# Kentucky Rd. 5 Open Source

# 1NC

## Off

### 1NC – T – Per Se

#### Business practices refer to repeatable transactions.

Kerry Lynn Macintosh 97, Associate Professor of Law, Santa Clara University School of Law. B.A. 1978, Pomona College; J.D. 1982, Stanford University, “Liberty, Trade, and the Uniform Commercial Code: When Should Default Rules Be Based On Business Practices?,” 38 Wm. & Mary L. Rev. 1465, Lexis

These new and revised articles reflect a strong trend toward choosing default rules 4 that codify existing business practices. 5 [FOOTNOTE 5 BEGINS] In this Article, the term "business practices" is used to refer to practices that emerge over time as countless market participants exercise their freedom to engage in profitable transactions. For an account of the evolution of business practices, see infra Part II. As used here, "business practices" is broader and less technical than "trade usage," which the Code narrowly defines as "any practice or method of dealing having such regularity of observance in a place, vocation, or trade as to justify an expectation that it will be observed with respect to the transaction in question." U.C.C. 1-205(2). [FOOTNOTE 5 ENDS] This is particularly true of the recent revisions to Articles 3 (Negotiable Instruments), 4 (Bank Deposits and Collections) and 5 (Letters of Credit).

#### Prohibitions are *ex ante* and *forbids* action

Sweet 3 (Robert W. Sweet, United States District Court, New York Southern, Am. Nat'l Fire Ins. Co. v. Mirasco, Inc., 249 F. Supp. 2d 303, 324, 2003 U.S. Dist. LEXIS 3302, \*52-54, S.D.N.Y. March 5, 2003)

In any [\*\*53] case, even if the word "embargo" does not stretch so far, there is no doubt that the restriction against the importation of all IBP goods constitutes a "prohibition" under Clause D. HN15 "Prohibition" is defined by Black's Law Dictionary to be "a law or order that forbids a certain action." Black's Law Dictionary 1228 (7th ed. 1999). The dictionary definition is similar: "a declaration or injunction forbidding some action." Webster's New International Dictionary, Unabridged 1978 (2d ed. 1944). The common understanding of the word "prohibition" has similar connotations, with one exception. As Mirasco points out, any governmental action -- including the rejection on which insurance coverage is based -- could potentially be deemed a prohibition under the definitions above as a declaration forbidding the entry of goods. Therefore, a prohibition must be qualitatively different from a rejection. That difference is that the prohibition occurs prior to the government's dealing with the specific cargo at issue and is of a more sweeping nature than the simple administrative function performed by customs officials determining whether or not goods should be permitted into the country. Decree [\*\*54] # 6 is such a prohibition, in that it was a law or declaration -- issued prior to, separate from and broader than the Egyptian authorities' administrative determination of whether the M/V Spero cargo should be permitted entry -- that forbids the importation of IBP products.

#### Violation – the aff changes a standard, topical affs must institute a per se violation.

John Paul Stevens 90, Justice, Supreme Court of the United States, “FTC v. Superior Court Trial Lawyers Ass'n,” 493 U.S. 411, Lexis

LEdHN[3C] [3C]LEdHN[14] [14]Equally important is the second error implicit in respondents' claim to immunity from the per se rules. In its opinion, the Court of Appeals assumed that the antitrust laws permit, but do not require, the condemnation of price fixing and boycotts without proof of market power. 15 The opinion further assumed that the per se rule prohibiting such activity "is only a rule of 'administrative convenience and efficiency,' not a statutory command." 272 U.S. App. D. C., at 295, 856 F. 2d, at 249.This statement contains two errors. HN10 [\*\*\*\*42] The per se [\*433] rules are, of course, the product of judicial interpretations of the Sherman Act, but the rules nevertheless have the same force and effect as any other statutory commands. Moreover, while the per se rule against price fixing and boycotts is indeed justified in part by "administrative convenience," the Court of Appeals erred in describing the prohibition as justified only by such concerns. The per se rules also reflect a long-standing judgment that the prohibited practices by their nature have "a substantial potential for impact on competition." Jefferson Parish Hospital District No. 2 v. Hyde, 466 U.S. 2, 16 (1984).

[\*\*\*\*43] LEdHN[15] [15]As we explained in Professional Engineers, HN11 the rule of reason in antitrust law generates

"two complementary categories of antitrust analysis. In the first category are agreements whose nature and necessary effect are so plainly anticompetitive that no elaborate study of the industry is needed to establish their illegality -- they are 'illegal per se.' In the second category are agreements whose competitive effect can only be evaluated by analyzing the facts peculiar to the business, the history of the restraint, and the reasons why it was imposed." 435 U.S., at 692.

[\*\*\*873] "Once experience with a particular kind of restraint enables the Court to predict with confidence that the rule of reason will condemn it, it has applied a conclusive presumption that the restraint is unreasonable." Arizona v. Maricopa County Medical Society, 457 U.S. 332, 344 (1982).

[\*\*781] LEdHN[16] [16] [\*\*\*\*44] The per se rules in antitrust law serve purposes analogous to per se restrictions upon, for example, stunt flying in congested areas or speeding. Laws prohibiting stunt flying or setting speed limits are justified by the State's interest in protecting human life and property. Perhaps most violations of such rules actually cause no harm. No doubt many experienced drivers and pilots can operate much more safely, even at prohibited speeds, than the average citizen.

[\*434] If the especially skilled drivers and pilots were to paint messages on their cars, or attach streamers to their planes, their conduct would have an expressive component. High speeds and unusual maneuvers would help to draw attention to their messages. Yet the laws may nonetheless be enforced against these skilled persons without proof that their conduct was actually harmful or dangerous.

In part, the justification for these per se rules is rooted in administrative convenience. They are also supported, however, by the observation that every speeder and every stunt pilot poses some threat to the community. An unpredictable event may overwhelm the skills of the best driver or pilot, even if the [\*\*\*\*45] proposed course of action was entirely prudent when initiated. A bad driver going slowly may be more dangerous that a good driver going quickly, but a good driver who obeys the law is safer still.

#### Prefer it:

#### 1) GROUND---key to link uniqueness and a unidirectional topic. Standards and balancing tests make the topic bidirectional and lead to affs that codify the squo.

#### 2) LIMITS---too many possible standards, each requiring distinct answers, makes the topic unmanageably large.

### 1NC – States Self-Regulation CP

#### The 50 states and all relevant territories should

#### ---ban licensing boards

#### ---remove all regulations on small businesses

#### ---ignore all federal preemption rulings relating to climate change or the grid.

#### Counterplan’s states rebellion solves federal preemption.

**Wolverton 13** (Joe A. Wolverton – J.D. and correspondent for The New American. “New Cato Paper Proposes Fixes for Loss of Federalism” December 7, 2013. http://www.thenewamerican.com/usnews/constitution/item/17117-new-cato-paper-proposes-fixes-for-loss-of-federalism)

We need to relearn this lesson and to reassert the sovereignty of the states we live in. We need to better understand that each state is absolutely sovereign and they have never surrendered that sovereignty. Accordingly, any one state or group of states may exercise that sovereignty by negating any unconstitutional act, regulation, or order of the general government — whether positively through acts of nullification or negatively through refusing to obey or enforce those acts. Neither of those approaches to nullification requires a coalition of states to be effective. In fact, such a requirement of multi-state collaboration in this check on the general government usurpations would diminish the sovereignty of the individual state. Such a requirement would reduce the single state to temporary sovereign status, sovereign only in those instances when it agrees to join some provisional confederacy of other states opposing this or that act of the general government. Ironically, perhaps, if a plurality (or a majority) of states nullified the same act or edict of one of the branches of the central government, the union would be strengthened by such a concerted commitment to the Constitution and the foundational principle of enumerated powers. Think of it this way: how much safer, cleaner, and attractive would a neighborhood be if the homeowners consistently enforced the terms of the covenant that created the Homeowners’ Association? Federalism is a delicate flower that grows best when planted in the rich soil of constitutional consistency. But that plot of land has lain fallow for so long and the weeds of centralism have grown so tall, that there are few legislators or laymen who remember the fertile, loamy soil that once nourished abundant acre upon abundant acre of the life-giving harvest of liberty. Today, federalism is not only misunderstood, but misapplied by those who claim to appreciate its qualities. For example, so often so-called “conservatives” will push back against the aggression of the federal government until the feds win (and they always do), and then the former foes retreat to safety behind the lines of the Supremacy Clause. State legislators who consider themselves lawmakers per se, that is to say, not proxies for their colleagues on Capitol Hill, could foment real revolution without ever firing a shot and without ever filing a bill. Nullification, whether exercised by one state or many, is a fact of constitutional construction and does not require a bill to trigger its protections of state sovereignty and individual liberty. States which refuse to enforce an unconstitutional federal edict nullify that act just as positively and permanently as a state that proposes and passes a law negating that same measure. After establishing a record of reliable resistance to attempts by the federal government to exercise unconstitutional powers, citizens of a state or group of states that effectively ignore the offending counterfeit law would learn in a generation or two that there are just some things that the federal government can’t do. That state (or states) would gradually gain a gravitational pull, attracting men and women who value liberty above devotion to a “union” that has long since ceased to abide by the terms of the contract that created it and had grown so gargantuan as to prevent the justice and liberty it was organized to preserve. Sadly, state lawmakers and governors have thus far failed to appreciate the right and responsibility they have to build these bulwarks of freedom. Perhaps more pragmatically relevant, they have failed to understand the amount of money that would be pumped into state budgets by a constant stream of immigrants (from within the union) seeking to be free from the crushing weight of federal mandates and monetary manipulation. When the first state assembly or the first state chief executive catches the vision of the viability and economic worth of a state where the Constitution is rigidly adhered to, there will be an immediate response by other states seeking to emulate that state’s success. And nullification is the arm that will ring the bell, calling civil libertarians and constitutionalists to gather inside the borders of the bastions of liberty.

### 1NC – Adv CP

#### The United States federal government should

#### ---implement a one-thousand dollar per month universal basic income financed through deficit spending.

#### ---substantially increase its research and development funding for small businesses to 1 trillion dollars per year

#### ---install microgrids at all military bases, critical infrastructure locations, and private businesses.

#### ---substantially increase research and development for CarbFix and mandate its use in all carbon-polluting sources.

#### ---cease preemption of all state policies involving grid adaptation and state action to fight climate change

#### ---offer federal assistance and funds to any states seeking help on these initiatives

#### Counterplan solves slow growth --- creates 12 percent growth in eight years.

**Nikiforos 17** (Michalis Nikiforos – Levy Institute research scholar working in the State of the US and World Economies program, M.Sc. in economic theory from the Athens University of Economics and Business, M.Phil. and a Ph.D. in economics from The New School for Social Research. Marshall Steinbaum – Research Director and Fellow at the Roosevelt Institute. Gennaro Zezza – Associate Professor in Economics at Dipartimento di Economia e Giurisprudenza, Università di Cassino e del Lazio meridionale and Research Scholar at the Levy Economics Institute of Bard College. <KEN> "Modeling the Macroeconomic Effects of a Universal Basic Income," Roosevelt Institute. August 2017. <https://rooseveltinstitute.org/wp-content/uploads/2020/07/RI-Macroeconomic-Effects-of-UBI-201708.pdf>) \*brackets for clarity

How would a massive federal spending program like a universal basic income (UBI) affect the macroeconomy? We use the Levy Institute macroeconometric model to estimate the impact of three versions of such an unconditional cash assistance program over an eight-year time horizon. Overall, we find that the economy can not only withstand large increases in federal spending, but could also grow thanks to the stimulative effects of cash transfers on the economy.

We examine three versions of unconditional cash transfers: $1,000 a month to all adults, $500 a month to all adults, and a $250 a month child allowance. For each of the three versions, we model the macroeconomic effects of these transfers using two different financing plans - increasing the federal debt, or fully funding the increased spending with increased taxes on households - and compare the effects to the Levy model’s baseline growth rate forecast. Our findings include the following:

 For all three designs, enacting a UBI and paying for it by increasing the federal debt would grow the economy. Under the smallest spending scenario, $250 per month for each child, GDP is 0.79% larger than under the baseline forecast after eight years. According to the Levy Model, the largest cash program - $1,000 for all adults annually - expands the economy by 12.56% [percent] over the baseline after eight years. After eight years of enactment, the stimulative effects of the program dissipate and GDP growth returns to the baseline forecast, but the level of output remains permanently higher.

 When paying for the policy by increasing taxes on households, the Levy model forecasts no effect on the economy. In effect, it gives to households with one hand what it is takes away with the other.

 However, when the model is adapted to include distributional effects, the economy grows, even in the tax-financed scenarios. This occurs because the distributional model incorporates the idea that an extra dollar in the hands of lower income households leads to higher spending. In other words, the households that pay more in taxes than they receive in cash assistance have a low propensity to consume, and those that receive more in assistance than they pay in taxes have a high propensity to consume. Thus, even when the policy is tax- rather than debt-financed, there is an increase in output, employment, prices, and wages.

Levy’s Keynesian model incorporates a series of assumptions based on rigorous empirical studies of the micro and macro effects of unconditional cash transfers, taxation and government net spending and borrowing (see Marinescu (2017), Mason (2017), Coibion et al (2017), and Konczal and Steinbaum (2016)). Fundamentally, the larger the size of the UBI, the larger the increase in aggregate demand and thus the larger the resulting economy is. The individual macroeconomic indicators are (qualitatively) what one would predict given an increase in aggregate demand: in addition to the increase in output, employment, labor force participation, prices, and wages all go up as well. Even in a deficit-financed policy, an increase in the government’s liabilities is mitigated by the increase in aggregate demand.

#### Research and development solves better than antitrust.

**Sitaraman 20** (Ganesh Sitaraman – Chancellor Faculty Fellow and Professor of Law at Vanderbilt Law School and Director of its Program in Law and Government. <KEN> "The National Security Case for Breaking Up Big Tech," *Knight First Amendment Institute at Columbia University*. January 30, 2020. <https://knightcolumbia.org/content/the-national-security-case-for-breaking-up-big-tech>)

Some might argue that robotics, AI, and quantum computing are so resource-intensive that an ecosystem of smaller companies engaged in fierce competition would mean that no company would have the resources available to invest in those next-generation technologies. There are a few responses to this argument. First, it is not clear that breaking up and regulating big tech would prevent those firms from having the considerable resources to develop the technologies of the future. Facebook would still have billions of users, even without Instagram and WhatsApp, for example. Amazon’s platform would still have enormous market power.

Second, and more importantly, part of the answer is that the decision to break up and regulate tech companies should be accompanied by public investment in R&D. One of the primary arguments for the national champions view is that monopolists have the resources to be able to invest in innovation because they do not face competitive pressures. 65. Baker, supra note 58, at 578 (describing the Schumpeterian view and linking it to R&D capacity).But any system of innovation operates against a backdrop of laws and public policy. 66. Some scholars have suggested that resolution to the Schumpeter-Arrow debate depends on an industry-by-industry assessment. See, e.g., Mark A. Lemley, Industry-Specific Antitrust Policy for Innovation, 3 Colum. Bus. L. Rev. 637, 651–52 (2011). But it is not clear that industry-by-industry assessments on antitrust enforcement alone can resolve this debate. Industries operate under different policy background conditions — including, for example, intellectual property rules, industrial policy, and R&D funding—and it may be that the optimal path is for policymakers to revisit policy choices in multiple areas.The ability to capture the gains of innovation depends on intellectual property law. The possibility of winning government contracts for frontier projects that require innovation is determined by procurement policies. And, of course, an alternative to monopolist investment in R&D is public investment in R&D. These policy choices all shape the innovation ecosystem, and it is not at all obvious why society has to accept national champions instead of thinking about revising these laws and policies more broadly. Given the emphasis that proponents of national champions place on research and development, it is worth noting that historically, as Mariana Mazzucato has argued, government has been a significant driver of innovation through its research and development efforts. 67. Mariana Mazzucato, The Entrepreneurial State: Debunking Public vs. Private Sector Myths (2013).Today, one could easily imagine the government spending considerable sums of money on R&D in artificial intelligence, robotics, quantum computing, augmented and virtual reality, and other technological research.

Public investment in research has a variety of benefits. First, because it is not tied to the profit motive and business model of a single company, it covers a wider range of subjects, leading potentially to innovations that would otherwise go undiscovered. Public investment extends to basic research that does not have immediate or foreseeable commercial applications. It could also include research into areas that might challenge the incumbency and business models of existing companies.

#### Counterplan juices growth, productivity, and jobs.

**Johnson & Gruber 19** (Simon Johnson is the Ronald A. Kurtz (1954) Professor of Entrepreneurship at MIT and former chief economist at the International Monetary Fund. Jonathan Gruber is the Ford Professor of Economics at MIT. <KEN> “Chapter 7: Innovation for Growth,” in “Jump-Starting America: How Breakthrough Science Can Revive Economic Growth and the American Dream,” *PublicAffairs*. ISBN: 978-1-5417-6250-3)

FUNDING SCIENCE FOR GROWTH

The heart of our proposal for jump-starting America is a substantial federal investment in R&D. If we devote an additional half of one percentage point of GDP to research funding—roughly $100 billion per year—we would return public funding to its level in the 1980s. Based on history and available evidence, this investment would lead to a significant growth boost, arising from more invention and faster productivity growth.18

The evidence reviewed in Chapter 5 shows that past expansions of public R&D have been a cost-effective way to increase employment. On the high end, our own regression estimates of the impact of more university R&D funding on jobs suggest that university research spending raises employment at a cost of $28,000 per job, while the study of the New Zealand public R&D program increasing employment implies a cost per job of $29,000.19 On the lower end, the study of the Finnish Tekes program implies a cost per job of $8,100, while the study of military R&D in Europe suggests a cost per job created of only $2,100. This entire range is quite low, relative to what it costs to create jobs in other contexts. For example, existing estimates of the jobs created by stimulus spending in the Great Recession suggested a cost per job created of about $50,000.20

If we conservatively assume that expansions of research and development create one additional job per $25,000 in spending, then an investment of $100 billion per year would create four million good new jobs. This would be a major step toward addressing the shortfall in quality jobs in the United States.

