic, and to stop exploiting the distraction or vulnerability of other states to expand its unlawful claims in the South China Sea.” The State Department also noted that since the outbreak of the pandemic, “Beijing has also announced new ‘research stations’ on military bases it built on Fiery Cross Reef and Subi Reef, and landed special military aircraft on Fiery Cross Reef.” Most recently, a Chinese coast guard (CCG) ship — one of several Chinese ships that harassed a Philippine commercial vessel in September 2019 — was seen patrolling near the Scarborough Shoal, representing one of many CCG ships that have been patrolling nearly all of the disputed areas between China and the Philippines in the South China Sea. Are these incidents merely a coincidence? Are they a sign that Beijing is distracted by COVID-19 and the resulting historic economic slowdown, and aggressive local commanders are pushing the envelope of their own accord? Or is this merely the result of China fielding more ships and more aircraft, leading to a predictable increase in incidents and exercises? While these explanations are all plausible, a more likely driver of China’s actions is, in fact, continuity. These incidents are not unprecedented and likely do not indicate a new, post-pandemic Chinese strategy. Rather, these incidents are consistent with a Chinese approach to foreign affairs under CCP General Secretary Xi Jinping’s leadership that even before the outbreak of COVID-19 demonstrated flexibility, assertiveness, and a singular desire to exploit opportunities of external weakness and distraction in order to advance China’s interests. For more than a decade, Chinese leaders have come to see their external security environment as generally favorable, representing a “strategic window of opportunity” in which China could achieve its primary objective of national revitalization through economic and social development, military modernization, and the expansion of its regional and global influence. Since the 2008 to 2009 global financial crisis, Beijing has perceived an opportunity to expand its geopolitical power relative to the United States yet does not seek an explicit conflict with the United States or its allies. As a result, Beijing has intensified its use of “gray zone” tactics that seek to gradually advance Chinese interests using ambiguity and tactics that are tailored to not provoke a military retaliation. These activities also serve as “probing behavior” that tests how far China can go before encountering determined resistance. In recent years, Beijing has used this approach to increase pressure on Japan in the East China Sea and advance Beijing’s territorial claims in the South China Sea against the Philippines, Vietnam, Malaysia, and Indonesia. Throughout, Beijing’s approach to regional geopolitics has been adaptive to specific conditions, flexible to broader strategic trends, and opportunistic to perceptions of weakness or distraction in its adversaries. Chinese actions are not the reckless gambles they may initially appear to be. Rather, they are premeditated probes seeking to identify weakness and opportunity. Chinese pressure is carefully calibrated to fit, but not necessarily to exceed, a given situation. This approach reflects a maxim of Vladimir Lenin, whom the Chinese Communist Party continues to revere to this day: “Probe with a bayonet: if you meet steel, stop. If you meet mush, then push.” In multiple instances, Beijing has continued to push when it perceives that its actions are unlikely to cause a significant response. But when Chinese assertiveness has been met with resolute counterpressure, Beijing’s response has not been predictably escalatory.Beijing has demonstrated flexibility when confronted with determined opposition. Examples include Japan’s response to China’s rollout of an air defense identification zone in the East China Sea in 2013 and President Obama’s reported drawing of a red line around Scarborough Shoal to Xi Jinping in March 2016. Moreover, India’s response to Chinese activities in Doklam did not lead to war.

#### 7] Turn – Econ Growth makes Boko Haram stronger – they can focus more on building since they sap profits

#### 8] No risk of bioterror – its too complicated and terrorists don’t have access to materials

Seitz 16 – Director of Nuclear Security Studies @ Global Intelligence Trust

(Sam, “Why WMD Terrorism Isn’t as Scary as it Seems,” 8/26/16, https://politicstheorypractice.wordpress.com/2016/08/26/why-wmd-terrorism-isnt-as-scary-as-it-seems/)