Alternative calculations produce similar numbers. Orlando receives $1.4 billion in government funding for its computer simulation industry. Since 1980, if the East Orange County subdivision had grown at the same rate as the rest of the county, it would have had thirty-eight thousand new jobs. Instead, it added ninety-one thousand new jobs. If we divide the government funding by the number of extra jobs created in East Orange County relative to the rest of the county, we get an estimate of $26,770 per job.

This is just the tip of the iceberg. The really big potential gains come from being at the forefront of the next wave of global superstar technologies. No one knows exactly which technology will be the next blockbuster, but there are plenty of candidates. Being the first to develop radar, jet engines, and the internet was worth a huge amount to the United States in terms of good jobs created and stronger national security.

What we need is a portfolio of high-risk and capital-intensive research and development that can lead to broad-based economic growth by creating high-paying middle-class jobs. We should focus on funding science that looks likely to have a strong return in terms of creating sustainable growth into the future. And the possibilities are indeed endless. In Chapter 8, we highlight promising potential developments in sectors such as synthetic biology, alternative energy, and ocean exploration, but keep in mind these are just a few examples of what may be possible in the near future.

#### Microgrids solve grid

**Barrett 16** (J. Michael Barrett – Lexington Institute Adjunct Scholar, Director of Strategy for the White House Homeland Security Council, Intelligence Officer for the Office of the Secretary of Defense, and Senior Analyst for the Chairman of the Joint Chiefs of Staff, War on Terrorism Branch. He currently serves as the Director of the Center for Homeland Security & Resilience, a public policy think tank based in Annapolis. <KEN> “Connecting Microgrids with Public Private Partnerships to Meet Critical Needs,” *Lexington Institute*. September 2016. <https://www.lexingtoninstitute.org/wp-content/uploads/2016/09/Connecting-Microgrids-with-PPPs.pdf>)

THE WHAT AND WHY OF MICROGRIDS

Multiple converging characteristics are driving forward-looking military bases, industrial parks, universities, critical infrastructure owners/operators and other communities to invest in the emerging potential of efficient, environmentally beneficial, and secure microgrids.

As Patricia Hoffman, Assistant Secretary of Energy for Electricity Delivery and Energy Reliability, described in testimony to the House of Representatives, “Advanced distribution systems that use microgrids and other distribution control strategies to enhance operational response and system recovery will be crucial to next-generation electric distribution systems that support a 21st century economy and society.”1 A microgrid can take many different forms, but at its core it is best thought of as a self-contained electrical power system that includes localized power generation and distribution in order to maximize the connection between the end-user needs and the key operating characteristics of that specific microgrid.

For example, for some communities the decision to move to a microgrid is mostly about a focus on easily integrating alternative energies. For others, especially energy intensive commercial entities, the main driver is the desire for price stability amid a changing costbenefit equation, for they recognize that the national power grid requires some $2 trillion of upgrade costs over the next decade – costs that will be borne by the installed user base, and which therefore likely translates into significant and somewhat unpredictable cost growth.

At the same time, others desire more control over very precise voltage and qualityrelated characteristics that can be enabled by localized power generation using newer transmission and distribution control technologies the overall grid is still years away from implementing. Finally, users such as military bases and critical infrastructure owners/operators have security concerns, including cybersecurity risks, that drive demand for a more resilient power supply to ensure mission critical activities can continue without any risk of power interruption. Indeed, in the face of mounting physical security concerns, evolving weather patterns and complex cyber integration challenges, ensuring the continued availability of power, come what may, is perhaps the most significant consideration for national security entities.

#### CarbFix solves warming

**Perasso 18** (Valeria Perasso – Environmental Reporter @ BBC, citing international consortium of researchers led by the University of Iceland and Columbia University. <KEN> "Turning carbon dioxide into rock," *BBC News*. May 2018. <https://www.bbc.com/news/world-43789527>)

Hellisheidi is not just an accomplished provider of green energy. It is also the site for a scientific breakthrough; an experiment to capture carbon dioxide (CO2) and turn it into stone - forever.

Thus keeping this greenhouse gas out of the atmosphere and putting a dent in global warming.

"Mankind has been burning fossil fuels since the industrial revolution and we have already reached the tipping point for CO2 levels", says Dr Aradottir. "This is one of the solutions that can be applied to reverse that".

Called CarbFix, the project is pioneered by an international consortium led by Reykjavík Energy, the French National Centre for Scientific Research, the University of Iceland and Columbia University, with funding from the EU.

Since experiments began in 2014, it's been scaled up from a pilot project to a permanent solution, cleaning up a third of the plant's carbon emissions.

"More importantly, we are a testing ground for a method that can be applied elsewhere, be that a power plant, heavy industries or any other CO2 emitting source", says Dr Aradottir.

#### Solvency advocate for the last two planks is the aff internal link cards. Stopping preemption solves.

### 1NC – DoJ DA

#### DoJ is focusing resources on ransomware crimes

The Hill ‘21 (Maggie Miller, May 21, “Justice Department convenes task force to tackle wave of ransomware attacks”, https://thehill.com/policy/cybersecurity/549549-justice-department-convenes-task-force-to-tackle-wave-of-ransomware)

The Justice Department this week convened a new task force to address the mounting ransomware cyberattacks on critical U.S. organizations that have spiked during the COVID-19 pandemic. The Ransomware and Digital Extortion Task Force, first reported on Wednesday by The Wall Street Journal, will be made of officials from the agency’s National Security Division, Criminal Division, Civil Division, Executive Office of U.S. Attorneys and FBI. It will be charged with working to ensure the Justice Department prioritizes pursuing cases involving ransomware attacks by increasing training for employees, focusing on intelligence sharing across the agency, improving coordination and leveraging all investigative leads. The task force will also create and implement a strategy to combat the criminal enterprise involved in ransomware attacks along with strengthening public-private partnerships between the Justice Department and the private sector to address ransomware attacks and furthering collaboration with international partners. Acting Deputy Attorney General John Carlin announced the task force in a memo, obtained by The Hill, sent to task force members on Tuesday. Carlin wrote that the ransomware attacks, which involve attackers holding critical networks hostage and demanding payment, could have “devastating human and financial consequences.” “When criminals target critical infrastructure such as hospitals, utilities, and municipal networks, their activity jeopardizes the safety and health of Americans,” Carlin wrote. “The Task Force will bring all of the Department's resources to bear to bolster our all-tools approach and work with our partners here and abroad to combat the threat of ransomware and digital extortion, and to ensure that we hold those who participate in the propagation of these crimes responsible and accountable,” he added. The task force was convened following a year that saw a huge increase in ransomware attacks during the COVID-19 pandemic against groups including hospitals, schools and other critical organizations, with cyber criminals targeting vulnerable organizations to make money. The Justice Department has announced numerous cases targeting cyber criminals involved in carrying out ransomware attacks. These efforts included recently working with allied nations to disrupt the Emotet botnet, described as the “world’s most destructive malware,” issuing indictments against North Korean hackers involved in stealing billions of dollars in cryptocurrency, and bringing multiple other charges against hackers based in China, Russia and Iran. “Although the Department has taken significant steps to address cybercrime, it is imperative that we bring the full authorities and resources of the Department to bear to confront the many dimensions and root causes of this threat,” Carlin wrote.

#### Plan tradeoffs

**Frank, 1-5**-2021, "Managing Antitrust Risk in the Biden Administration," Fried Frank, https://www.lexology.com/library/detail.aspx?g=8f2eaf8e-db8e-47d5-80c5-c912e3042591)

Further, despite a record number of litigated cases, the budget at the antitrust agencies is insufficient to match the rhetoric of more enforcement. The DOJ had 25% fewer full-time employees in 2019 than it had 10 years earlier9 and the FTC recently imposed a hiring freeze. With limited resources, the agencies are forced to make important tradeoffs in deciding what matters to challenge, settle, or walk away from. Indeed, Commissioner Wilson reportedly voted against bringing a lawsuit to block CoStar's acquisition of RentPath, in part, because of limited FTC resources.10 Although the agencies will receive a modest budget increase for the current fiscal year,11 it is far short of what some think is needed.12 As antitrust enforcement has become a bipartisan issue, a significant increase in the antitrust agencies' budgets in the future is likely.

#### Ransomware targets CRBN materials

**Koblentz 20** – Associate Professor and Director of the Biodefense Graduate Program at the Schar School of Policy and Government at George Mason University (Gregory, (2020) Emerging Technologies and the Future of CBRN Terrorism, The Washington Quarterly, 43:2, 177-196, DOI: 10.1080/0163660X.2020.1770969) NAR

Cyberspace presents another CBRN-related threat: malware. There is a growing risk that non-state actors could use malicious software, or malware, to launch a cyberattack on a facility that produces or stores chemical, biological, radiological, or nuclear [CBRN] materials. These facilities are increasingly vulnerable to such attacks due to the widespread use of digital and automated industrial control systems and the connection of such systems to computer networks and the internet. As of 2014, there were 2 million industrial control systems connected to the internet—a number that has surely increased since then.23 In 2014, the Department of Homeland Security was notified of 245 breaches of cybersecurity systems associated with critical infrastructure in the United States, 10 percent of which were part of the nuclear or chemical industries.24 That same year, the industrial control system at a German iron plant was compromised by an unknown perpetrator, resulting in “massive damage” to the facility.25 TRITON, a new type of malware that was specifically designed to compromise the safety systems used in large industrial facilities, emerged in 2017.26 Several strains of ransomware, a type of malware used to hold infected computer systems hostage until the hackers are paid, that are specifically designed to target industrial control systems have been identified over the last two years.27 The capability of non-state actors to use sophisticated malware capable of conducting such attacks is growing, based in part on the reverse-engineering of advanced cyberweapons developed by states that have become public.28

#### Nuclear war

**Hayes 18** (Dr. Peter J. Hayes, Executive Director of the Nautilus Institute for Security and Sustainability, Ph.D. in Energy and Resources from the University of California-Berkeley, Professor of International Relations at RMIT University, “Non-State Terrorism and Inadvertent Nuclear War”, NAPSNet Special Reports, 1/18/2018, <https://nautilus.org/napsnet/napsnet-special-reports/non-state-terrorism-and-inadvertent-nuclear-war/>)

The critical issue is how a nuclear terrorist attack may “catalyze” inter-state nuclear war, especially the NC3 systems that inform and partly determine how leaders respond to nuclear threat. Current conditions in Northeast Asia suggest that multiple precursory conditions for nuclear terrorism already exist or exist in nascent form. In Japan, for example, low-level, individual, terroristic violence with nuclear materials, against nuclear facilities, is real. In all countries of the region, the risk of diversion of nuclear material is real, although the risk is likely higher due to volume and laxity of security in some countries of the region than in others. In all countries, the risk of an insider “sleeper” threat is real in security and nuclear agencies, and such insiders already operated in actual terrorist organizations. Insider corruption is also observable in nuclear fuel cycle agencies in all countries of the region. The threat of extortion to induce insider cooperation is also real in all countries. The possibility of a cult attempting to build and buy nuclear weapons is real and has already occurred in the region.[15] Cyber-terrorism against nuclear reactors is real and such attacks have already taken place in South Korea (although it remains difficult to attribute the source of the attacks with certainty). The stand-off ballistic and drone threat to nuclear weapons and fuel cycle facilities is real in the region, including from non-state actors, some of whom have already adopted and used such technology almost instantly from when it becomes accessible (for example, drones).[16]

Two other broad risk factors are also present in the region. The social and political conditions for extreme ethnic and xenophobic nationalism are emerging in China, Korea, Japan, and Russia. Although there has been no risk of attack on or loss of control over nuclear weapons since their removal from Japan in 1972 and from South Korea in 1991, this risk continues to exist in North Korea, China, and Russia, and to the extent that they are deployed on aircraft and ships of these and other nuclear weapons states (including submarines) deployed in the region’s high seas, also outside their territorial borders.

The most conducive circumstance for catalysis to occur due to a nuclear terrorist attack might involve the following nexi of timing and conditions:

1. Low-level, tactical, or random individual terrorist attacks for whatever reasons, even assassination of national leaders, up to and including dirty radiological bomb attacks, that overlap with inter-state crisis dynamics in ways that affect state decisions to threaten with or to use nuclear weapons. This might be undertaken by an opportunist nuclear terrorist entity in search of rapid and high political impact.
2. Attacks on major national or international events in each country to maximize terror and to de-legitimate national leaders and whole governments. In Japan, for example, more than ten heads of state and senior ministerial international meetings are held each year. For the strategic nuclear terrorist, patiently acquiring higher level nuclear threat capabilities for such attacks and then staging them to maximum effect could accrue strategic gains.
3. Attacks or threatened attacks, including deception and disguised attacks, will have maximum leverage when nuclear-armed states are near or on the brink of war or during a national crisis (such as Fukushima), when intelligence agencies, national leaders, facility operators, surveillance and policing agencies, and first responders are already maximally committed and over-extended.

At this point, we note an important caveat to the original concept of catalytic nuclear war as it might pertain to nuclear terrorist threats or attacks. Although an attack might be disguised so that it is attributed to a nuclear-armed state, or a ruse might be undertaken to threaten such attacks by deception, in reality a catalytic strike by a nuclear weapons state in conditions of mutual vulnerability to nuclear retaliation for such a strike from other nuclear armed states would be highly irrational.

Accordingly, the effect of nuclear terrorism involving a nuclear detonation or major radiological release may not of itself be *catalytic* of *nuclear* war—at least not intentionally–because it will not lead directly to the destruction of a targeted nuclear-armed state. Rather, it may be catalytic of non-nuclear war between states, especially if the non-state actor turns out to be aligned with or sponsored by a state (in many Japanese minds, the natural candidate for the perpetrator of such an attack is the pro-North Korean General Association of Korean Residents, often called Chosen Soren, which represents many of the otherwise stateless Koreans who were born and live in Japan) and a further sequence of coincident events is necessary to drive escalation to the point of nuclear first use by a state. Also, the catalyst—the non-state actor–is almost assured of discovery and destruction either during the attack itself (if it takes the form of a nuclear suicide attack then self-immolation is assured) or as a result of a search-and-destroy campaign from the targeted state (unless the targeted government is annihilated by the initial terrorist nuclear attack).

It follows that the effects of a non-state nuclear attack may be characterized better as a *trigger* effect, bringing about a *cascade* of nuclear use decisions within NC3 systems that shift each state increasingly away from nuclear non-use and increasingly towards nuclear use by releasing negative controls and enhancing positive controls in multiple action-reaction escalation spirals (depending on how many nuclear armed states are party to an inter-state conflict that is already underway at the time of the non-state nuclear attack); and/or by inducing concatenating nuclear attacks across geographically proximate nuclear weapons forces of states already caught in the crossfire of nuclear threat or attacks of their own making before a nuclear terrorist attack.[17]

### 1NC – Security K

#### Securitization of threats ensures a state *permanent war* and biopolitical management

Morrissey 11 (John Morrissey, Department of Geography, National University of Ireland, “Liberal Lawfare and Biopolitics: US Juridical Warfare in the War on Terror”. Geopolitics, 16(2), 280–305, 2011, doi:10.1080/14650045.2010.538872)

A bigger question, of course, is what the US military practices of lawfare and juridical securitization say about our contemporary moment. Are they essentially ‘exceptional’ in character, prompted by the so-called exceptional character of global terrorism today? Are they therefore enacted in ‘spaces of exceptions’ or are they, in fact, simply contemporary examples of Foucault’s ‘spaces of security’ that are neither exceptional nor indeed a departure from, or perversion of, liberal democracy? As Mark Neocleous so aptly puts it, has the “liberal project of ‘liberty”’ not always been, in fact, a “project of security”?116 This ‘project of security’ has long invoked a powerful political dispositif of ‘executive powers’, typically registered as ‘emergency powers’, but, as Neocleous makes clear, of the permanent kind.117 For Neocleous, the pursuit of ‘security’ – and more specifically ‘capitalist security’ – marked the very emergence of liberal democracies, and continues to frame our contemporary world. In the West at least, that world may be endlessly registered as a liberal democracy defined by the ‘rule of law’, but, as Neocleous reminds us, the assumption that the law, decoupled from politics, acts as the ultimate safeguard of democracy is simply false – a key point affirmed by considering the US military’s extensive waging of liberal lawfare. As David Kennedy observes, the military lawyer who “carries the briefcase of rules and restrictions” has long been replaced by the lawyer who “participate[s] in discussions of strategy and tactics”.118

The US military’s liberal lawfare reveals how the rule of law is simply another securitization tactic in liberalism’s ‘pursuit of security’; a pursuit that paradoxically eliminates fundamental rights and freedoms in the ‘name of security’.119 This is a ‘liberalism’ defined by what Michael Dillon and Julian Reid see as a commitment to waging ‘biopolitical war’ for the securitization of life – ‘killing to make live’.120 And for Mark Neocleous, (neo)liberalism’s fetishisation of ‘security’ – as both a discourse and a technique of government – has resulted in a world defined by anti-democratic technologies of power.121 In the case of the US military’s forward deployment on the frontiers of the war on terror – and its juridical tactics to secure biopolitical power thereat – this has been made possible by constant reference to a neoliberal ‘project of security’ registered in a language of ‘endless emergency’ to ‘secure’ the geopolitical and geoeconomic goals of US foreign policy.122 The US military’s continuous and indeed growing military footprint in the Middle East and elsewhere can be read as a ‘permanent emergency’,123 the new ‘normal’ in which geopolitical military interventionism and its concomitant biopolitical technologies of power are necessitated by the perennial political economic ‘need’ to securitize volatility and threat.