Of course, nuclear weapons are not the only WMD system. Chemical and biological weapons also seemingly pose serious threats to public safety, especially when they fall into the hands of terrorists. However, when one begins to examine the risks of chemical or biological weapons, one finds that chemical and biological weapons are far less concerning than they originally appear. Chemical weapons are unlikely to pose a serious threat for two reasons. First, they are banned under international law, thus making acquisition of potent compounds challenging. Second, there are no empirical examples of successful chemical attacks. Indeed, when the Aum Shinrikyo cult did initiate a large-scale chemical attack in Tokyo in 1995, it produced only minimal casualties (5). The problem with chemical attacks is that it is incredibly challenging to effectively engineer compounds in a way that maximizes lethality while also ensuring that the agent does not dissipate before affecting large numbers of victims (6). Therefore, it is unlikely that terrorist organizations would dedicate time and resources to the development of chemical weapons. They are simply too fickle. Biological attacks are equally unlikely to occur for many of the same reasons. There simply aren’t many biological weapons programs because the use of these kinds of systems is prohibited by international law. Thus, few individuals have the requisite knowledge to engineer and produce effective bio-agents. Without proper expertise and infrastructure, it is unlikely that terrorist networks will ever possess the knowledge or means to produce weapons grade biological agents (7). Like chemical weapons, biological weapons also have a poor track record when it comes to inflicting serious damage. As Alan Dove explains, “Terrorist groups have… deployed biological weapons twice… The first was [in] 1984… [when] a cult in Oregon inoculated restaurant salad bars with Salmonella… 751 people got sick, but nobody died.” The second biological terrorist attack was conducted by another cult, the same one that launched the chemical attack in Tokyo; its bio-attack was even less effective than its chemical attack. Despite the cult being “well-financed, and [having] many highly educated members… Nobody got sick or died” (8). Finally, it’s important to remember that the United States and other Western countries have impressively modern and well-funded public health institutions. Thus, even if terrorists are able to execute a potent biological attack against metropolitan areas in North America or Europe, it is unlikely that casualties would be high, as well-stocked hospitals and emergency response units would be able to mitigate the impact and prevent worst case scenarios. The risk of WMD terrorism is, of course, not zero. A NBC attack could occur despite the many mitigating factors, and even if it does not cause excessive casualties, the fear and paranoia it would generate could be extremely disruptive. Thus, this report is not suggesting that intelligence and public health measures designed to prevent and mitigate NBC attacks should be curtailed. Instead, this report simply seeks to remind people that the odds of an effective terrorist attack using weapons of mass destruction remain quite low. It is important to understand the relative risks of different threats in order to make informed policy decisions, and, thus, it is crucial that the threat of WMD terrorism not be overly inflated.

### AT Warming

#### Warming doesn’t cause extinction---new studies.

Nordhaus 20 Ted Nordhaus, an American author, environmental policy expert, and the director of research at The Breakthrough Institute, citing new climate change forecasts. [Ignore the Fake Climate Debate, 1-23-2020, https://www.wsj.com/articles/ignore-the-fake-climate-debate-11579795816]//BPS