#### The alternative is to *dismantle security*

Calkivik 10 (Emine Asi Calkivik, Ph.D. in Political Science at the University of Minnesota. Currently, faculty member of the Department of Humanities and Social Sciences at Istanbul Technical University, “Dismantling Security”, Dissertation submitted for the completion of a Doctor of Philosophy, October 2010, https://conservancy.umn.edu/bitstream/handle/11299/99479/Calkivik\_umn\_0130E\_11576.pdf?sequence=1&isAllowed=y)

After making these deconstructive moves on the terrain of the empire of security, in the final chapter, I turned to a discussion of what a politics beyond politics of security would entail, what ethical and political possibilities open up when insecurity is embraced as an inescapable condition. What happens when thought of politics starts at the limits of security? To answer this question, I inquired into three possible moves beyond politics of security. One of these three moves, I suggested, passes through de-centering the sovereign subject of security by exposing the Otherness constitutive of subjectivity as such. Shattering the illusion of a sovereign and secure self opens the way to formulate ethical responsibility on the premise of the radical interdependence inscribed at the heart of being. It recasts politics as a way of being in the world beyond a techno-politics of life.

The second move beyond a politics of security that I discussed centered on the works of Jacques Rancière, where politics is conceptualized as the overturning of the ordered space of security by staging political subjectivities in excess of the secure and functional order. Deploying the distinction that Rancière makes between “police” (logic of consensus) and “politics” (logic of dissensus), I suggested that, on this account, a politics beyond disrupts the reduction of politics to the management of the given and the securing of the proper distribution of identities, space, and time.

I elaborated the third and final move beyond politics of security by visiting Jacques Derrida’s conception of political time as aporetic and his account of the future beyond representation. Such a conception of political time inscribes anxiety that issues from the absence of secure grounds as the condition of possibility of politics. In contrast to politics of security that annihilates political time as possibility by legislating the future, I argued, Derrida’s thinking on political time allows for a form of writing the future beyond security.

My investigation into alternative conceptions of political subjectivity beyond security hopes to serve as an opening that calls for further inquiry into other possibilities, other conceptions of politics that would allow approaching global political life with an idiom detoxified from security. Politics beyond politics of security can be a point of reflection in the light of many other questions that could be raised. For instance, if security reduces the body of the political community to a species body, what alternative forms of thinking about the body are available that could challenge this assertion? How would different conceptions of the body beyond biological thinking enable different forms of politics beyond bio-politics of security? Or should political thought abandon the thought of the body altogether? Does politics beyond politics of security call for a new body or a no body?

## Adv 1

### 1NC – Private Sector Fails

#### The private sector can’t innovate anything.

**Mazzucato 15** (Mariana Mazzucato –RM Phillips Chair in the Economics of Innovation at the Science Policy Research Unit (SPRU) at the University of Sussex. Previously she has held academic positions at the University of Denver, London Business School, Open University, and Bocconi University. <KEN> “Chapter 1: From Crisis Ideology to the Division of Innovative Labour,” in “The Entrepreneurial State: Debunking Public vs. Private Sector Myths,” *PublicAffairs*. Revised Edition. ISBN 978-1-61039-614-1)

THE BUMPY RISK LANDSCAPE

As will be explained in more detail in the next chapter, innovation economists from the ‘evolutionary’ tradition (Nelson and Winter 1982) have argued that ‘systems’ of innovation are needed so that new knowledge and innovation can diffuse throughout the economy, and that systems of innovation (sectoral, regional, national) require the presence of dynamic links between the different actors (firms, financial institutions, research/education, public sector funds, intermediary institutions), as well as horizontal links within organizations and institutions (Lundvall 1992; Freeman 1995). What has been ignored even in this debate, however, is the exact role that each actor realistically plays in the ‘bumpy’ and complex risk landscape. Many errors of current innovation policy are due to placing actors in the wrong part of this landscape (both in time and space). For example, it is naïve to expect venture capital to lead in the early and most risky stage of any new economic sector today (such as clean technology). In biotechnology, nanotechnology and the Internet, venture capital arrived 15–20 years after the most important investments were made by public sector funds.

In fact, history shows that those areas of the risk landscape (within sectors at any point in time, or at the start of new sectors) that are defined by high capital intensity and high technological and market risk tend to be avoided by the private sector, and have required great amounts of public sector funding (of different types), as well as public sector vision and leadership, to get them off the ground. The State has been behind most technological revolutions and periods of long-run growth. This is why an ‘entrepreneurial State’ is needed to engage in risk taking and the creation of a new vision, rather than just fixing market failures.

### 1NC – Econ Defense

#### Collapse won’t cause war – studies prove

Clary 15 (Christopher Clary, former International Affairs Fellow in India at the Council on Foreign Relations, Postdoctoral Fellow at the Watson Institute at Brown University, Adjunct Staff Member @ RAND Corporation, Security Studies Program @ MIT, country director for South Asian affairs in the Office of the Secretary of Defense, former Research Fellow @ the Harvard Kennedy School's Belfer Center for Science and International Affairs, former research associate in the Department of National Security Affairs at the Naval Postgraduate School, BA from Wichita State University and an MA from the U.S. Naval Postgraduate School, 2015, “Economic Stress and International Cooperation: Evidence from International Rivalries,” Massachusetts Institute of Technology Political Science Department Research Paper No. 2015-­‐8, “Economic Stress and International Cooperation: Evidence from International Rivalries,” http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2597712)

Do economic downturns generate pressure for diversionary conflict? Or might downturns encourage austerity and economizing behavior in foreign policy? This paper provides new evidence that economic stress is associated with conciliatory policies between strategic rivals. For states that view each other as military threats, the biggest step possible toward bilateral cooperation is to terminate the rivalry by taking political steps to manage the competition. Drawing on data from 109 distinct rival dyads since 1950, 67 of which terminated, the evidence suggests rivalries were approximately twice as likely to terminate during economic downturns than they were during periods of economic normalcy. This is true controlling for all of the main alternative explanations for peaceful relations between foes (democratic status, nuclear weapons possession, capability imbalance, common enemies, and international systemic changes), as well as many other possible confounding variables. This research questions existing theories claiming that economic downturns are associated with diversionary war, and instead argues that in certain circumstances peace may result from economic troubles. Defining and Measuring Rivalry and Rivalry Termination I define a rivalry as the perception by national elites of two states that the other state possesses conflicting interests and presents a military threat of sufficient severity that future military conflict is likely. Rivalry termination is the transition from a state of rivalry to one where conflicts of interest are not viewed as being so severe as to provoke interstate conflict and/or where a mutual recognition of the imbalance in military capabilities makes conflict-causing bargaining failures unlikely. In other words, rivalries terminate when the elites assess that the risks of military conflict between rivals has been reduced dramatically. This definition draws on a growing quantitative literature most closely associated with the research programs of William Thompson, J. Joseph Hewitt, and James P. Klein, Gary Goertz, and Paul F. Diehl.1 My definition conforms to that of William Thompson. In work with Karen Rasler, they define rivalries as situations in which “[b]oth actors view each other as a significant politicalmilitary threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry.5 Why Might Economic Crisis Cause Rivalry Termination? Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to downplay the seriousness of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to consider threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international economic cooperation. Leaders seek foreign aid, enhanced trade, and increased investment from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as capable of resolving economic difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. Collectively, these mechanisms make it much more likely that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this causal logic in greater detail, while also providing historical examples that these mechanisms recur in practice.

### 1NC – War Offense

#### Economic growth causes war, collapse has no impact

Boehmer 10 (Charles R., Associate Professor of Political Science at the University of Texas El Paso, “Economic Growth and violent international conflict: 1875-1999,” Defence and Peace Economics, Volume 21, Issue 3, June 2010)

The theory set forth earlier theorizes that economic growth increases perceptions of state strength, increasing the likelihood of violent interstate conflicts. Economic growth appears to increase the resolve of leaders to stand against challenges and the willingness to escalate disputes. A non-random pattern exists where higher rates of GDP growth over multiple years are positively and significantly related to the most severe international conflicts, whereas this is not true for overall conflict initiations. Moreover, growth of military expenditures, as a measure of the war chest proposition, does not offer any explanation for violent interstate conflicts. This is not to say that growth of military expenditures never has any effect on the occurrence of war, although such a link is not generally true in the aggregate using a large sample of states. In comparison, higher rates of economic growth are significantly related to violent interstate conflicts in the aggregate. States with growing economies are more apt to reciprocate military challenges by other states and become involved in violent interstate conflicts. The results also show that theories from the Crisis-Scarcity perspective lack explanatory power linking GDP growth rates to war at the state level of analysis. This is not to say that such theories completely lack explanatory power in general, but more particularly that they cannot directly link economic growth rates to state behavior in violent interstate conflicts. In contrast, theories of diversionary conflict may well hold some explanatory power, although not regarding GDP growth in a general test of states from all regions of the world across time. Perhaps diversionary theory better explains state behaviors short of war, where the costs of externalizing domestic tensions do not become too costly, or in relation to the foreign policies of particular countries. In many circumstances, engaging in a war to divert attention away from domestic conditions would seemingly exacerbate domestic crisis conditions unless the chances of victory were practically assured. Nonetheless, this study does show that domestic conflict is associated with interstate conflict. If diversionary conflict theory has any traction as an economic explanation of violent interstate conflicts, it may require the study of other explanatory variables besides overall GDP growth rates, such as unemployment or inflation rates. The contribution of this article has been to examine propositions about economic growth in a global study. Most existing studies on this topic focus on only the United States, samples of countries that are more developed on average (due to data availability in the past), or are based on historical information and not economic GDP data. While I have shown that there is no strong evidence linking military expenditures to violent interstate conflicts at the state level of analysis, much of the remaining Growth-as-Catalyst perspective is grounded in propositions that are not directly germane to questions about state conflict behavior, such as those linking state behavior to long-cycles, or those that remain at the systemic level. What answer remains linking economic growth to war once we eliminate military expenditures as an explanation? Considering that the concept of foreign policy mood is difficult to identify and measure, and that the bulk of the literature relies solely on the American historical experience, I do not rely on that concept. It is still possible that such moods affect some decision-makers. Instead, similar to Blainey, I find that economic growth, when sustained over a stretch of years, has its strongest effect on states once they find themselves in an international crisis. The results of this study suggest that states such as China, which have a higher level of opportunity to become involved in violent interstate conflicts due to their capabilities, geographic location, history of conflict, and so on, should also have a higher willingness to fight after enjoying multiple years of recent economic growth. One does not have to assume that an aggressive China will emerge from growth. If conflicts do present themselves, then China may be more likely to escalate a war given its recent national performance.

### 1NC – Dedev

#### The economy is in *ecological overshoot* – best modelling on proves decoupling and green reformism fail. *Only* a crisis spurs a transition to a sustainable economy and averts extinction.

Rees 20 (William Rees, PhD in Population Ecology from the University of Toronto, Professor Emeritus and former Director of the University of British Columbia’s School of Community and Regional Planning in Vancouver, Canada, “Ecological economics for humanity’s plague phase”, Ecological Economics, 169, 2020, 106519. doi:10.1016/j.ecolecon.2019.106519)

1. Introduction: establishing context

This paper explores underused theory for ecological economics and suggests how the discipline might contribute more effectively to human well-being in coming decades. There is no doubt that new economic thinking is required. At the end of the second decade of the 21st Century scientists—if not politicians—have declared anthropogenic climate change an existential threat (Spratt and Dunlop, 2017, 2019; IPCC, 2018). Formal climate agreements have had little effect and “….even if the [2015] Paris Accord target of a 1.5 °C–2.0 °C rise in temperature is met, we cannot exclude the risk that a cascade of feedbacks could push the Earth System irreversibly onto a ‘Hothouse Earth’ pathway” (Steffen et al., 2018, p. 3). Meanwhile, a million non-human species face extinction from the human-induced decline of natural systems (IPBES, 2019); the pollution of air, land and oceans continues unabated; soil erosion and land degradation directly threaten two-fifths of the human population (Watts, 2018), etc., etc. On the socio-political front, we are witnessing growing civil discontent with wide-spread political corruption and increasingly egregious income disparity, elevated global tension over diminishing water and energy resources, and continuous energy-related war(s) in the Middle East (Castelo, 2018; Klare, 2014). No one should be surprised at the accompanying surge in international political and environmental refugees.

What all these trends have in common is a clear connection to the material economy and related economic processes. In this age of financialization we need reminding that, to the majority of people, the ‘economy’ still refers mainly to the production, distribution and consumption of physical goods. It is the (un)economic over-exploitation of biophysical systems that results in pollution (including GHG emissions/ climate change), fisheries collapses, land degradation, etc. A cascade of data shows that the human enterprise is in ecological overshoot, consuming nature’s goods and services faster than ecosystems can regenerate and dumping (often toxic) wastes beyond nature’s processing/ recycling capacity (Wackernagel et al., 2002; IPBES, 2019; Pearce, 2019). In short, we are currently ‘financing’ economic growth by liquidating the biophysical systems upon which humanity ultimately depends. There are too many people competing for the same diminishing quantity of essential resources.

Meanwhile, the benefits of growth are not equitably distributed; even in high-income capitalist economies the income gap is expanding. Neo-liberal economics scorns regulation and considers markets the arbiter of social value. In these circumstances, interest bearing money, mergers and acquisitions, regressive taxation and regulatory corruption ensure that an increasing proportion of national wealth flows to the already wealthy (Kennedy, 1995). In the United States, the rich-poor income gap has widened for several decades as neoliberal policies have taken hold. Since 1989 the share of national income going to wealthiest 1 % has almost doubled while the share going to families in poverty has stagnated. By 2017, the average annual income of the wealthiest 1 % averaged 39 times that of the bottom 90 % and “an estimated 43.5 percent of the total U.S. population (140 million people) [were] either poor or low-income” (Inequality.org, 2019).

These data are extreme for an OECD country, but egregious inequality is a global phenomenon. Even quasi-capitalist China recently passed the US to join the club of the world’s most unequal nations (JainChandra, 2018).1 India may not be far behind. Our leaders need reminding that income inequality anywhere is negatively correlated with various measures of population health (Wilkinson and Pickett, 2010); extreme inequality foments discontent and is a precursor to civil disorder.

* 1. The economics of planetary unraveling

A story is a choreographed hallucination that temporarily displaces reality…. By telling stories, early humans could obscure, revise and mythologize truth; they could dwell in alternative worlds of their own making (Jabr, 2019, p. 40).

Modern humans easily match their Paleolithic ancestors as storytellers. The economic paradigms that run our lives are made-up stories, complex social constructs conceived in language and massaged into accepted theory through academic debate, social discourse and practical experience. However, just because some economic model has become received wisdom does not mean it accurately represent either actual human behavior or that of the ecological systems with which the economy interacts in the real world. A serious mismatch can be problematic.

In fact, as a “choreographed hallucination”, the neoliberal paradigm contributes significantly to planetary unraveling. Neoliberal thinking treats the economy and the ecosphere as separate independent systems and essentially ignores the latter. The foundational model in mainstream analysis is the circular flow of exchange value (money) from households to firms (expenditures on goods, services and investments) and back again (wages, salaries, and dividends), in which each “selfrenewing, self-feeding” cycle can be larger than the last (see Heilbroner and Thurow, 1981, p. 127). Thus, the goal of mainstream economists and most governments since the 1950s has been to maximize the growth of this cycle of production and consumption. True believers have such overweening confidence in human technological ingenuity that so-called ‘factors of production’ — manufactured capital, labor, knowledge, natural capital (land and natural resources/processes) — are considered inter-substitutable. In effect, the world is in thrall to a mythic construct of perpetual material growth abetted by technological progress in which even “exhaustible resources do not pose a fundamental problem” (Dasgupta and Heal., 1979, p. 205). (Many production functions omit resources altogether.) What could possibly go wrong?

Plenty, as it turns out. Ecosystems, social systems, and real economies are actually tightly connected, complex dynamic systems characterized by opaque multi-layered relationships, temporal lags and behavioral thresholds. Because they ignore this connectivity, interdependence and complexity, simplistic quasi-mechanical economic models are unable to capture the complex space, time and behavioral dynamics of real-world natural and social systems including even the economy (see Christensen, 1991). Dysfunction is inevitable.

1.2. In search of economic realism

Ecological economics (ecol-econ) was framed as a more realistic alternative to neoliberal economics (Costanza, 1991; Daly and Farley, 2010). Ecol-econ sees the economy as a fully contained, dependent, prone-to-grow subsystem of the non-growing ecosphere. Ecological economists recognize that: a) the economy is dynamically connected to the rest of nature through resource extraction/consumption and waste production and; b) all economically-relevant energy and material transformations are subject to biophysical laws, particularly the laws of thermodynamics (Georgescu-Roegen, 1971; Martinez-Alier, 1991). Thus, the most important economic flows are the unidirectional irreversible throughputs of energy and material rather than the self-inflating circular flows of abstract money value.

Significantly, humanity’s growth-driven ecological predicament is generally predictable from the assumptions of ecological economics (which tends to validate the assumptions). Ecol-econ therefore shifts the developmental policy emphasis from promoting growth and efficiency toward enhancing well-being and social equality. Emphasizing qualitative improvement (getting better) over quantitative increase (getting bigger) essentially negates the neoliberal vision — changing the story changes everything.

1. Losing our grip on reality (and what’s needed to get it back)

Or maybe not. In the half-century since the theoretical foundations of ecological economics were laid down, and after more than three decades of sustainable development rhetoric, expansionist neoliberal thinking has colonized virtually the entire world. Ecological economics has had little discernible effect.

There are many reasons for this failure including major weaknesses in disciplinary development. Paradoxically, ecol-econ does not adequately reflect key aspects of human evolution and behavioral ecology. The facts are that H. sapiens is an evolved species; human resourcegetting and allocation (i.e., ‘economic’) behavior has been shaped, in part, by natural selection. These facts should help shape ecological economics.

* 1. Competitive displacement or ‘the demise of nature’

Intra-and inter-specific competition for scarce habitat and food is a powerful selection pressure in the evolution of most life forms.2 Two innate tendencies that humans share with other species are predispositions to expand to occupy all accessible habitats and to use all available resources.3 In fact, H. sapiens is classified as a reproductive Kstrategist because human populations historically tended to press up against the carrying capacities (‘K’) of their habitats. K-strategists are generally long-lived, slowly reproducing species with extensive parental care and relatively high rates of offspring survival. Thus their populations grow until their habitats ‘push back’—negative feedback may include spatial crowding, disease, food shortages, ecosystems degradation, etc.4 Humans are archetypal K-strategists, but have a competitive ‘leg-up’ in the game because technological advances tend to increase resource availability and therefore short-term carrying capacity.

Humanity’s competitive superiority has been well documented. In a comparative study of ecologically similar species, Fowler and Hobbs (2003) test (and reject) the hypothesis that contemporary humans fall “within the normal range of natural variation observed among species for a variety of ecologically relevant measures” (p. 2579). They found that, in 22 of 31 tests, humans lie outside the 99 % confidence limits for variation among other species and that our technology-aided demands on exploited ecosystems often dwarf those of competing species. For example, the human population is two orders of magnitude greater than the upper 95 % confidence limits of populations of 63 similar-sized mammal species; human aggregate consumption of biomass from the biosphere exceeds the upper 95 % confidence limits for biomass ingestion by 95 nonhuman mammal species by two orders of magnitude and; humanity’s geographic range exceeds the upper 95 % confidence limit for the ranges of 523 other mammal species by a factor of ten.

As human populations expand they necessarily appropriate ecological space required by other species. Human ‘competitive displacement’ of non-human organisms from their habitats and food sources is now the greatest contributing factor to plunging biodiversity (Pimm and Raven, 2000; Smil, 2011, 2013). Consider that with only 0.01 % of total Earthly biomass, H. sapiens’ expansion has eliminated 83 % of wild animal and 50 % of natural plant biomass. From a fraction of 1 % ten millennia ago, humans now constitute 36 %, and our domestic livestock another 60 %, of the planet’s much expanded mammalian biomass compared to only 4 % for all wild species combined. Similarly, domestic poultry now comprise 70 % of Earth’s remaining avian biomass (data from Bar-On et al., 2018; see also Smil, 2011). Meanwhile, commercial fishing depletes the oceans at the expense of rapidly declining marine mammals and birds. Seabirds are the most threatened bird group, with a 70 % community-level population decline between 1950 and 2010 (Grémillet et al., 2018).

Overall, the World Wildlife Fund reports an “astonishing” 60 % decline in the populations of mammals, birds, fish, reptiles, and amphibians in just over 40 years (WWF, 2018). Using very conservative assumptions, Ceballos et al. (2015) found that the average rate of vertebrate extinctions over the last century is up to 100 times higher than the (mainly pre-industrial) background rate. Even insects are experiencing “Armageddon” (and systemically-linked insect-dependent birds, mammals and amphibians are not far behind) (Lister and Garcia, 2018; Hallmann et al., 2017).

There are several lessons here for ecological economists: 1) The data show what should be self-evident on a finite planet—humanity’s appropriation of an ever-greater proportion of the energy and material flows through the ecosphere can have only dire impacts on competing life-forms. Contrary to politicians’ assertions that economic growth can be compatible with conserving ‘the environment’, a core principle of ecological economics should be that, beyond a certain scale (long-since exceeded), there is an absolute conflict between the economy and ecosystem integrity. (This consideration is not even visible to neoliberal models); 2) While mainstream economists see ‘the economy’ and ‘the environment’ as virtually separate systems (and believe the former is further decoupling from the latter) ecological economists can assert that H. oeconomicus is the most ecologically significant macro-consumer organism (both herbivore and carnivore) in all the major terrestrial and most marine ecosystems on Earth; 3) Finally, the data highlight a double-barrelled behavioral challenge to sustainability—H. sapiens’ genetic predisposition to expand is being reinforced by a socially constructed cultural meme, the neoliberal growth ethic, as most dramatically expressed through global capitalism. Nature and nurture, the latter abetted by technology, conspire against human society living within safe planetary boundaries. The central question is how can ecolecon contribute to neutralizing this potentially fatal confluence? Subsidiary questions (admittedly anthropocentric) are, what level of biodiversity is necessary, and what percentage of ecosystem area should be left unexploited (or restored), to ensure the continued functioning of essential life-support services as necessary for human survival?

* + 1. Just what is nature worth?

These questions are not likely to be satisfactorily answered by ‘putting a price on nature’ (Spangenberg and Settele, 2010; Rees, 2006). Ecol-econ has dedicated considerable attention to the commoditization of so-called natural capital on grounds that knowing its money value should discourage depletion. This effort has done little to retard degradation, in part because monetization is a relapse into neoliberal market thinking, displaces other approaches and leaves no room for a fall-back position. A major problem is that many species have no market value or valid shadow price—their contributions, if any, to ecointegrity are simply unknowable until they disappear. Similarly, various life-support services may be transparent to detection, rendering monetary valuation impossible (Vatn and Bromley, 1994).

These technical limitations alone can invalidate cost-benefit analysis—undervalued natural capital gives way to competing profitable development. Ecological economists must therefore accept that conventional economic logic is an unreliable ally in protecting nature. Mainstream valuation can never fully capture the ultimate worth of most species or so-called ecosystems services. In short:

…to the dismay of all those conservationists who have joined the valuation bandwagon in the hope it would play a preservationist tune, pure economic reasoning generally resonates more with the prevailing symphony of destruction […] Absent a crisis, the perceived value of biodiversity is likely always to be less than the measurable value of development. [In the circumstances,] the valuation exercise becomes a mere formality that turns against biodiversity by rationalizing its destruction (Rees, 2006).

If it is theoretically impossible to monetize life-forms and eco-processes, then ecological economists must devise and champion some other approach to valuing life. We need “value articulating processes which involve open deliberative judgment rather than instantaneously stated preferences, concealed expert opinion and global cost-benefit analysis” (Spash, 2008).

2.2. H. sapiens as maximum power archetype—accelerating eco-destruction

We use 30 percent of all the energy… That isn’t bad; that is good. That means we are the richest, strongest people in the world and that we have the highest standard of living in the world. That is why we need so much energy, and may it always be that way (US President Richard Nixon, November 1973, p. 980).

Ecological economists should be more creative in exploring the role of energy in both human evolution and economic progress. Physicist Ludwig Boltzmann (the father of statistical thermodynamics) famously speculated as early as 1886 that the Darwinian struggle for existence is really a competition for available energy. Subsequently, ecologists Alfred Lotka (1922) and later Howard Odum formulated what is now known as the ‘maximum power principle’: Successful systems are those that evolve in ways that maximize their use of available energy per unit time in the performance of useful work (growth, self-maintenance and reproduction) (see Hall, 1995). In the Anthropocene, no other species comes close to challenging humanity’s energy hegemony. As President Nixon implicitly understood, ‘maximum power’ is a fundamental organizing force in both ecosystems and socioeconomic systems.

That said, humanity’s power supremacy had a long gestation period. Anatomically modern humans have existed for about 200,000 years but it wasn’t until we committed to fossil-fuels only 200 years ago that we came fully to exercise our ‘maximum power’ muscle. The 19th Century shift to coal, oil and natural gas marked humanity’s fateful transition from mainly endosomatic or ‘within body’ renewable energy (animal and human labor, including slavery), to dependence on an entirely exosomatic but depletable energy source (buried stocks of stored ancient solar energy). Modern society was birthed by, and remains precariously balanced on, a gusher of petroleum.5

Contemporary analysts rarely acknowledge what a uniquely remarkable transition this has been. For most of humanity’s at least 200,000 year history, population growth was negligible and attributable mainly to expansion out of Africa during the past 60 millennia. Even with agriculture and the boost in food production 10,000 years ago, it took 99.9 % of human history for the population to top one billion early in the early 1800s.

Then, in just 200 years—1/1000th as much time required to reach the first billion—the population ballooned over 7-fold to 7.4 billion by 2016. The principal enabler was the 1300-fold increase in global fossil energy use that energized industrialization between1800 and 2016.6 Fossil power facilitated a 100-fold increase in real global GDP and a factor 13 (rising to 25-fold in the richest countries) surge in average per capita incomes (Roser, 2019). In short, fossil energy, along with access to the land and resources of the ‘new-world’ and improving population health, suppressed natural negative feedback (e.g., disease, food/land/ resource shortages) and freed H. sapiens to express its innate capacity to expand exponentially (sometimes super-exponentially; Fig. 1).

Of course, it is these parallel (and on-going) increases in energy supply, population, resource consumption and waste production that are driving climate change and the precipitous degradation of the ecosphere. And ‘precipitous’ is precisely the right word. It is a quirk of exponential growth that half the fossil energy ever used (and half the fossil CO2 ever produced), has been burned (emitted) in just the past 35 years!7 (The same for many other industrially important minerals and metals and waste generation/pollution.) During the 20th Century, humanity’s ‘maximum power’ leverage elevated our species to superiority not only as the dominant ecological entity on Earth but also as the major geological force changing the face of the planet. Ironically, maximum power success may be our downfall. The economics facilitating this rise to power dominance ignores the biophysical laws governing every energy and material transformation!

2.3. Raising humanity far-from-equilibrium, disordering the ecosphere)

Every process, event, happening—call it what you will; in a word, everything that is going on in Nature means an increase of the entropy of the part of the world where it is going on (Schrödinger, 1945)

All energy and material transformations are subject to the second law of thermodynamics, the entropy law. The second law dictates that any spontaneous change in an isolated system—a system that can exchange neither energy nor material with its environment—increases the system’s entropy (where ‘entropy’ is a measure of disorder or randomness). Each successive change in an isolated system creates greater disorder; concentrations disperse, gradients disappear and energy dissipates. In simple language, the second law states that things naturally run down, wear out and crumble away. Eventually, “a permanent state is reached, in which no observable events occur” (Schrödinger, 1945). This is a state of local ‘thermodynamic equilibrium’, or maximum entropy, in which no further change is possible.

Of course, many real-world systems from single-celled amoebae to the entire ecosphere are neither crumbling nor slipping toward equilibrium; in fact, all living systems persist in a state of thermodynamic disequilibrium. The ecosphere, for example, is a self-organizing system of mind-numbing complexity and multi-layered structure comprising steep material gradients, millions of distinct species, thousands of ecosystems and incalculable accumulations of energy-rich biomass. Moreover, over billions of years of evolution, on average, all these qualities have been increasing—i.e., the ecosphere has been moving ever further from equilibrium. Indeed, distance from equilibrium may well be the measure of life: it is “…an essential parameter in describing nature, much like temperature is in standard equilibrium thermodynamics” (Prigogine, 1997).

While living things seem to violate the second law, they are actually subject to the same inexorable processes of entropic decay as everything else. However, because they are open rather than isolated systems, organisms, ecosystems (and economies) are able to extract energy and concentrated matter (‘negentropy’) from their ‘environments’ which they use to maintain themselves, grow and reproduce; they simultaneously inject resultant waste heat and degraded materials (entropy) back into their surroundings.8 Because living systems survive by continuously degrading and dissipating low entropy energy and matter they are called ‘dissipative structures’ (Prigogine, 1997).

Nicholas Georgescu-Roegen was among the first economists to understand (and be rejected for understanding) the implications of the second law for the economy. He observed repeatedly that “…in a finite space there can be only a finite amount of low entropy and, second, that low entropy continuously and irrevocably dwindles away” (e.g., Georgescu-Roegen, 1975, p. 359). This observation is the more relevant in light of the structural/functional relationships described by SOHO (selforganizing holarchic open) systems theory (see Kay and Regier, 2001). Living systems, including the human enterprise, exist in overlapping nested hierarchies in which each component sub-system (holon) is contained by a higher level in the system, and itself hosts a complex of linked sub-systems at lower levels. (Think of Russian nesting dolls). Within the hierarchy each holon thrives—maintains itself far-from-equilibrium—by extracting low entropy energy and material from its host system one level up and exporting resultant degraded energy and material wastes (entropy) back into that host. In short, living organisms create and increase their local structure and complexity at the expense of increased global disorder and decay (Schneider and Kay, 1994, 1995).

SOHO relationships should reframe all economists’ understanding of humans-in-nature. It is true that both the human enterprise and the ecosphere are self-producing far-from-equilibrium dissipative structures. However, while the ecosphere evolves and maintains itself in dynamic steady-state by dissipating an extra-terrestrial source of negentropy, sunlight, the human sub-system to date can grow and complexify (i.e., raise itself ever further from equilibrium) only by dissipating its host system, the ecosphere.

That said, there was nothing inherently unstable or unsustainable about energy and material dynamics within the pre-industrial SOHO hierarchy. Ecosystems self-produce, indefinitely powered by solar energy; anabolism marginally exceeds catabolism so biomass accumulates; the recycling process—nature’s ‘waste’ sink—is capacious. Thus, for 99.9 % of human history our species functioned within thermodynamically ‘healthy’ limits. Indeed, net primary production by producer species (mostly green plants) has been more than adequate to sustain not only humans but also the world’s entire complement of millions of other consumer species.

2.4. H. sapiens as plague species

Serious problems emerged only in the fossil fuel age. Coal, oil and natural gas have helped raise the human enterprise so far-from-equilibrium that (rising) demand for negentropy to maintain and grow the economy exceeds the productive and assimilative capacities of host ecosystems. The resultant entropic disordering of the ecosphere is evident in biodiversity loss, dissipation of soils and material resources (including fossil fuels), accumulating GHGs/climate change, ocean dead zones, etc., all signature symptoms of overshoot and apparent gross human ecological dysfunction.

I say ‘apparent’ because the root cause is natural. Recall that all species populations have a predisposition to expand exponentially. When exposed to a temporary abundance of some limiting resource, many respond with an explosive population outbreak. Some species in simple ecosystems exhibit regular cycles of outbreak followed by collapse in which the outbreak is referred to as the ‘plague phase’ of the cycle (e.g., CSIRO, 2019). The plague continues until negative feedback—food shortages, disease, predation, etc., depending on species and circumstances—knocks the population back (Korpimäki et al., 2004).

As exemplary ‘K’-strategists, humans are as prone to population outbreaks as any similar species (only the time scales differ). When fossil-fueled technology reduced normal negative feedback by providing access to all necessary food and other material resources, humanity embarked on a 200+ year global population outbreak now well into plague phase (Fig. 1) with all the negative consequences for the ecosphere described above.

This raises an important question for all economists: can—or should—the human plague phase be extended indefinitely or will it wind down, either through controlled implosion, gradual unraveling or catastrophic collapse? The answer is suggested by examination of energy consumption by country and region as of 2018 (Fig. 2). The horizontal line at ‘0’ represents global average energy consumption per capita remembering that energy use is tightly correlated with GDP/ capita. Relatively rich OECD countries representing only 17 % of the world’s population consume 2.4 times as much energy per capita as world average citizen and 3.4 times as much as non-OECD citizens (83 % of the world’s population) (Fig. 2).

To address equity concerns and bring the present non-OECD population to just average 2018 OECD levels—still low compared to high-end users such as Norway, Canada and the US—would require increasing global energy consumption by 140 %. At a global energy-use growth rate of 2.0 %/year, total primary energy use would double in just 35 years—scarcely over 2 /3rds of the way to 140 %—and more energy and other resources would be consumed/dissipated during that doubling than the total to date since 1800! Are there adequate fossil energy supplies? What would this mean for CO2 emissions? Could the already stressed ecosphere cope with the attendant massive entropy injection? And what about the expected additional billions of people? Meanwhile, the IPCC 1.5 C degree special report demands nearly 50 % lower emissions by 2030 and complete decarbonization by 2050, i.e. 6 % annual reductions beginning immediately.

This conundrum will not soon be resolved by the much-heralded shift to ‘green’ alternative energy. The hype over wind, solar and other ‘green’ energy sources notwithstanding, no fully adequate substitutes for fossil fuels are available (IER, 2019; Mills, 2019) and absolute decarbonization is not occurring (Schröder and Storm, 2018). Global energy demand grew by 2.9 % in 2018 led by natural gas; carbon emissions grew by 2.0 %. Renewables did contribute about a third of the growth in electrical power generation—solar now produces about 585 TWh and wind 1270 TWh globally (total = 1850 TWh). However, the global increase in demand for electricity in 2018 was 938 TWh, 60% more than the total output of all existing solar photovoltaic installations. Just two years of electricity demand increase absorbs the entire contribution from more than three decades of wind and solar power development (data from BP, 2019).

Even if the world were successfully to engineer a economically viable combination of fossil fuels and renewables sufficient to double energy production, we still have a problem. The use of so much energy to expand and raise the human enterprise even further-from-equilibrium, would guarantee both disastrous climate change and accelerate the parasitic hollowing-out of the ecosphere. Bottom line: human enterprise will almost certainly be forced to contract by energy/food/etc. shortages or foundering life-support systems.

3. Discussion – where is the ‘economics’ in the ultimate human saga?

The forgoing narrative obviously describes humanity’ ecological predicament but it is no less a description of economic reality. On an elementary level, each of the concepts explored above provides a key to understanding: a) the full implications of humanity’s extraction and use of energy and material resources including direct and unaccounted costs; b) the limited utility of attempts to price so-called natural capital; c) the eventual inevitability of simultaneous depletion (physical scarcity) and pollution (entropic disorder) on a global scale; d) the fundamental conflict between continuous material growth and maintaining ecological integrity; e) why inequality cannot be resolved through economic growth alone and; f) the limited scope for enhanced ‘factor productivity’ and factor substitution which constitute mainstream’s major means to sustainability. On this last point: SOHO thermodynamics underscores that, while some dematerialization may occur, it is not even theoretically possible to ‘decouple’ the economy from the ecosphere (see also Ward et al., 2016); empirical data provide “…no evidence of decoupling of rising standards of living and consumptionbased carbon emissions—which means that the future has to be different from the past, because ‘business-as-usual’ economics will lead us to ‘Hothouse Earth’” (Schröder and Storm, 2018, p. 22).