Beyond the headlines and social media, where Greta Thunberg, Donald Trump and the online armies of climate “alarmists” and “deniers” do battle, there is a real climate debate bubbling along in scientific journals, conferences and, occasionally, even in the halls of Congress. It gets a lot less attention than the boisterous and fake debate that dominates our public discourse, but it is much more relevant to how the world might actually address the problem. In the real climate debate, no one denies the relationship between human emissions of greenhouse gases and a warming climate. Instead, the disagreement comes down to different views of climate risk in the face of multiple, cascading uncertainties. On one side of the debate are optimists, who believe that, with improving technology and greater affluence, our societies will prove quite adaptable to a changing climate. On the other side are pessimists, who are more concerned about the risks associated with rapid, large-scale and poorly understood transformations of the climate system. But most pessimists do not believe that runaway climate change or a hothouse earth are plausible scenarios, much less that human extinction is imminent. And most optimists recognize a need for policies to address climate change, even if they don’t support the radical measures that Ms. Thunberg and others have demanded. In the fake climate debate, both sides agree that economic growth and reduced emissions vary inversely; it’s a zero-sum game. In the real debate, the relationship is much more complicated. Long-term economic growth is associated with both rising per capita energy consumption and slower population growth. For this reason, as the world continues to get richer, higher per capita energy consumption is likely to be offset by a lower population. A richer world will also likely be more technologically advanced, which means that energy consumption should be less carbon-intensive than it would be in a poorer, less technologically advanced future. In fact, a number of the high-emissions scenarios produced by the United Nations Intergovernmental Panel on Climate Change involve futures in which the world is relatively poor and populous and less technologically advanced. Affluent, developed societies are also much better equipped to respond to climate extremes and natural disasters. That’s why natural disasters kill and displace many more people in poor societies than in rich ones. It’s not just seawalls and flood channels that make us resilient; it’s air conditioning and refrigeration, modern transportation and communications networks, early warning systems, first responders and public health bureaucracies. New research published in the journal Global Environmental Change finds that global economic growth over the last decade has reduced climate mortality by a factor of five, with the greatest benefits documented in the poorest nations. In low-lying Bangladesh, 300,000 people died in Cyclone Bhola in 1970, when 80% of the population lived in extreme poverty. In 2019, with less than 20% of the population living in extreme poverty, Cyclone Fani killed just five people. “Poor nations are most vulnerable to a changing climate. The fastest way to reduce that vulnerability is through economic development.” So while it is true that poor nations are most vulnerable to a changing climate, it is also true that the fastest way to reduce that vulnerability is through economic development, which requires infrastructure and industrialization. Those activities, in turn, require cement, steel, process heat and chemical inputs, all of which are impossible to produce today without fossil fuels. For this and other reasons, the world is unlikely to cut emissions fast enough to stabilize global temperatures at less than 2 degrees above pre-industrial levels, the long-standing international target, much less 1.5 degrees, as many activists now demand. But recent forecasts also suggest that many of the worst-case climate scenarios produced in the last decade, which assumed unbounded economic growth and fossil-fuel development, are also very unlikely. There is still substantial uncertainty about how sensitive global temperatures will be to higher emissions over the long-term. But the best estimates now suggest that the world is on track for 3 degrees of warming by the end of this century, not 4 or 5 degrees as was once feared. That is due in part to slower economic growth in the wake of the global financial crisis, but also to decades of technology policy and energy-modernization efforts. “We have better and cleaner technologies available today because policy-makers in the U.S. and elsewhere set out to develop those technologies.” The energy intensity of the global economy continues to fall. Lower-carbon natural gas has displaced coal as the primary source of new fossil energy. The falling cost of wind and solar energy has begun to have an effect on the growth of fossil fuels. Even nuclear energy has made a modest comeback in Asia.

#### Warming doesn’t trigger extinction

* peer-reviewed journal shows IPCC exaggeration
* history proves resilience
* no extinction- warming under Paris goals
* rock breaking strategy could offset warming

IBD 18 [Investors Business Daily, Citing Study from Peer reviewed journal by Lewis and Curry, “Here's One Global Warming Study Nobody Wants You To See”, 4/25/18, https://www.investors.com/politics/editorials/global-warming-computer-models-co2-emissions/]

Settled Science: A new study published in a peer-reviewed journal finds that climate models exaggerate the global warming from CO2 emissions by as much as 45%. If these findings hold true, it's huge news. No wonder the mainstream press is ignoring it.

In the study, authors Nic Lewis and Judith Curry looked at actual temperature records and compared them with climate change computer models. What they found is that the planet has shown itself to be far less sensitive to increases in CO2 than the climate models say. As a result, they say, the planet will warm less than the models predict, even if we continue pumping CO2 into the atmosphere.

As Lewis explains: "Our results imply that, for any future emissions scenario, future warming is likely to be substantially lower than the central computer model-simulated level projected by the (United Nations Intergovernmental Panel on Climate Change), and highly unlikely to exceed that level.

How much lower? Lewis and Curry say that their findings show temperature increases will be 30%-45% lower than the climate models say. If they are right, then there's little to worry about, even if we don't drastically reduce CO2 emissions.

The planet will warm from human activity, but not nearly enough to cause the sort of end-of-the-world calamities we keep hearing about. In fact, the resulting warming would be below the target set at the Paris agreement.

This would be tremendously good news.

The fact that the Lewis and Curry study appears in the peer-reviewed American Meteorological Society's Journal of Climate lends credibility to their findings. This is the same journal, after all, that recently published widely covered studies saying the Sahara has been growing and the climate boundary in central U.S. has shifted 140 miles to the east because of global warming.