The most profound and disturbing insight from all this is that, left unchecked, highly evolved and perfectly normal eco-behavioral predispositions, as manifested in humanity’s fossil-energy powered economic exploitation of the natural world, have the potential to collapse the human enterprise. Some say societal collapse is inevitable (Bendell, 2018). These issues should be at the core of economic thinking for sustainability. In practice, however, daily reports on the state of the economy or global markets (which may actually follow news about the latest pollution disaster, heat wave or super-storm) never ask when ‘enough is enough’, just how ‘far-from-equilibrium’ can we safely go, or what life-style changes are necessary to avoid catastrophe. On the contrary, the mainstream fantasy—‘green-grow the economy so the next generation has the wealth and technology to mitigate the consequences—remains compelling enough to merit the 2018 Nobel Prize in economics (Hickel, 2018). This obsession with growth cannot end well.

In fairness, neoliberal algorithms do not reference most human ecological behaviors so it is perhaps unsurprising that their consequences are ignored in mainstream discourse. But we do have to ask why the implications of basic human ecology are not framing elements of ecological economics.

3.1. The Jekyll and Hyde of human nature

It’s not just economists who seem reluctant to face reality. Defense of the status quo remains the default position of most other academic disciplines, governments, transnational corporations and international organizations. Global society is mesmerized by the prevailing cultural narrative of perpetual material growth abetted by continuous technological progress. This begs the question, how can such an unlikely ‘story’—such a ‘choreographed hallucination’—have so much staying power within the best educated of human generations in the face of cascading contrary physical evidence?

Part of the answer lies in yet another domain of human nature. Motivational studies tell us that H. sapiens is not primarily a rational species—emotion and instinct play a remarkably large role in directing human affairs. Indeed, circumstances in which high intelligence rule our actions may actually be quite limited and their effect relatively trivial in the grand evolutionary context (see Rees, 2010). In particular, when humans feel their physical safety or social status is under threat, or they are sorely tempted by some forbidden fruit, the Dr Jekyll of reason may not be able to prevail over the Mr Hyde of emotion or instinct. Some argue that free will as normally understood is largely illusion (Harris, 2012; also Overbye, 2007). The obvious problem for sustainability is that “[b]iological drives…can be pernicious to rational decision-making in certain circumstances by creating an overriding bias against objective facts” (Damasio, 1994, p. 192).9

The propensities that qualify H. sapiens as a dogged K-strategist and master of maximum power are among the ‘biological drives’ that become ‘pernicious’ at the biophysical limits to growth. To these we can add natural optimism and an innate tendency to favor the here-andnow and close relatives/friends over distant places, future possibilities and total strangers. Discounting—temporal/spatial/social— clearly militates against determined environmental protection today (and is one ecologically-significant behavioral trait that has been incorporated into mainstream economics).

And there is yet another twist to the human psyche that conspires to dilute the heady wine of reason. Cognitive neuroscience tells us that repeated social, cultural, or sensory inputs can acquire a physical presence in our brains, i.e., repeated experiences and cultural norms become engrained as semi-permanent synaptic circuits. Once entrenched, these structures filter subsequent inputs—people select information that matches, and seek out experiences/people that reinforce, their neural ‘presets’. Conversely, “when faced with information that does not agree with their pre-formed structures, they deny, discredit, reinterpret, or forget that information” (Wexler, 2006). One variation of this latter tendency, “the white male effect” manifests as defense of cultural identity and the status quo (Kahan et al., 2007) and is associated with high levels of climate change denial (McCright and Dunlap, 2011).

When exercised by society’s power elites, temporal discounting and self-interest are sufficient to compromise even the most important global environmental agreements. For example, parties to the 2015 Paris climate accord—national governments coached by teams of corporate lobbyists—discussed numerous capital-intensive technological solutions ranging from so-called green energy technologies (e.g., wind and solar) through unproved approaches to carbon capture and storage, and even nuclear fission and fusion, all techno-solutions that would contribute to investment and growth. Reductions in energy/resource use, lifestyle changes, fair income redistribution and population control—i.e., serious threats to the status quo, were not on the table.

Arguably, “What is going on is a rebooting of a stagnant capitalist economy, that needs new markets – new growth – in order to save itself. What is being created is a mechanism to unlock approximately 90 trillion dollars for new investments and infrastructure” (Morningstar, 2019). In short, the real commitment of the international community is to technological solutions that will sustain growth and not jeopardize the current social and economic system (Spratt and Dunlop, 2017). Perversely, then, climate disaster policy is designed to serve the capitalist growth economy “…so the latter becomes the solution to (not the cause of) the [problem]. Unfortunately, many environmental nongovernmental organisations have bought into this illogical reasoning [believing] without justification, that the financialization of Nature will help prevent its destruction” (Spash, 2016, p. 931). (The fact that many NGOs are dependent on the corporate sector for financial support is a corrupting factor.)

Perhaps more disturbing, many ordinary citizens are all too willing to go along for the ride, trusting their leaders, buying into trivial mitigating pursuits as solutions and thus becoming both victims and perpetrators of eco-destruction. Russell and Bolton (2019) explain such social complicity and argue that the world’s best hope to avoid collapse may be for an “…unavoidable and ultimately staggering ecological disaster [to strike] soon at the heart of the developed world. [This event] would need to induce a level of terror intense enough to convey to all that our harmful actions really do end in destructive consequences, thus sending the message that we can no longer act with impunity”.

## Adv 2

### 1NC – Backwards

#### The aff is backwards – the status quo is a project of deference to the states that allows their innovation – the plan is the slippery slope to completely crushing federalism.

Nachbar 19 – Professor of Law, University of Virginia School of Law (Thomas B. Nachbar, "Antitrust and the Politics of State Action," William & Mary Law Review 60, no. 4 (March 2019): 1395-1438 ) NAR

In North Carolina State Board, when confronted with a profoundly undemocratic regulatory system, the Supreme Court responded not by upholding the republican values that form the basis of modern democratic government, but instead by pointing to the likelihood that the residents of North Carolina might have to pay too much for whiter teeth.2 59 While the Court may have saved us all from the clutches of rent-seeking dentists and the perils of pricey teeth whitening, it ignored democracy in the process. It wouldbe fair to ask whether the Court was focused on the right problem. When considered against the possibility that North Carolina could randomly pick someone out of the Raleigh phonebook and designate that person the state dental regulator without review, the FTC's concern that person might have a conflict of interest by virtue of a financial interest in dentistry borders on the petty. Yet antitrust's state action doctrine, as it has developed over time, drove the Court to just such a result. Moreover, the Court's economic focus on the harms of state action has caused the Court to ignore the political value of state action immunity. For instance, the Court described state action as a "disfavored" doctrine,26 0 when it is in fact a necessary component of federalism. Anticompetitive state regulation, as distasteful as it might be to economists, is an expression of state political systems in exactly the same way as other forms of regulation are; there is no reason to single out regulation that harms competition-as indeed all regulation harms competition to some degree 2 6 1-for especially disfavorable treatment. State action presents some very difficult questions-some going to core ideas about republican government that border on the imponderable. But whether the Board is the state for purposes of state action immunity is not one of them. The Court should simplify the state action doctrine and return it to its roots. By doing so, the Court can both clarify the doctrine within antitrust and better situate antitrust within the constellation of laws that protect both the competitive landscape and America's political identity.

### 1NC – No Spillover

#### No spillover

**Gerken 17** (Heather K. Gerken – Dean and Sol & Lillian Goldman Professor of Law, Yale Law School. <KEN> “Federalism 3.0,” *California Law Review*. Vol. 105. Issue 1695. <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=6176&context=fss_papers>)

State power, in effect, exhibits a hydraulic quality. Even as federal officials enter state domains, state officials find ways to assert their power informally through networks, administrative and political ties, and the leverage provided by the federal government's heavy dependence on state and local apparatuses. Those channels of influence are less legible to lawyers but no less important to policymakers. These relationships aren't captured by one-off judicial decisions or even the one-time passage of legislation, but by the quotidian workings of the administrative state.

### 1NC – Grid

#### Federalism doesn’t solve the grid. We’ve tried that in Texas by disconnecting our grid from the federal grid --- the grid froze for a week during the middle of a pandemic!

#### No grid impact --- regional variation and redundancies check.

**Koerth 18** (Maggie Koerth – senior science writer for FiveThirtyEight. Citing Bill Lawrence – chief security officer at the North American Electric Reliability Corporation. Citing Candace Suh-Lee – researcher at the Electric Power Research Institute. <KEN> "Hacking The Electric Grid Is Damned Hard," FiveThirtyEight. August 2018. <https://fivethirtyeight.com/features/hacking-the-electric-grid-is-damned-hard/>)

Representatives from two nonprofit organizations — both of which play large roles in how the electric grid is regulated and maintained — said it is easier to imagine disaster scenarios than create one. “There’ve been some very sensational books out there about the grid going dark because someone’s got their finger ready over a mouse and everything is going to turn off at the same time,” said Bill Lawrence, vice president and chief security officer at the North American Electric Reliability Corporation, the regulatory authority that sets and enforces technological standards for utility companies across the continent. “The grid does not work that way.” Our electric infrastructure is chock-full of both redundancies and regional variations — two things that impede widespread sabotage.

That’s not to say that the grid isn’t under attack. Lawrence acknowledged that there is interest in “trying to hurt us from a distance.” But he emphasized there have not yet been any successful attacks — meaning hackers haven’t caused any blackouts.

They’ve been poking at our critical infrastructure for a long while. Incident reports published by the Industrial Control Systems Cyber Emergency Response Team — a division of Homeland Security that does training and responds to cyberattacks on critical infrastructure — suggest that electricity, oil and natural gas infrastructure have been routinely targeted for years.1 There are dozens of these attacks reported to ICS-CERTS annually.

However, it would be difficult for these attacks to lead to wide-scale blackouts, according to Lawrence and Candace Suh-Lee, who leads a cybersecurity research team at the Electric Power Research Institute, a nonprofit research and development lab. And that’s true even if hackers do eventually succeed in taking control of some electric systems.

It helps that the North American electric grid is both diverse in its engineering and redundant in its design. For instance, the Ukrainian attacks are often cited as evidence that hundreds of thousands of Americans could suddenly find themselves in the dark because of hackers. But Lawrence considers the Ukrainian grid a lot easier to infiltrate than the North American one. That’s because Ukraine’s infrastructure is more homogeneous, the result of electrification happening under the standardizing eye of the former Soviet Union, he told me. The North American grid, in contrast, began as a patchwork of unconnected electric islands, each designed and built by companies that weren’t coordinating with one another. Even today, he said, the enforceable standards set by NERC don’t tell you exactly what to buy or how to build. “So taking down one utility and going right next door and doing the same thing to that neighboring utility would be an extremely difficult challenge,” he said.

Meanwhile, the electric grid already contains a lot of redundancies that are built in to prevent blackouts caused by common problems like broken tree limbs or heat waves — and those redundancies would also help to prevent a successful cyberattack from affecting a large number of people. Suh-Lee pointed to an August 2003 blackout that turned the lights off on 50 million people on the east coast of the U.S. and Canada. “When we analyzed it, there was about 17 different things lined up that went wrong. Then it happened,” she said. Hackers wouldn’t necessarily have control over all the things that would have to go wrong to create a blackout like that.

### 1NC – States fail – Climate

#### State efforts on climate fail – political hurdles and resource constraints

Rai 20 (Dr. Saatvika Rai, assistant professor of environmental policy in the Department of Political Science and Public Administration, University of Toledo, “Policy Adoption and Policy Intensity: Emergence of Climate Adaptation Planning in U.S. States,” 2020, https://onlinelibrary.wiley.com/doi/am-pdf/10.1111/ropr.12383)

With climate change, extreme weather events in the U.S. are expected to increase in both frequency and severity (IPCC, 2018). Disasters like hurricane Katrina (2005), floods in Iowa (2019), and the on-going droughts and wildfires in California, all illustrate the high potential for damage to life and property caused by these disasters. Despite growing scientific evidence on climate change, there is limited federal action on mitigation (reducing GHG emissions) and adaptation (building resilience) in the country. Much like the historical pattern in environmental policymaking, states and local governments are filling the federal climate policy void by taking action on their own initiative (Rabe, 2008). A range of scholars have examined the development of climate policy in the U.S. (Wheeler, 2008; Rabe, 2010; Krause, 2011, Bromley‐Trujillo, Butler, Poe, & Davis, 2016; to name a few). Most of these studies focus on understanding climate mitigation policies and emissions reduction programs among state and local governments. Climate adaptation, in comparison, is relatively underexamined (Javeline, 2014) [there are exceptions, like: Bierbaum, Smith, Lee, Blair, Carter, Chapin, et al., 2013, Koski & Siulagi, 2016; Koski and Keating, 2018]. The politics surrounding adaptation is different from mitigation as adaptation does not present the same collective action problems. Resilience initiatives undertaken by a government, such as improved water storage infrastructure, will benefit its jurisdiction irrespective of whether other jurisdictions take similar measures. Conversely, mitigation measures to reduce emissions within the same jurisdiction would not necessarily result in benefits of reduced climate change impacts, if other governments and individuals do not undertake similar measures (free-rider problem). This demands a separate investigation of climate adaptation. Additionally, climate change poses various challenges of governance. As a ‘wicked problem’, policies to build resilience or reduce emissions often involve complex scientific and technical information, and cut across different agencies and bureaucracies. There are large risks and uncertainties, and these are spread over long timeframes, spanning beyond a decade to the next 50 to 100 years (IPCC, 2018). Within the U.S., these challenges are further exasperated with the large partisan divide on the issue. This contentious nature of climate politics presents a unique case to explore differences between symbolic and substantive policymaking (Krause, 2011). There is growing scholarship examining drivers of policy stringency (Carley & Miller, 2012, Bromley‐Trujillo et al., 2016) and examining the same through politics of climate adaptation will expand our understanding of the mechanisms at play. This article examines the factors that predict the emergence of State Adaptation Plans (SAPs) in the United States. I ask two main questions – why are some states initiating adaptation planning while others are not? And do these predictors vary across policy intensity - states that set ambitious policy goals for more substantive outcomes versus states that adopt limited goals as mere symbolic policymaking? I apply the Diffusion of Innovation (DOI) theory using two dependent variables. The first is a basic measure of policy adoption, noting if a state has adopted its State Adaptation Plan (SAP) or not. The second dependent variable captures the intensity of a state’s commitment to climate adaption by measuring the number of goals articulated in these plans. Using panel data from 2009 to 2015, I consider the relative influence of internal state characteristics, such as problem severity, citizen demand, state fiscal capacity and interest group pressures along with testing the impact of external pressure driving the development and level of commitment to climate adaption. I find that states tend to adopt policies when faced with greater climate vulnerabilities, and are influenced by the prevailing ideology of the mass public. While there are differences between adaptation and mitigation policies, my results show that states with previous experience of mitigation were more likely to adopt adaptation plans. To adopt a mitigation policy, states would most likely have to cross policy hurdles associated with building consensus around climate change. While this consensus is not necessary to build resilience, benefits of creating acceptance tends to help build support for adaptation as well. Policy intensity, on the other hand, is driven by interest group politics, fiscal capacity, and diffusion of policy ideas. As states overcome the negative pressures from carbon intensive industries and adopt a policy, the presence of greater number of environmental groups leads states to prepare more detailed and stringent plans (Bromley-Trujillo and Poe, 2018). And these plans are more likely to have a higher number of policy goals in states with greater resources to cover costs associated with implementing strategies. Additionally, once a state decides to adopt, they seem more likely to work with other states in their Environmental Protection Agency (EPA) region to prepare ambitious and comprehensive plans (Stoutenborough and Beverlin, 2008). It maybe that regional offices serve as conduits for information and sharing policy lessons such as resources, scientific/climate data and recommendations for effective adaptation strategies. For highly salient and politicized issues like climate change, the politics is definitely complex. My findings indicate that some policymakers maybe responding to forces such as climate vulnerabilities and citizen demands, but are limited in their ability to act due to factors like insufficient resources or substantial negative push-back from the carbon intensive industry. This is likely to result in either inaction or mere symbolic efforts where policies are adopted (to please their constituents) but without sufficient stringency of goals to build adequate climate resilience (responding to the industry). When environmental group pressures are high, and states have more resources at their disposal, they are more likely to learn from other states and develop comprehensive adaptation plans aimed at creating substantive policy change. These finding advance our understanding of which factors are potential barriers and incentives for policymakers in decisions on climate adaptation planning.

### 1NC – Standards Fail

#### Standards are enforced through case-by case adjudication --- that produces wildly varying results and is delayed for decades.