The Lewis and Curry findings come after another study, published in the prestigious journal Nature, that found the long-held view that a doubling of CO2 would boost global temperatures as much as 4.5 degrees Celsius was wrong**.** The most temperatures would likely climb is 3.4 degrees.

It also follows a study published in Science, which found that rocks contain vast amounts of nitrogen that plants could use to grow and absorb more CO2, potentially offsetting at least some of the effects of CO2 emissions and reducing future temperature increases.

### 5

#### Strong current IP guarantees causes massive Pharma innovation.

* Answers Evergreening/Me-Too Drugs

Stevens and Ezell 20 Philip Stevens and Stephen Ezell 2-3-2020 "Delinkage Debunked: Why Replacing Patents With Prizes for Drug Development Won’t Work" <https://itif.org/publications/2020/02/03/delinkage-debunked-why-replacing-patents-prizes-drug-development-wont-work> (Philip founded Geneva Network in 2015. His main research interests are the intersection of intellectual property, trade, and health policy. Formerly he was an official at the World Intellectual Property Organization (WIPO) in Geneva, where he worked in its Global Challenges Division on a range of IP and health issues. Prior to his time with WIPO, Philip worked as director of policy for International Policy Network, a UK-based think tank, as well as holding research positions with the Adam Smith Institute and Reform, both in London. He has also worked as a political risk consultant and a management consultant. He is a regular columnist in a wide range of international newspapers and has published a number of academic studies. He holds degrees from the London School of Economics and Durham University (UK).)//Elmer