**Chopra & Khan 20** (Rohit Chopra – Commissioner @ the FTC. Lina Khan – Academic Fellow @ Columbia Law School; Counsel on the Subcommittee on Antitrust, Commercial, and Administrative Law in the US House Committee on the Judiciary. <KEN> “The Case for “Unfair Methods of Competition” Rulemaking” *The University of Chicago Law Review*. Vol. 87, Issue 357. <https://lawreview.uchicago.edu/sites/lawreview.uchicago.edu/files/ChopraKhan_Rulemaking_87UCLR357.pdf>)

Decades ago, former Commissioner Philip Elman observed that case-by-case adjudication “may simply be too slow and cumbersome to produce specific and clear standards adequate to the needs of businessmen, the private bar, and the government agencies.”7 Relying solely on case-by-case adjudication means that businesses and the public must attempt to extract legal rules from a patchwork of individual court opinions. Because antitrust plaintiffs bring cases in dozens of different courts with hundreds of different generalist judges and juries, simply understanding what the law is can involve piecing together disparate rulings founded on unique sets of facts. All too often, the resulting picture is unclear. This ambiguity is compounded when the Supreme Court assigns to lower courts the task of fleshing out how to structure and apply a standard, potentially delaying clarity and certainty for years or even decades.8

#### The plan will take decades, its penalty will be irrelevant, and its gains will be unwound.

KellogInsight 19 – Quoting Mark McCareins, codirector of Kellogg’s JDMBA program and a clinical professor of business law who specializes in antitrust issues. (<https://insight.kellogg.northwestern.edu/article/why-antitrust-regulators-dont-scare-big-tech>, Why Antitrust Regulators Don’t Scare Big Tech , insights from Mark McCareins ) NAR

Even where there may be cause for concern, federal regulatory agencies are notoriously slow to investigate anticompetitive practices by tech companies. The investigations of any of these four firms will take years to unfold, and even longer to prosecute. Take, for example, Microsoft. The FTC launched an investigation into the software firm’s bundling practices in 1990, with the DOJ following suit eight years later. At the time, the company’s Windows operating system accounted for 90 percent of the PC market. The DOJ eventually charged Microsoft, claiming that its Internet Explorer browser, which was built into Windows, had an unfair advantage over other web browsers like Netscape. In 2000, a federal judge ordered the company to be split into separate entities, but an appeals court reversed the ruling. The DOJ and Microsoft finally settled the case in 2002—a full twelve years after a regulatory agency first launched an investigation. Microsoft was ultimately required to give computer manufacturers identical licensing contracts for Windows, which gave other companies more equal access to the browser market, as well as undergo nine years of court supervision into its business practices. The punishment was, to say the least, much reduced from its original form. “The U.S. Department of Justice was not overly successful in that attack,” says McCareins, who was a partner in the firm that represented Microsoft, Winston & Strawn. Any Penalties Are Likely to Be Insufficient Which brings McCareins to his final argument: even if regulators are successful in proving anticompetitive behavior by one of the big four, the penalties will likely be civil judgements in the form of large fines, which may not serve as an effective deterrent for such huge, highly profitable companies. In addition, the antitrust division announced earlier that it is not a big fan of what it describes as “behavioral remedies.” So if the division does find grounds to sue, it will need to be sure that a structural remedy will be the ultimate result. At worst, the FTC and DOJ could force a divestiture similar to the federal ruling in the Microsoft case. However, according to McCareins, divestitures do not always work to quell anticompetitive behavior in a timely manner, especially in markets where technological change is rampant. In 1984, for example, the federal government broke AT&T into eight regional telecom providers, which became known as the “Baby Bells.” But those companies have since been reunited through a series of mergers and acquisitions. AT&T is now even bigger than it was in the 1980s thanks to its acquisitions of cellular and cable companies. “You look at the telecom landscape today and you look at AT&T back in the day; you laugh and say, ‘I can’t believe we spent so much time and energy on that process,’” McCareins says.

### 1NC – Circumvention

#### Plan doesn’t solve – “active supervision” isn’t defined that tanks the aff.

**Allensworth, 16** (Rebecca Haw Allensworth, Associate Professor of Law, Vanderbilt Law School; J.D., Harvard Law School; M.Phil, University of Cambridge; B.A., Yale , 10-28-2016, accessed on 8-26-2021, Scholarship@Vanderbilt Law, "The New Antitrust Federalism", https://scholarship.law.vanderbilt.edu/faculty-publications/15/)

Its success, however, is not guaranteed. If accountability review fails, the Court has intimated that it may be willing to face the specter of Lochner v. New York1 ° and directly review the substance of anticompetitive state regulation. Much depends on how the Court fills in the most important piece still missing from the antitrust federalism puzzle. The Court's recent cases have held that regulation delegated to the industry itself must be "'actively supervised' by the State" 11 to enjoy immunity from the Sherman Act,'2 but the Court has not provided a concrete definition of active supervision. If the Court defines "active supervision" to give accountability review real bite, then the new antitrust federalism has a chance of survival. If not, the Court may find itself in the unenviable position of having to choose between accusations of Lochnerism and letting the states trample federal antitrust policy at their discretion.

# 2NC

## Adv CP

### 2NC – R&D CP – Innovation Solvency

#### Every major innovation in the past century was made by the government --- airplanes, everything in space, the internet, and nuclear power

**Mazzucato 15** (Mariana Mazzucato –RM Phillips Chair in the Economics of Innovation at the Science Policy Research Unit (SPRU) at the University of Sussex. Previously she has held academic positions at the University of Denver, London Business School, Open University, and Bocconi University. <KEN> “Chapter 3: Risk-Taking State,” in “The Entrepreneurial State: Debunking Public vs. Private Sector Myths,” *PublicAffairs*. Revised Edition. ISBN 978-1-61039-614-1)

Not all innovations lead to economy-wide growth. Economy-wide growth is generally caused by new products or processes that have an impact on a wide variety of sectors in the economy, as was the case with the rise of electricity and computers. These are what macroeconomists call general purpose technologies (GPTs). GPTs are characterized by three core qualities:

• They are pervasive in that they spread into many sectors.

• They improve over time and should keep lowering the cost to their users.

• They make it easier to spawn innovation through the invention and production of new products or processes. (Grossman and Helpman 1991)

Ruttan (2006) argues that large-scale and long-term government investment has been the engine behind almost every GPT in the last century. He analysed the development of six different technology complexes (the US ‘mass production’ system, aviation technologies, space technologies, information technology, Internet technologies and nuclear power) and concluded that government investments have been important in bringing these new technologies into being. He adds that nuclear power would most probably not have been developed at all in the absence of large government investments. In each case successful development of new technology complexes was not just a result of funding and creating the right conditions for innovation. Equally important was setting up specific institutions to envision the opportunity space, engage in the riskiest and most uncertain early research and oversee the commercialization process (Ruttan 2006). In Chapter 4, I will show that the same has been the case for the recent development of nanotechnology, which many believe is the next GPT.

Examples of the leading role played by the US government in technology development in fact abound. Lazonick (2013) presents a compelling summary of cases where the US Developmental State played a prominent role, ranging from land freely handed to private companies for the construction of railroads and the financial support of agricultural research in the nineteenth century; through the funding, support and active development of the aeronautical, space and aircraft industries in the twentieth century; to R&D grants and other types of finance for life sciences, nanotechnology and clean energy industries in the twenty-first century.

Abbate’s (1999) extensive research shows how the Internet grew out of the small Defense Department network project (ARPANET) of connecting a dozen research sites in the US into a network linking millions of computers and billions of people. Leslie (2000) argues that while Silicon Valley has been an attractive and influential model for regional development, it has been difficult to copy it, because almost every advocate of the Silicon Valley model tells a story of ‘freewheeling entrepreneurs and visionary venture capitalists’ and yet misses the crucial factor: the military’s role in creating and sustaining it. Leslie shows that ‘Silicon Valley owes its present configuration to patterns of federal spending, corporate strategies, industry–university relationships, and technological innovation shaped by the assumptions and priorities of Cold War defense policy’ (Leslie 2000, 49). Notwithstanding the Silicon Valley model still lingers in the collective imagination of policy makers as a place where VC created a revolution. The 1999 National Research Council report Funding a Revolution: Government Support for Computing Research is in fact an attempt to recall and acknowledge the major role the US federal government has played in launching and giving momentum to the computer revolution. We look at this further below.

Given the leading developmental role the US government plays in a vast number of sectors, it is no surprise that at a more micro level, Block and Keller (2011b) found that between 1971 and 2006, 77 out of the most important 88 innovations (rated by R&D Magazine’s annual awards)—or 88 percent—have been fully dependent on federal research support, especially, but not only, in their early phases—and the R&D Magazine’s award excludes IT innovations.

#### Stock market returns prove --- aff solvency is capped at six percent.

**Blyth 17** (Mark Blyth – Professor of Political Economy @ Brown University. <KEN> "America tampers with the Chomsky trade at its peril," *Financial Times*. October 2017. <https://archive.is/JmZlp>)

There is a trade in finance known among some as the “Chomsky trade”, after the linguist and social critic Noam Chomsky. Mr Chomsky once pointed out that, if you want to know what’s worth investing in, look at what US federal research funding organisations such as the National Institutes of Health (NIH) and the Defence Advanced Research Projects Agency (Darpa) are investing in today, and then go long 30 years.

In the 1950s, the big thing was transistors, which gave us the microelectronics revolution in the 1980s. In the 1960s, it was digital processing, which gave us personal computers in the 1990s. In the 1970s it was biotech, which started to come on line in the 2000s. And in the 1980s, it was the beginnings of machine learning and big data, which will transform much of the world of work in the 2010s and beyond.

Despite the ill-informed claims of politicians, the US government and the US taxpayer are the critical investors in basic scientific research, not the private sector. Private foundations fund only 6 percent of US research and development. The federal government funds 55 percent.

### 2NC – R&D CP – Growth Solvency

#### East Asia proves – targeted R and D revived Japan, South Korea, and China’s economies

**Mazzucato 15** (Mariana Mazzucato –RM Phillips Chair in the Economics of Innovation at the Science Policy Research Unit (SPRU) at the University of Sussex. Previously she has held academic positions at the University of Denver, London Business School, Open University, and Bocconi University. <KEN> “Chapter 2: Technology, Innovation, and Growth,” in “The Entrepreneurial State: Debunking Public vs. Private Sector Myths,” *PublicAffairs*. Revised Edition. ISBN 978-1-61039-614-1)

This version of the State’s role has been accepted in a consensus among multiple countries that are attempting to catch up with most technologically advanced economies. There is a whole literature devoted to the role of the so-called Developmental State, where the State is active not only in Keynesian demand management but also in leading the process of industrialization. The most typical examples are the East Asian economies, which through planning and active industrial policy were able to ‘catch up’ technologically and economically with the West (Amsden 1989). In states that were late to industrialize, the State itself led the industrialization drive. It took on developmental functions, for example by targeting certain sectors for investment, placed barriers to foreign competition until such time as companies in the targeted sectors were ready to export, and then provided assistance finding new export markets for companies. In Japan, for example, Johnson (1982) illustrates how the MITI worked to coordinate Japanese firms in new international markets. This occurred through investments made in particular technologies (picking winners), and the creation of specific business strategies meant to win particular domestic and international markets. Furthermore, the Japanese State coordinated the finance system through the Bank of Japan as well as through the Fiscal Investment Loan Program (funded by the postal savings system).

Chang (2008) offers similar illustrations for South Korea and other recently emerged economies. China has engaged in a targeted industrialization strategy too, only joining the World Trade Organisation once its industries were ready to compete, rather than as part of an International Monetary Fund–backed industrialization strategy. The Chinese strategy showed the weaknesses of the Washington Consensus on development, which denied the State the active role that it played in the development of major industrialized nations such as the United States, Germany, and the United Kingdom (Chang 2002; Reinert 2007).

If there is strong evidence that the State can be effective in pursuing targeted catch-up policies by focusing resources on being dominant in certain industrial sectors, why is it not accepted that the State can have a greater role in the development of new technologies and applications beyond simply funding basic science and having an infrastructure to support private sector activity?

#### Productivity surge is massive

**Johnson & Gruber 19** (Simon Johnson is the Ronald A. Kurtz (1954) Professor of Entrepreneurship at MIT and former chief economist at the International Monetary Fund. Jonathan Gruber is the Ford Professor of Economics at MIT. <KEN> ““Chapter 5: Public R&D: Pushing Frontiers and Promoting Growth,” in “Jump-Starting America: How Breakthrough Science Can Revive Economic Growth and the American Dream,” *PublicAffairs*. ISBN: 978-1-5417-6250-3)

Recent research by Enrico Moretti, Claudia Steinwender, and John Van Reenen demonstrates this convincingly.39 They study changes in military R&D across OECD nations over almost a quarter century. They confirm that more public spending increases (crowding in), rather than displacing (crowding out), private research-and-development spending. Each dollar of publicly financed military research-and-development spending leads to $2.50–$5.90 in private R&D. This is a huge effect, showing that—at a minimum—military research is promoting more, not less, private sector innovation—just as is the case for the NIH.

Most importantly for our purposes, they find a large effect on productivity from more research-and-development spending. To put their results in context, they suggest that the rise in US military R&D after 9/11, from 0.45 percent to 0.6 percent of GDP, led to 2 percent faster growth.40 This is a large effect from a fairly modest change in spending.

In the 1940s and 1950s, there was a positive catalytic effect on the broader economy from military-related research, as we discussed in Chapters 1 and 2. But the benefits continue to this day. Want an illustration? Look at the Roomba currently cleaning floors around the world.

### 2NC – Microgrids Solvency

#### Ensures critical operations continue and fast tracks grid recovery

**Wimsatt 20** (Katie Wimsatt – Intern at the Atlantic Council Global Energy Center. <KEN> “Microgrids: The NDAA’s crucial investment for energy resilience,” Atlantic Council. <https://www.atlanticcouncil.org/blogs/energysource/microgrids-the-ndaas-crucial-investment-for-energy-resilience/>)

Building microgrids at military installations will increase the resilience of US military infrastructure. Accidents, severe weather events, and cyberattacks all threaten the electrical grid, and unless military installations can disconnect and rely on distributed resources, they too, are threatened by power outages. Although back-up diesel generators can ensure that some critical operations continue, microgrids are more reliable because they can draw power from multiple generators and are able to assign power to different buildings or regions that are most in need, unlike generators that are generally only connected to one building. Used in tandem with long-term storage measures and diverse energy sources, microgrids can provide continuous energy in the case of multi-day outages; for example, a microgrid installation at the Miramar Marine Corps Air Station that uses a mix of generators, battery storage, and solar photovoltaics can supply power to the base for up to three weeks. Further demonstration projects could provide lessons for best practices and help both the military and civilian sectors design microgrids that can supply adequate power for longer.

Additionally, demonstration projects could drive civilian adoption of microgrid technologies. Demonstration projects can help civilian operators understand how to design microgrids and showcase the diverse benefits of these systems. Military investment has historically spurred civilian adoption down the line, furthering climate resilience efforts. Weather-related power outages cost the United States $25 to $70 billion per year, a number that will only grow as climate change increases the frequency and intensity of extreme weather events. Power outages can also worsen chronic health conditions, cut off water supplies, and limit access to key amenities such as elevators and air conditioning. Microgrids, especially when combined with battery storage, can minimize large-scale power cutoffs and accelerate recovery operations by providing baseload power necessary to continue critical operations.

#### It unplugs the grid --- makes attacks impossible.

**Marks 19** (Joseph Marks – Georgetown University, MS in Foreign Service; University of Wisconsin - Madison, BA in English, writes The Cybersecurity 202 newsletter focused on the policy and politics of cybersecurity. Before joining The Washington Post,Marks covered cybersecurity for Politico and Nextgov, a news site focused on government technology and security. He also covered patent and copyright trends for Bloomberg BNA and federal litigation for Law360. <KEN> "Sen. King wants the U.S. to unplug parts of its electrical grid," Press Herald. February 21, 2019. <https://www.pressherald.com/2019/02/20/sen-king-wants-the-u-s-to-unplug-parts-of-electric-grid/>)

King, who serves on the Senate Energy Committee, wants the government to consider unplugging some digital systems at strategic positions in the nation’s power grid and replacing them with physical ones that hackers can’t compromise. This is what helped Ukraine recover after a massive cyberattack that hit its electrical grid in 2015 and shut off power for about 225,000 customers. Three companies targeted in the attack were able to recover power by switching off their digital systems and reverting to manual operations. Yet the U.S. is far more reliant on its digital systems, and King warns that switching to manual on the fly after a crippling attack would be difficult. “The grand fear is that a cyberattack could take down the grid and that would take down with it hospitals, financial centers, people’s day-to-day lives,” King said. “There’s no question lives would be lost.” King compared the idea of taking key parts of the electric grid offline to the push among election cybersecurity experts for paper ballots rather than voting machines that record ballots digitally — and are more vulnerable to tampering.

### 2NC – Carbon Fix

#### Solves all climate change

**Perasso 18** (Valeria Perasso – Environmental Reporter @ BBC, citing Sandra Snaebjornsdottir – PhD in Geochemistry. <KEN> "Turning carbon dioxide into rock," *BBC News*. May 2018. <https://www.bbc.com/news/world-43789527>)

Potentially, basalt could solve all the world's CO2 problems says Sandra: "The storage capacity is such that, in theory, basalts could permanently hold the entire bulk of CO2 emissions derived from burning all fossil fuel on Earth.”

#### It’s 1000 times more effective than other tech

**Young & Miller-Mendoza 19** (Robin Young – Peabody Award-winning documentary filmmaker who has also reported for NBC, CBS and ABC television. Karyn Miller-WBUR Reporter, master's degrees in international relations from McGill University, a master's in journalism from Columbia University and a certificate from the Institut de Sciences Politiques de Paris. <KEN> "Researchers In Iceland Can Turn CO2 Into Rock. Could It Solve The Climate Crisis?," WBUR. December 2019. <https://www.wbur.org/hereandnow/2019/12/10/iceland-climate-change-carbon>)

That's why there's so much excitement about the newer, larger Carbfix injection wells that can capture 1,000 times more emissions. And if it were to run at that capacity, ‘then we have solved the climate crisis,” Magnason says.