The **Current System** Has **Produced a Tremendous Amount of Life-Sciences Innovation** The frontier for biomedical innovation is seemingly limitless, and the challenges remain numerous—whether it comes to diseases that afflict millions, such as cancer or malaria, or the estimated 7,000 rare diseases that afflict fewer than 200,000 patients.24 And while certainly citizens in developed and developing nations confront differing health challenges, those challenges are increasingly converging. For instance, as of this year, analysts expect that **noncommunicable** diseases such as cardiovascular disease and diabetes will account for 70 percent of natural fatalities **in developing countries**.25 Citizens of low- and middle-income countries bear 80 percent of the world’s death burden from cardiovascular disease.26 Forty-six percent of Africans over 25 suffer from hypertension, more than anywhere else in the world. Similarly, 85 percent of the disease burden of cervical cancer is borne by individuals living in low- and middle-income countries.27 To develop treatments or cures for these conditions, novel biomedical innovation **will be needed from everywhere**. Yet tremendous progress has been made in recent decades. To tackle these challenges, the global pharmaceutical industry invested over **$1.36 trillion in R&D** in the decade from 2007 to 2016—and it’s expected that annual R&D investment by the global pharmaceutical industry will reach $181 billion by 2022.28 In no small part due to that investment, **943 new active substances have been introduced** globally over the prior 25 years.29 The U.S. Food and Drug Administration (FDA) has approved more than **500 new medicines since 2000** alone. And these medicines are getting to more individuals: Global medicine use **in 2020 will reach 4.5 trillion doses**, up 24 percent from 2015.30 Moreover, there are an estimated 7,000 new medicines under development globally (about half of them in the United States), with 74 percent being potentially first in class, meaning they use a new and unique mechanism of action for treating a medical condition.31 In the United States, over 85 percent of all drugs sold are generics (only 10 percent of U.S. prescriptions are filled by brand-name drugs).32 And while some assert that biotechnology companies focus too often on “me-too” drugs that compete with other treatments already on the market, the reality is many drugs currently under development are meant to tackle some of the **world’s most intractable diseases**, **including cancer and Alzheimer’s**.33 Moreover, such arguments miss that many of the drugs developed in recent years have in fact been first of their kind. For instance, in 2014, the FDA approved **41 new medicines** (at that point, the most since 1996) many of which were first-in-class medicines.34 In that year, 28 of the 41 drugs approved were considered biologic or specialty agents, and 41 percent of medicines approved were intended to treat rare diseases.35 Yet even when a new drug isn’t first of its kind, it can still produce benefits for patients, both through **enhanced clinical efficacy** (for instance, taking the treatment as a pill rather than an injection, with a superior dosing regimen, **or better treatment** for some individuals who don’t respond well to the original drug) and by generating competition that exerts downward price pressures. For example, a patient needing a cholesterol drug has a host of statins from which to choose, which is important because some statins produce harmful side effects for some patients. Similarly, patients with osteoporosis can choose from Actonel, Boniva, or Fosomax. Or take for example Hepatitis C, which until recently was an incurable disease eventually requiring a liver transplant for many patients. In 2013, a revolutionary new treatment called Solvadi was released that boosted cure rates to 90 percent. This was followed in 2014 by an improved treatment called Harvoni, which cures the Hepatitis C variant left untouched by Solvadi. Since then, an astonishing six new treatments for the disease have received FDA approval, opening up a wide range of treatment options that take into account patients’ liver and kidney status, co-infections, potential drug interactions, previous treatment failures, and the genotype of HCV virus.36 “If you have to have Hepatitis C, now is the time to have it,” as Douglas Dieterich, a liver specialist at the Icahn School of Medicine at Mount Sinai Hospital in New York, told the Financial Times. “We have these marvellous drugs we can treat you with right now, without side effects,” he added. “And this time next year, we’ll have another round of drugs available.”37 Moreover, the financial potential of this new product category has led to multiple competing products entering the market in quick succession, in turn placing downward pressure on prices.38 As Geoffrey Dusheiko and Charles Gore write in The Lancet, “The market has done its work for HCV treatments: after competing antiviral regimens entered the market, competition and innovative price negotiations have driven costs down from the initially high list prices in developed countries.”39 As noted previously, opponents of the current market- and IP-based system contend patents enable their holders to exploit a (temporary) market monopoly by inflating prices many multiples beyond the marginal cost of production. But rather than a conventional neoclassical analysis, an analysis based on “innovation economics” finds it is exactly this “distortion” that is required for innovation to progress. As William Baumol has pointed out, “Prices above marginal costs and price discrimination become the norm rather than the exception because … without such deviations from behaviour in the perfectly competitive model, innovation outlays and other unavoidable and repeated sunk outlays cannot be recouped.”40 Or, as the U.S. Congressional Office of Technology Assessment found, “Pharmaceutical R&D is a risky investment; therefore, high financial returns are necessary **to induce companies to invest** in researching new chemical entities.”41 This is also why, in 2018, the U.S. Congressional Budget Office estimated that because of high failure rates, biopharmaceutical **companies would need to earn a 61.8 percent rate of return on their successful new drug R&D projects in order to match a 4.8 percent after-tax rate of return on their investment**s.42 Indeed, **it’s the ability to recoup fixed costs, not just marginal** costs, through mechanisms such as patent protection that lies at the heart of all innovation-based industries and indeed all innovation and related economic progress. If companies could not find a way to pay for their R&D costs, and could only charge for the costs of producing the compound, **there would be no new drugs developed**, just as there would be no new products developed in any industry. Innovating in the life sciences remains expensive, risky, difficult, and uncertain. Just 1 in 5,000 drug candidates make it all the way from discovery to market.43 A 2018 study by the Deloitte Center for Health Solutions, “Unlocking R&D productivity: Measuring the return from pharmaceutical innovation 2018,” found that “the average cost to develop an asset [an innovative life-sciences drug] including the cost of failure, has increased in six out of eight years,” and that the average cost to create a new drug has risen to $2.8 billion.44 Related research has found the development of new drugs requires years of painstaking, risky, and expensive research that, for a new pharmaceutical compound, takes an average of 11.5 to 15 years of research, development, and clinical trials, at a cost of $1.7 billion to $**3.2 billion**.45 IP rights—including patents, copyrights, and data exclusivity protections—give innovators, whether in the life sciences or other sectors, the **confidence** to undertake the risky and expensive process of innovation, secure in the knowledge they’ll be able to capture a share of the gains from their efforts. And these gains are often only a small fraction of the true value created. For instance, Yale University economist William Nordhaus estimated inventors capture just 4 percent of the total social gains from their innovations; the rest spill over to other companies and society as a whole.46 Without adequate IP protection, private investors would never find it viable to fund advanced research because lower-cost copiers would be in a position to undercut the legitimate prices (and profits) of innovators, even while still generating substantial profits on their own.47 As the report “Wealth, Health and International Trade in the 21st Century” concludes, “Conferring robust intellectual property rights is, in the pharmaceutical and other technological-development contexts, **in the global public’s long-term interests.** Without adequate mechanisms for directly and indirectly securing the private and public funding of medicines and vaccines, research and development communities across the world will lose future benefits that would far outweigh the development costs involved.”48 Put simply, the current market- and IP-based life-sciences innovation system is producing life-changing biomedical innovation. As Jack Scannell, a senior fellow at Oxford University’s Center for the Advancement of Sustainable Medical Innovation has explained, “I would guess that one can buy today, at rock bottom generic prices, a set of small-molecule drugs that has greater medical utility than the entire set available to anyone, anywhere, at any price in 1995.” He continued, “Nearly all the generic medicine chest was created by firms who invested in R&D to win future profits that they tried pretty hard to maximize; short-term financial gain building a long-term common good.”49 For example, on September 14, 2017, the FDA approved Mvasi, the first biosimilar for Roche’s Avastin, a breakthrough anticancer drug when it came out in the mid-1990s for lung, cervical, and colorectal cancer.50 In other words, a medicine to treat forms of cancer that barely existed 20 years ago is now available as a generic drug today. It’s this dynamic that enables us to imagine a situation wherein drugs to treat diseases that aren’t available anywhere at any price today (for instance, treatments for Alzheimer’s or Parkinson’s) might be available as generics in 20 years. But that will only be the case if we preserve (and improve where possible) a life-sciences innovation system that is generally working. The current system does not require wholesale replacement by a prize-based system that—notwithstanding a meaningful success here or there—has produced nowhere near a similar level of novel biomedical innovation.