## Security

### No Heg Impact

#### No impact

**Fettweis 17.** Christopher J. Fettweis – Associate Professor of Political Science at Tulane University. “Unipolarity, Hegemony, and the New Peace,” Security Studies, Vol 26, No 3. https://www.tandfonline.com/doi/abs/10.1080/09636412.2017.1306394?journalCode=fsst20

How does one measure polarity? Power is traditionally considered to be some combination of military and economic strength, but despite scores of efforts, no widely accepted formula exists. Perhaps overall military spending might be thought of as a proxy for hard power capabilities; perhaps too the amount of money the United States devotes to hard power is a reflection of the strength of the unipole. When compared to conflict levels, however, there is no obvious correlation, and certainly not the kind of negative relationship between US spending and conflict that many hegemonic stability theorists would expect to see. During the 1990s, the United States cut back on defense by about 25 percent, spending $100 billion less in real terms in 1998 that it did in 1990.68 To those believers in the neoconservative version of hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace,” argued Kristol and Kagan at the time.69 The world grew dramatically more peaceful while the United States cut its forces, however, and stayed just as peaceful while spending rebounded after the 9/11 terrorist attacks. The incidence and magnitude of global conflict declined while the military budget was cut under President Clinton, in other words, and kept declining (though more slowly, since levels were already low) as the Bush administration ramped it back up. Overall US military spending has varied during the period of the New Peace from a low in constant dollars of less than $400 billion to a high of more than $700 billion, but war does not seem to have noticed. The same nonrelationship exists between other potential proxy measurements for hegemony and conflict: there does not seem to be much connection between warfare and fluctuations in US GDP, alliance commitments, and forward military presence. There was very little fighting in Europe when there were 300,000 US troops stationed there, for example, and that has not changed as the number of Americans dwindled by 90 percent. Overall, there does not seem to be much correlation between US actions and systemic stability. Nothing the United States actually does seems to matter to the New Peace.

## Let’s Get Fiscal

### 2NC – Private Sector Fails

#### The valley of death kills all innovative ideas

**Johnson & Gruber 19** (Simon Johnson is the Ronald A. Kurtz (1954) Professor of Entrepreneurship at MIT and former chief economist at the International Monetary Fund. Jonathan Gruber is the Ford Professor of Economics at MIT. <KEN> “Chapter 4: The Limits of Private Research and Development,” in “Jump-Starting America: How Breakthrough Science Can Revive Economic Growth and the American Dream,” *PublicAffairs*. ISBN: 978-1-5417-6250-3)

INTO THE VALLEY OF DEATH

While the free-rider problem and spillovers lead to too little research, there is another set of problems in translating research into development and ultimately into economic growth. Research is carried out by technical experts who are excited by discovery. However, the ultimate good that emerges from this process of discovery requires much more than just an excited scientist; it requires the ability to turn that discovery into a new technology, then into a new product, and finally into a sale to consumers. These are steps that go beyond the training and skill level of the basic scientists doing the discovery, and they require financing. Taking an idea from the lab to the store is expensive.

In our economy, turning a good idea into a product is exactly what should be financed by private capital. Private capitalists should be able to provide both the funding and expertise to help scientists take their ideas from the laboratory to the marketplace. Indeed, the United States has a successful venture capital (VC) industry with a long and impressive track record of doing so. But this industry has fallen short when it comes to maximizing the entrepreneurial—and economic growth—-potential of new technologies.

The VC industry has been an important player in our economy for decades. Early VC was closely associated with technology companies, so it makes sense that the growth of the VC industry beginning in the early 1970s has become linked to Sand Hill Road, in Menlo Park, California, which hosted firms like Kleiner Perkins Caufield & Byers and Sequoia. Virtually every major player in Silicon Valley received money from a Sand Hill Road firm.49 In 1973, the National Venture Capital Association (NVCA) was formed. By the early 1990s, nearly half of venture money was going to the West Coast.50

The VC industry has been a clear success story in terms of promoting the growth of technology companies in the United States. The examples are legendary; Microsoft, Google, Apple, Amazon, Intel, and many more of the leading companies in the United States were funded at their early stages by venture capital. Sixty percent of all companies who had an initial public offering (IPO) between 1999 and 2009 had venture backing.51 In 2014, 17 percent of US public corporations had started with VC backing, representing 21 percent of the entire capitalization of publicly traded companies in the country.52

That said, the VC industry faces three defining constraints. The first is that the people who run these funds are investing in an exceedingly risky environment. Even after a rigorous process of culling thousands of proposals to the few that get funded, most venture-backed investments fail. Data from a leading venture investing firm show that 8 percent of their investment dollars resulted in more than 70 percent of the overall returns of the portfolio, while 60 percent of the investment dollars were spent on projects that were ultimately terminated below the cost of the investment.53

The second is that VCs are ultimately investing in something that is largely out of their control. Venture investors are relying on entrepreneurs to put in the incredibly hard work required to take a product from idea to market. There is a legitimate concern that those who are the best inventors may not be ideally suited to put in that effort. If VCs invest a lot of money in a good idea and the entrepreneur is not dedicated or skilled enough to turn this into a productive company, then the venture capitalists have a failed investment on their hands.

The final constraint is that the pool of investors willing to risk their money on very early-stage enterprises is actually quite limited. Only one-sixth of 1 percent of new start-ups each year get venture backing. The amount of actual capital that is committed to backing venture capital partnerships has typically been around 0.2 percent of the value of the US stock market.54 In other words, while the $76 billion in venture commitments in 2016 may seem large in absolute dollars, it is tiny compared both to the multitrillion-dollar size of our financial markets and to the requests for start-up funds by hundreds of thousands of firms each year.55 Venture investments amounted to only 2.5 percent of gross domestic private investment in the United States in 2016.56

To attract and disburse these limited dollars, venture capitalists have developed two investing approaches that make sense from their perspective—but that also explain a great deal about the limitations of the existing venture capital industry as a catalyst for economic growth.57

The first is to pay entrepreneurs in proportion to the actual commercial success of the product. That is, while VCs can’t tell how much effort the entrepreneurs are making, they can use the signal sent by the market as to whether the process was a success. So entrepreneur earnings are not proportional to their effort but rather to their market success.

This strategy makes a great deal of sense for the venture capitalists—but it places a lot of risk on the entrepreneur. The inventor could genuinely put in enormous effort only to, through no fault of their own, have the market not value their contribution. And individuals, with their limited budgets, are not in a good position to bear this risk.

If you look only at the experience of successful entrepreneurs like Mark Zuckerberg or Jeff Bezos, entrepreneurship appears to be a high-return activity, but in reality, most new start-up firms yield no meaningful value to entrepreneurs, and most of the total value to entrepreneurs comes from the tiny fraction of ventures that is wildly successful.58

After accounting for risk, the return on starting a company is not high for the typical entrepreneur. A comprehensive study gathered data on the income earned by entrepreneurs and their risk of success and failure. The study concluded that if a worker is well paid and does not have millions of their own assets to put at risk, they will be better off staying at their job than striking out on their own.59 Consequently, many potential entrepreneurs do not go forward with their ideas because they cannot afford the risk of failure. This poses a major bottleneck to the ability of the private market to promote entrepreneurship.

#### Short-time horizons prove

**Mazzucato 15** (Mariana Mazzucato –RM Phillips Chair in the Economics of Innovation at the Science Policy Research Unit (SPRU) at the University of Sussex. Previously she has held academic positions at the University of Denver, London Business School, Open University, and Bocconi University. <KEN> “Chapter 2: Technology, Innovation, and Growth,” in “The Entrepreneurial State: Debunking Public vs. Private Sector Myths,” *PublicAffairs*. Revised Edition. ISBN 978-1-61039-614-1)

Although most venture capital funds are usually structured to have a life of ten years, they tend to prefer to exit much earlier than ten years because of the management fees and the bonuses earned for high returns. Early exits are preferred in order to establish a winning track record and raise a follow-on fund. This creates a situation whereby venture capital funds therefore have a bias towards investing in projects where the commercial viability is established within a three- to five- year period (Ghosh and Nanda 2010). Although this is sometimes possible (e.g. Google), it is often not. In the case of an emerging sector like biotech or green tech today, where the underlying knowledge base is still in its early exploratory phase, such a short-term bias is damaging to the scientific exploration process, which requires longer time horizons and tolerance of failure. Venture capital has succeeded more in the US when it provided not only committed finance, but managerial expertise and the construction of a viable organization (Lazonick 2012).

#### Firm-level studies prove

**Mazzucato 15** (Mariana Mazzucato –RM Phillips Chair in the Economics of Innovation at the Science Policy Research Unit (SPRU) at the University of Sussex. Previously she has held academic positions at the University of Denver, London Business School, Open University, and Bocconi University. <KEN> “Chapter 1: From Crisis Ideology to the Division of Innovative Labour,” in “The Entrepreneurial State: Debunking Public vs. Private Sector Myths,” *PublicAffairs*. Revised Edition. ISBN 978-1-61039-614-1)

Usually a question like this might be framed in terms of the ‘crowding- out’ concept. Crowding out is a hypothesis in economics that says that the danger of State investment is that it uses up savings that could have been used by the private sector for its own investment plans (Friedman 1979). Keynesians have argued against the idea that State spending crowds out private investment by emphasizing that this would only hold in a period of full resource utilization, a state that hardly ever occurs. However, the issues raised in this book present a different view: that an entrepreneurial State invests in areas that the private sector would not invest in even if it had the resources. And it is the courageous risk-taking visionary role of the State that has been ignored. Business investment is mainly limited not by savings but by its own lack of courage (or Keynesian ‘animal spirits’)—the ‘business as usual’ state of mind. Indeed, firm-level studies have show that what drives entry behaviour into industries (companies deciding to move into one particular sector) is not existing profits in that sector but projected technological and market opportunities (Dosi et al. 1997). And such opportunities are linked to the amount of State investment in those areas.

#### Problem is getting worse

**Johnson & Gruber 19** (Simon Johnson is the Ronald A. Kurtz (1954) Professor of Entrepreneurship at MIT and former chief economist at the International Monetary Fund. Jonathan Gruber is the Ford Professor of Economics at MIT. <KEN> “Chapter 4: The Limits of Private Research and Development,” in “Jump-Starting America: How Breakthrough Science Can Revive Economic Growth and the American Dream,” *PublicAffairs*. ISBN: 978-1-5417-6250-3)

Ironically, the short time-horizon problem appears to be getting worse as technology such as Amazon Web Services makes it cheaper to start new companies. VCs are increasingly focused on “spray and pray” models of small funding to companies where they can more quickly determine whether the company will succeed—worsening the valley-of-death problem for capital-intensive start-ups.65 It is for this reason that experts are pessimistic about the ability of venture investors to fund new technologies that require significant lag times and capital intensity.66

### 2NC – No Econ Impact

#### Downturn won’t cause war – prefer post-COVID evidence.

Walt ’20 [Stephen; Robert and Renée Belfer professor of international relations @ Harvard University; 5/13/20; "Will a Global Depression Trigger Another World War?"; Foreign Policy; https://foreignpolicy.com/2020/05/13/coronavirus-pandemic-depression-economy-world-war/]

One familiar argument is the so-called diversionary (or “scapegoat”) theory of war. It suggests that leaders who are worried about their popularity at home will try to divert attention from their failures by provoking a crisis with a foreign power and maybe even using force against it. Drawing on this logic, some Americans now worry that President Donald Trump will decide to attack a country like Iran or Venezuela in the run-up to the presidential election and especially if he thinks he’s likely to lose. This outcome strikes me as unlikely, even if one ignores the logical and empirical flaws in the theory itself. War is always a gamble, and should things go badly—even a little bit—it would hammer the last nail in the coffin of Trump’s declining fortunes. Moreover, none of the countries Trump might consider going after pose an imminent threat to U.S. security, and even his staunchest supporters may wonder why he is wasting time and money going after Iran or Venezuela at a moment when thousands of Americans are dying preventable deaths at home. Even a successful military action won’t put Americans back to work, create the sort of testing-and-tracing regime that competent governments around the world have been able to implement already, or hasten the development of a vaccine. The same logic is likely to guide the decisions of other world leaders too. Another familiar folk theory is “military Keynesianism.” War generates a lot of economic demand, and it can sometimes lift depressed economies out of the doldrums and back toward prosperity and full employment. The obvious case in point here is World War II, which did help the U.S economy finally escape the quicksand of the Great Depression. Those who are convinced that great powers go to war primarily to keep Big Business (or the arms industry) happy are naturally drawn to this sort of argument, and they might worry that governments looking at bleak economic forecasts will try to restart their economies through some sort of military adventure. I doubt it. It takes a really big war to generate a significant stimulus, and it is hard to imagine any country launching a large-scale war—with all its attendant risks—at a moment when debt levels are already soaring. More importantly, there are lots of easier and more direct ways to stimulate the economy—infrastructure spending, unemployment insurance, even “helicopter payments”—and launching a war has to be one of the least efficient methods available. The threat of war usually spooks investors too, which any politician with their eye on the stock market would be loath to do. Economic downturns can encourage war in some special circumstances, especially when a war would enable a country facing severe hardships to capture something of immediate and significant value. Saddam Hussein’s decision to seize Kuwait in 1990 fits this model perfectly: The Iraqi economy was in terrible shape after its long war with Iran; unemployment was threatening Saddam’s domestic position; Kuwait’s vast oil riches were a considerable prize; and seizing the lightly armed emirate was exceedingly easy to do. Iraq also owed Kuwait a lot of money, and a hostile takeover by Baghdad would wipe those debts off the books overnight. In this case, Iraq’s parlous economic condition clearly made war more likely. Yet I cannot think of any country in similar circumstances today. Now is hardly the time for Russia to try to grab more of Ukraine—if it even wanted to—or for China to make a play for Taiwan, because the costs of doing so would clearly outweigh the economic benefits. Even conquering an oil-rich country—the sort of greedy acquisitiveness that Trump occasionally hints at—doesn’t look attractive when there’s a vast glut on the market. I might be worried if some weak and defenseless country somehow came to possess the entire global stock of a successful coronavirus vaccine, but that scenario is not even remotely possible. If one takes a longer-term perspective, however, a sustained economic depression could make war more likely by strengthening fascist or xenophobic political movements, fueling protectionism and hypernationalism, and making it more difficult for countries to reach mutually acceptable bargains with each other. The history of the 1930s shows where such trends can lead, although the economic effects of the Depression are hardly the only reason world politics took such a deadly turn in the 1930s. Nationalism, xenophobia, and authoritarian rule were making a comeback well before COVID-19 struck, but the economic misery now occurring in every corner of the world could intensify these trends and leave us in a more war-prone condition when fear of the virus has diminished. On balance, however, I do not think that even the extraordinary economic conditions we are witnessing today are going to have much impact on the likelihood of war. Why? First of all, if depressions were a powerful cause of war, there would be a lot more of the latter. To take one example, the United States has suffered 40 or more recessions since the country was founded, yet it has fought perhaps 20 interstate wars, most of them unrelated to the state of the economy.

## Federalism

### 2NC – No Spillover

#### Cooperative federalism means federal takeover won’t happen

**Gerken 17** (Heather K. Gerken – Dean and Sol & Lillian Goldman Professor of Law, Yale Law School. <KEN> “Federalism 3.0,” *California Law Review*. Vol. 105. Issue 1695. <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=6176&context=fss_papers>)

While the assumptions undergirding Federalism 1.0 might match what happens in a one-off Supreme Court case, they do not capture how the states and federal government interact over time and across domains. We argue as if one side or another will win out, when in fact neither side has had much success in playing a regulatory trump card under Our Federalism. Instead, states and the federal government are usually governing together in a regulatory space that is constantly negotiated and contested. Federal-state relations look more like the implementation of the Affordable Care Act (ACA),1 8 with its messy negotiations between the Obama administration and the states, than the Court's one-off decision in National Federation of Independent Businesses (NFIB).19 They are better captured by the delicate negotiations between the Attorney General and state officials limiting federal marijuana enforcement in Washington and Colorado 20 than they are by the Court's decision on the reach of federal regulatory power in Gonzalez v. Raich.2 1

#### EVERY field of law proves

**Gerken 17** (Heather K. Gerken – Dean and Sol & Lillian Goldman Professor of Law, Yale Law School. <KEN> “Federalism 3.0,” *California Law Review*. Vol. 105. Issue 1695. <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=6176&context=fss_papers>)

The problem with both positions is that they are painfully difficult to square with today's regulatory realities. 9 The evidence abounds in environmental law,' 0 health care," telecommunications,12 and financial regulation.' 3 We see strong evidence in areas thought to be largely in the state's control, including education,' 4 crime,' 5 family law, 16 and even a place as unlikely as land use law.17 These days, neither the state nor the federal government presides over its own empire. Instead, they govern shoulder-to-shoulder in a tight regulatory space, sometimes leaning on one another and sometimes deliberately jostling each other. When one moves, the other moves with it. Overlap and interdependence are the rule, not the exception. The choice in federalism fights is almost never between decentralization or centralization; it's almost always both/and.