#### **Reducing IP protections chills future investment – even the perception of wavering commitment scares off companies.**

Grabowski et al. ’15 (Harry; Professor Emeritus of Economics at Duke, and a specialist in the intersection of the pharmaceutical industry and government regulation of business; February 2015; “The Roles Of Patents And Research And Development Incentives In Biopharmaceutical Innovation”; Health Affairs; <https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1047>; Accessed: 8-31-2021; AU)

Patents and other forms of **intellectual property** **protection** play **essential roles** in encouraging innovation in biopharmaceuticals. As part of the “21st Century Cures” initiative, Congress is reviewing the policy mechanisms designed to accelerate the discovery, development, and delivery of new treatments. Debate continues about how best to balance patent and intellectual property incentives to encourage innovation, on the one hand, and generic utilization and price competition, on the other hand. We review the current framework for accomplishing these dual objectives and the important role of patents and regulatory exclusivity (together, the patent-based system), given the lengthy, costly, and risky biopharmaceutical research and development process. We summarize existing targeted incentives, such as for orphan drugs and neglected diseases, and we consider the pros and cons of proposed voluntary or mandatory alternatives to the patent-based system, such as prizes and government research and development contracting. We conclude that patents and regulatory exclusivity provisions are likely to remain the core approach to providing incentives for biopharmaceutical research and development. However, prizes and other voluntary supplements could play a useful role in addressing unmet needs and gaps in specific circumstances. Technological innovation is widely recognized as a key determinant of economic and public health progress. 1,2 Patents and other forms of intellectual property protection are generally thought to play essential roles in encouraging innovation in biopharmaceuticals. This is because the process of developing a new drug and bringing it to market is **long, costly, and risky**, and the costs of imitation are low. After a new drug has been approved and is being marketed, its **patents protect it** from competition from chemically identical entrants (or entrants infringing on other patents) for a period of time. **For firms** to have an **incentive** to **continue to invest** in innovative development efforts, they must have an **expectation** that they can **charge enough** during this period to **recoup** costs and make a profit. After a drug’s patent or patents expire, **generic rivals** can enter the market at **greatly reduced development cost** and prices, providing added consumer benefit but **eroding** the **innovator drug** company’s revenues. The Drug Price Competition and Patent Term Restoration Act of 1984 (commonly known as the Hatch-Waxman Act) was designed to balance innovation incentives and generic price competition for new drugs (generally small-molecule chemical drugs, with some large-molecule biologic exceptions) by extending the period of a drug’s marketing exclusivity while providing a regulatory framework for generic drug approval. This framework was later changed to encompass so-called biosimilars for large-molecule (biologic) drugs through the separate Biologics Price Competition and Innovation Act of 2009. Other measures have been enacted to provide research and development (R&D) incentives for antibiotics and drugs to treat orphan diseases and neglected tropical diseases. Discussion continues about whether current innovation incentives are optimal or even adequate, given evolving public health needs and scientific knowledge. For instance, the House Energy and Commerce Committee recently embarked on the “21st Century Cures” initiative, 3 following earlier recommendations by the President’s Council of Advisors on Science and Technology on responding to challenges in “propelling innovation in drug discovery, development, and evaluation.” 4 In this context, we discuss the importance of patents and other forms of intellectual property protection to biopharmaceutical innovation, given the unique economic characteristics of drug research and development. We also review the R&D incentives that complement patents in certain circumstances. Finally, we consider the pros and cons of selected voluntary (“opt-in”) or mandatory alternatives to the current patent- and regulatory exclusivity–based system (such as prizes or government-contracted drug development) and whether they could better achieve the dual goals of innovation incentives and price competition. The essential rationale for patent protection for biopharmaceuticals is that long-term benefits in the form of continued future innovation by pioneer or brand-name drug manufacturers outweigh the relatively short-term restrictions on imitative cost competition associated with market exclusivity. Regardless, the entry of other branded agents remains an important source of therapeutic competition during the patent term. Several economic characteristics make patents and intellectual property protection **particularly important** to **innovation incentives** for the biopharmaceutical industry. 5 The R&D process often takes more than a decade to complete, and according to a recent analysis by Joseph DiMasi and colleagues, per new drug approval (including failed attempts), it involves more than a **billion** dollars in out-of-pocket costs. 6 Only approximately one in eight drug candidates survive clinical testing. 6 As a result of the high risks of failure and the high costs, research and development must be funded by the **few successful, on-market products** (the top quintile of marketed products provide the dominant share of R&D returns). 7,8 Once a new drug’s patent term and any regulatory exclusivity provisions have expired, competing manufacturers are allowed to sell generic equivalents that require the investment of only several million dollars and that have a high likelihood of commercial success. **Absent intellectual property protections** that allow marketing exclusivity, innovative firms would be **unlikely** to make the costly and risky investments needed to bring a new drug to market. Patents confer the right to exclude competitors for a limited time within a given scope, as defined by patent claims. However, **they do not guarantee demand**, nor do they prevent competition from nonidentical drugs that treat the same diseases and fall outside the protection of the patents. New products may enter the same therapeutic class with common mechanisms of action but different molecular structures (for example, different statins) or with differing mechanisms of action (such as calcium channel blockers and angiotensin receptor blockers). 9 Joseph DiMasi and Laura Faden have found that the time between a first-in-class new drug and subsequent new drugs in the same therapeutic class has been dramatically reduced, from a median of 10.2 years in the 1970s to 2.5 years in the early 2000s. 10 Drugs in the same class compete through quality and price for preferred placement on drug formularies and physicians’ choices for patient treatment. Patents play an **essential role** in the economic “ecosystem” of **discovery and investment** that has developed since the 1980s. Hundreds of start-up firms, often backed by venture capital, have been launched, and a robust innovation market has emerged. 11 The value of these development-stage firms is largely determined by their proprietary technologies and the candidate drugs they have in development. As a result, the **strength of intellectual property protection** plays a **key role** in funding and partnership opportunities for such firms. Universities also play a key role in the R&D ecosystem because they conduct basic biomedical research supported by sponsored research grants from the National Institutes of Health (NIH) and the National Science Foundation (NSF). The Patent and Trademark Law Amendments Act of 1980 (commonly known as the Bayh-Dole Act) gave universities the right to retain title to patents and discoveries made through federally funded research. This change was designed to encourage technology transfer through industry licensing and the creation of start-up companies. Universities received only 390 patents for their discoveries in 1980, 12 compared to 4,296 in 2011, with biotechnology and pharmaceuticals being the top two technology areas (accounting for 36 percent of all university patent awards in 2012). 13

#### Cannabis wipes out superbugs and kills developing mutations, but further research and investments are required.

Sample ’20 [Ian; journalist at New Scientist and worked at the Institute of Physics as a journal editor, PhD in biomedical materials; 1-19-2020; "Cannabis compound could be weapon in fight against superbugs", Guardian; https://www.theguardian.com/society/2020/jan/19/cannabis-compound-could-be-weapon-in-fight-against-superbugs, accessed 4-16-2021]

A compound made by cannabis plants has been found to wipe out drug-resistant bacteria, raising hopes of a new weapon in the fight against superbugs. Scientists screened five cannabis compounds for their antibiotic properties and found that one, cannabigerol (CBG), was particularly potent at killing methicillin-resistant Staphylococcus aureus (MRSA), one of the most common hospital superbugs. Tests in the lab showed that CBG, which is not psychoactive, killed common MRSA microbes and “persister” cells that are especially resistant to antibiotics and that often drive repeat infections. The compound also cleared up hard-to-shift “biofilms” of MRSA that can form on the skin and on medical implants. Having seen how effective the substance was against bacteria in the lab, the researchers decided to test CBG’s ability to treat infections in animals. In a study that has not yet been published, they found that CBG cured mice of MRSA infections as effectively as vancomycin, a drug widely considered to be the last line of defence against drug-resistant microbes. The study is under review at the ACS Infectious Diseases journal. Eric Brown, a microbiologist who led the work at McMaster University in Hamilton, Ontario, said cannabinoids were “clearly great drug-like compounds”, but noted it was early days in assessing the compounds for use in the clinic. “There is much work to do to explore the potential of the cannabinoids as antibiotics from the safety standpoint,” he said. Antibiotic resistance has become a major threat to public health. England’s former chief medical officer Dame Sally Davies has said the loss of effective antibiotics would lead to “apocalyptic scenarios”, with patients dying from routine infections and many operations becoming too risky to perform. In the study, the researchers describe how the rapid global spread of drug resistance, caused by microbes developing mutations that protect them against antibiotics, has driven an urgent need to explore new sources of drugs. Among antibiotics in use today, the newest date back to discoveries made more than 30 years ago.

#### Only CBD solves superbugs.

Stevens ’21 [Kylie; reporter covering medical breakthrough by Researchers at University of Queensland’s Institute for Molecular Bioscience and the peer-reviewed Communications Biology journal; 1-19-2021; Mail Online; https://www.dailymail.co.uk/news/article-9165415/Medical-breakthrough-revealed-cannabis-kill-superbugs-save-10million-lives-year.html, accessed 4-16-2021; RG]

Laboratory studies have shown synthetic cannabidiol, the main nonpsychoactive component of cannabis better known as CBD can kill bacteria in diseases such as gonorrhea, a sexually transmissible infection. The research has been hailed as a potential world medical breakthrough, amid predictions drug-resistant infections could result in 10 million deaths worldwide a year by 2050 unless an alternate treatment is found. The research, recently published in the Communications Biology journal is part of a collaboration between Queensland researchers and Botanix Pharmaceuticals, which lead to the first new class of antibiotics for resistant bacteria in 60 years. 'This is the first time CBD has been shown to kill some types of Gram-negative bacteria. These bacteria have an extra outer membrane, an additional line of defence that makes it harder for antibiotics to penetrate,' Institute for Molecular Bioscience director Dr Mark Blaskovich said in a statement. Researchers also discovered cannabidiol is effective in killing off superbug MRSA found in golden staph bacteria. It may also be used to treat infected diabetic ulcers and wounds. 'Cannabidiol showed a low tendency to cause resistance in bacteria even when we sped up potential development by increasing concentrations of the antibiotic during 'treatment,' Dr Blaskovich added. 'We think that cannabidiol kills bacteria by bursting their outer cell membranes, but we don't know yet exactly how it does that, and need to do further research.'