#### Regulatory intransigence, resource constraints, and inertia prevent broad takeover

**Gerken 17** (Heather K. Gerken – Dean and Sol & Lillian Goldman Professor of Law, Yale Law School. <KEN> “Federalism 3.0,” *California Law Review*. Vol. 105. Issue 1695. <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=6176&context=fss_papers>)

To be sure, as a formal matter, the national government reigns supreme, but as a practical matter it must overcome regulatory intransigence, resource constraints, and inertia to vindicate its aims.28 That's why the federal government's success almost always depends as much on politics as decrees. While the feds hold the national supremacy trump card, they must be circumspect about playing it. If an issue matters for national values, that fight can be had, and it can be won. The states can be shoved aside or brought to heel or bribed. But the federal government must work to do so. In a world of regulatory overlap, resource constraints, and a heavy federal dependence on state and local actors, the federal government's programs depend as much on politics as law. Technically the federal government can preside over its own empire, but practically it relies heavily on the states and thus takes on all of the fractiousness and messiness associated with that reliance. As Jason Weinstein-Tull has quipped, the Supremacy Clause trump card turns out to be a jack.29

### 2NC – !D – Grid

#### Hackers would have to develop hundreds of custom exploits --- takes years and is impossible

Pollet 14 (Jonathan Pollet – founder of Red Tiger Security, and a 17 year veteran of the US critical infrastructure. consults for some of the world's largest energy companies, as well as electric utilities, chemical plants, water treatment plants, etc. to help them better defend against cyber attacks. "Here's What Chinese Hackers Can Actually Do To The US Power Grid. Business Insider. November 23, 2014. http://www.businessinsider.com/what-hackers-can-do-to-our-power-grid-2014-11#ixzz3hTq8klee" www.businessinsider.com/what-hackers-can-do-to-our-power-grid-2014-11) \*Edited for ableist language\*

This line is important because it clarifies the types of risks we’re actually talking about when it comes to the electric grid. No, hackers can’t take down the entire, or even a widespread portion of the US electric grid. From a logistical standpoint, this would be far too difficult to realistically pull off - and it’s not what we should be devoting our attention to. What is more realistic is for a cyber attack to ~~cripple~~ [devastate] an individual utility, causing a blackout or disruption of service at the local level.¶ The power grid is vulnerable to attack — there’s no question about that. In my own work, testing the security readiness of US and global energy companies and utilities, I regularly find serious vulnerabilities on these networks and I am often called in to deal with compromises that have already taken place — including cyber-espionage activities by state-sponsored groups.¶ Adm. Rogers testimony is extremely important as it provides a strong authoritative voice to what is an urgent problem facing this country right now: America’s critical infrastructure is vulnerable to attack, it’s a complicated problem to fix it and an attack is eminent. But the notion that a hacker could basically turn off the country’s power with the ‘flip of a switch,’ as Rep. Rogers called it, is more science fiction than reality.¶ Here’s why:¶ The US energy grid is owned and operated by hundreds of various regional utilities that all use different hardware and software. That means hackers would have to tunnel into hundreds of diverse networks, which would take several years, and then write custom exploits which are unique for each specific environment they’re targeting. For those who would argue that China or Russia have the money, time and capability to do that, try to understand that developing a functional exploit, getting it placed on the exact part of the network that it needs to be on in order to have the desired effect (i.e., specific programmable logic controllers that run the utility’s machinery), then keeping it hidden on that network over a period of months or years while security teams try to hunt it down, and doing all of this at the same time on hundreds of networks is extremely difficult. To put it in perspective, it would be like trying to rob a hundred different banks at the exact same time.¶

# 1NR

## Tradeoff DA

### 2NC – ! – Terror

#### Turns econ, turns their war scenarios

**Buis & Arguello 18** (Emiliano J. Buis – a lawyer specializing in international law. He holds a PhD from the University of Buenos Aires (UBA), a Master’s in Human and Social Sciences from the University of Paris/Panthéon-Sorbonne, and a postgraduate diploma in national defense from the National Defense School. Currently he is a professor in international law at UBA, and co-director of the UNICEN Center for Human Rights in Azul. He is also a researcher and professor at the NPSGlobal Foundation. Irma Arguello – founder and chair of the NPSGlobal Foundation, and head of the secretariat of the Latin American and Caribbean Leadership Network. She holds a degree in physics, a Master’s in business administration, and completed graduate studies in defense and security. Arguello previously worked on nuclear projects for the Argentine. <KEN> “The global impacts of a terrorist nuclear attack: What would happen? What should we do?,” February 21, 2018. DOA: 7/7/18. Bulletin of the Atomic Scientists. https://www.tandfonline.com/doi/abs/10.1080/00963402.2018.1436812?journalCode=rbul20)

The consequences of a terrorist nuclear attack Asmallandprimitive1-kilotonfissionbomb(withayield of about one-fifteenth of the one dropped on Hiroshima, and certainly much less sophisticated; cf. Figure 1), detonated in any large capital city of the developed world, would cause an unprecedented catastrophic scenario. An estimate of direct effects in the attack’s location includes a death toll of 7,300-to-23,000 people and 12,600-to-57,000peopleinjured,dependingonthetarget’s geography and population density. Total physical destruction of the city’s infrastructure, due to the blast (shock wave)andthermalradiation,wouldcoveraradiusofabout 500 meters from the point of detonation (also known as ground zero), while ionizing radiation greater than 5 Sieverts – compatible with the deadly acute radiation syndrome – would expand within an 850-meter radius. From the environmental point of view, such an area would be unusable for years. In addition, radioactive fallout would expandinanareaofabout300squarekilometers,depending on meteorological conditions (cf. Figure 2). But the consequences would go far beyond the effects in the target country, however, and promptly propagate worldwide. Global and national security, economy and finance, international governance and its framework, national political systems, and the behavior of governments and individuals would all be put under severe trial. The severity of the effects at a national level, however, would depend on the countries’ level of development, geopolitical location, and resilience. Global security and regional/national defense schemes would be strongly affected. An increase in global distrust would spark rising tensions among countries and blocs, that could even lead to the brink of nuclear weapons use by states (if, for instance, a sponsor country is identified). The consequences of such a shocking scenario would include a decrease in states’ self-control, an escalation of present conflicts and the emergence of new ones, accompanied by an increase in military unilateralism and military expenditures. Regarding the economic and financial impacts, a severe global economic depression would rise from the attack, likely lasting for years. Its duration would be strongly dependent on the course of the crisis. The main results of such a crisis would include a 2 percent fall of growth in global Gross Domestic Product, and a 4 percent decline of international trade in the two years following the attack (cf. Figure 3). In the case of developing and less-developed countries, the economic impacts would also include a shortage of high-technology products such as medicines, as well as a fall in foreign direct investment and a severe decline of international humanitarian aid toward low-income countries. We expect an increase of unemployment and poverty in all countries. Global poverty would raise about 4 percent after the attack, which implies that at least 30 million more people would be living in extreme poverty, in addition to the current estimated 767 million. In the area of international relations, we would expect a breakdown of key doctrines involving politics, security, and relations among states. These international tensions could lead to a collapse of the nuclear order as we know it today, with a consequent setback of nuclear disarmament and nonproliferation commitments. In other words, the whole system based on the Nuclear Non- Proliferation Treaty would be put under severe trial. After the attack, there would be a reassessment of existing security doctrines, and a deep review of concepts such as nuclear deterrence, no-firstuse, proportionality, and negative security assurances.

#### Ranswomare alone turns the economy.

**Palmer 21** – Senior reporter at ZDNet. Based in London, he writes about issues including cybersecurity, hacking and malware threats.(Daniel, https://www.zdnet.com/article/ransomware-gangs-now-have-industrial-targets-in-their-sights-that-raises-the-stakes-for-everyone/February 2, 2021Ransomware gangs now have industrial targets in their sights. That raises the stakes for everyone ) NAR

Ransomware attacks are a potential danger for any organisation, with ransomware variants including Conti, Egregor, Maze and many others still successfully compromising victims across all industries – but there are some industries that criminal gangs are targeting more than others. The ransomware attacks are successful because many organisations can't afford for their network to be out of service for a sustained period of time, so many businesses are still taking what they perceive to be the quickest and easier route to restoring the network by giving into the ransom demands of criminals. A recent report by cybersecurity company Digital Shadows examined which industries were most targeted by ransomware during 2020. While almost every industry found itself dealing with ransomware gangs over the course of the past 12 months, industrial goods and services was the most targeted, accounting for 29% – or almost one in three – ransomware attacks. SEE: Security Awareness and Training policy (TechRepublic Premium) That number of attacks is more than those on the next three most targeted sectors – construction, technology and retail – combined. Manufacturers and infrastructure can make a tempting targeted for ransomware attacks because the organisations in these sectors need to be in operation around the clock, whether that's running a factory production line or operating a utilities plant. If they can't provide these services, there can be wide-ranging impacts further down the supply chain. "Industrial organisations will feel more pressure to pay the ransom as periods of inoperability have significant impacts to their customers. This may result in a perception that organizations in this area are more likely to pay a ransom demand compared to organizations in other sectors," says Jamie Hart, cyber-threat intelligence analyst at Digital Shadows. Also, these systems also tend to be in constant use, which can create another problem because operators may be reluctant to take them offline to apply the steady flow of routine software patches necessary to protect against security vulnerabilities that can give ransomware gangs access in the first place. That's if the machines can receive security updates at all because obsolete, unsupported technology is still common in many industrial environments. "Organisations in this vertical are heavily reliant on systems that are outdated and thus require significant efforts to maintain vulnerability management. Additionally, these systems are so vital to the day-to-day operations of these organizations taking them offline for patching is a significant undertaking," says Hart. This reliance on older systems and the need for constant uptime, therefore, makes industrial plants tempting victims for ransomware attacks. For the cyber criminals, it's all about the money and they're targeting factories because they know there's money to be made, potentially against a soft target that will be willing to pay up. "Ransoming an enterprise, that's one thing. Ransoming an industrial plant that has a 15-million-a-day production line that would be affected by downtime, that's another," says Rob Lee, CEO and co-founder of Dragos, a company specialising in industrial cybersecurity."It will be extremely enticing for ransomware operators." Most ransomeware will target the PCs and servers on the business network (which is often enough to shut down operations), but some are going further to target the industrial systems too. There are some specialist ransomware operations that are looking to take attacks even further in their quest to make money, such as ransomware variants like EKANS, which are specifically designed to target industrial control systems (ICS). The prospect of ransomware encrypting ICS systems in factories is a worrying prospect, but there's also the potential these gangs could target critical infrastructure and attempt to hold energy, water and other utilities hostage. These aren't products that organisations and individuals could go without for a few days – if a cyber criminal has the ability to shut down the power of a city, the impact is going to be felt far and wide.

#### Link alone turns case, zeroing enforcement and encouraging anticompetitive behavior.

**Baker 20** (Jonathan Baker, Bill Baer, Michael Kades, Fiona Morton, Nancy Rose, Carl Shapiro, Tim Wu; Professor of Law at American University, former Director of the Bureau of Economics at the Federal Trade Commission, Ph.D. in Economics from Stanford University, J.D. from Harvard University; Visiting Fellow in Governance Studies, former Assistant Attorney General for Antitrust at the U.S. Department of Justice and Director of the Bureau of Competition at the Federal Trade Commission, J.D. from Stanford University; Director of Markets and Competition Policy at the Equitable Growth Foundation, J.D. from the University of Wisconsin; Professor of Economics at ale University, Ph.D. in Economics from the Massachusetts Institute of Technology; Professor of Applied Economics, Ph.D. in Economics from the Massachusetts Institute of Technology; Professor of Business Strategy at the University of California, Berkeley; Special Assistant to the President for Technology and Competition Policy in the National Economic Council, J.D. from Harvard Law School, “Restoring competition in the United States,” Washington Center for Equitable Growth. November 19, 2020. <https://equitablegrowth.org/research-paper/restoring-competition-in-the-united-states/>)

The need for more resources

The agencies lack the resources to fulfill their mission after a decade in which they have seen their budgets largely frozen. Increasing resources alone will not solve today’s manifest market power problems, but substantially increasing resources is an important part of the solution.

The agencies require a significant increase in appropriations to begin the process of more effectively deterring anticompetitive conduct and mergers. Agencies strapped for resources are less likely to investigate complex cases and more willing to accept flawed settlements. Corporations are more likely to pursue questionable mergers or undertake potentially anticompetitive conduct if they think the agencies have little or no capacity to bring additional enforcement actions.

#### Even winning that the link causes delay *zeroes solvency* because the *damage will already be done* by the time the aff is enforced.

**Jones & Kovacic 20** (Alison Jones – Professor of Law @ King’s College London. William Kovacic – commissioner of the FTC from 2006 to 2011, professor @ George Washington University Law School and the director of their Competition Law Center. <KEN> “Antitrust’s Implementation Blind Side: Challenges to Major Expansion of U.S. Competition Policy,” *The Antitrust Bulletin*. Vol. 65(2) 227-255. DOI: 10.1177/0003603X20912884)

In the discussion above, we have been addressing the types of remedies that are imposed at the conclusion of a lawsuit. A problem in highly dynamic markets, however, is that the lag between the initiation of a case and a final order on relief may be so great that market circumstances have changed dramatically or the victim of allegedly improper exclusion may have left the market or otherwise lost its opportunity to expand and contest the position of the incumbent dominant firm. In this context, the antitrust cure arrives far too late to protect competition. The relatively slow pace of antitrust investigations and litigation (with appeals that follow an initial decision) has led some observers to doubt the efficacy of antitrust cases as effective policy-making tools in dynamic commercial sectors.

### 2NC – AT: Morale

#### It’s importance was recently elevated --- prefer internal memos and public statements

Jercich 21 – {Kat, DOJ will elevate ransomware probes to terrorism-level priority , <https://www.healthcareitnews.com/news/doj-will-elevate-ransomware-probes-terrorism-level-priority>, June 04, 2021) NAR

Amid an ongoing series of expensive and disruptive attacks on U.S. health systems, energy infrastructure and food suppliers, the U.S. Department of Justice [DOJ] says it will elevate its ransomware investigations to a priority level similar to that of terrorism. As Reuters' Christopher Bing reported this week, the agency sent internal guidance to U.S. attorney's offices around the country directing staff to centrally coordinate ransomware investigations in the field with a Washington task force. "To ensure we can make necessary connections across national and global cases and investigations, and to allow us to develop a comprehensive picture of the national and economic security threats we face, we must enhance and centralize our internal tracking," said the guidance, according to Reuters. WHY IT MATTERS As senior officials told Bing, the DOJ's move to shift ransomware response illustrates how the issue is being prioritized. It will mean that the agency expects U.S. attorney's office investigators to share case details and other information with leaders in Washington. "We've used this model around terrorism before, but never with ransomware," said Justice Department Principle Associate Deputy Attorney General John Carlin. Other investigations that will also trigger similar notifications now include cases involving counter-antivirus services, botnets and other tools used by hackers. The guidance follows a Thursday letter from National Security Council Cybersecurity Advisor Anne Neuberger to corporate executives and business leaders, noting the rise in ransomware attacks and advising organizations to beef up their protection against them. The letter outlines best practices for companies, including routine backups and patches, multifactor authentication, endpoint detection and response, encryption, and the employment of a skilled security team. THE LARGER TREND The Biden administration has signaled that cybersecurity will be a priority going forward, with billions of dollars allocated toward bolstering it in the budget released this past week.

#### DoJ is leading interagency coordination to address cyber

Mashable ’21, Jack Morse (June 3, “The U.S. government finally decides to get serious about ransomware”, <https://mashable.com/article/doj-ransomware-task-force>)

All it took was a fundamental disruption to the nation's fuel supply and a threat to meat, but the U.S. Department of Justice is finally going to start taking ransomware seriously. Or, at least more seriously. So reports Reuters, which on Thursday noted that the DOJ is "elevating investigations of ransomware attacks to a similar priority as terrorism." This move, in part, will involve coordinating responses to ransomware with a single task force in Washington D.C. Ransomware is a form of digital extortion that involves encrypting a victim's files and then offering to provide a decryption key for a price, typically paid in cryptocurrency. Thursday's news was well received by experts in the cybersecurity field. Chris Krebs, the former director of the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (who was notoriously fired by tweet), called out DOJ's effort as a step in the right direction. "This is a positive indication that we're getting serious about stopping ransomware," he wrote Thursday. "Much more needs to be done, but directional shifts are a good thing." Jackie Singh, a former senior cybersecurity staffer in the Biden campaign, explained what the DOJ's move means in practice. "Centralizing the data and clarifying the reporting structure means more effective information sharing between disparate agencies on a topic of growing importance and recognized risk, primarily due to the disruption at Colonial Pipeline, but also based on the hundreds of ransomware incidents which pose mounting threats to Americans," she wrote over direct message. According to Singh, this may actually have a meaningful effect on ransomware's proliferation. "This move may enable the White House and diplomats at the State Department to develop more effective geopolitical responses to foreign criminal cyber intrusion."

### 2NC – AT: Across the Board

#### Cybercrime is one of the DoJ’s most obscure units. That ensures overstretch trades off with it!

**Dwyer 21** (Kellen Dwyer – Assistant U.S. Attorney in the Eastern District of Virginia, where he prosecuted computer hacking and national security cases, then as a Deputy Assistant Attorney General in the National Security Division, where he was in charge of cybersecurity policy and represented the Department on the National Security Council “It’s Time to Surge Resources Into Prosecuting Ransomware Gangs,” Lawfare. May 20, 2021. <https://www.lawfareblog.com/its-time-surge-resources-prosecuting-ransomware-gangs>)

Why, then, isn’t the Justice Department clamoring to hire more cyber prosecutors and agents? Part of it may be concern about the difficulty in obtaining custody of the perpetrators. But the reluctance may also result from the resource limitations of an organization that is constantly juggling competing priorities. It is the most visible crimes that get the resources. To be sure, a high-profile data breach is visible and will command resources. But those resources tend to go into investigating the perpetrators of that particular hack, not into launching long-term, proactive investigations into all the cybercrime-as-a-service organizations that contribute to global hacking in larger, if less measurable ways. Part of the problem is that each U.S. attorney’s office and each FBI field office has responsibility over a particular territory. Thus, a U.S. attorney will (understandably) be most concerned about catching the perpetrators of a ransomware attack committed against a company in his or her district. But, as noted above, the hackers who commit the ransomware attacks are like street-level drug dealers, not kingpins. And U.S. attorneys have much less incentive to spend scarce resources on long-term investigations into Russian-based cybercrime services with slight connections to their districts and a small chance of producing arrests in the near future. The department does have a centralized computer crimes section, CCIPS, which provides training and assistance to cyber prosecutors and has partnered with U.S. attorney’s offices in many successful cybercrime-as-a-service cases, including the ones discussed in this post. But CCIPS’s approximately 45 attorneys spend much of their time conducting training, providing advice, building relationships with foreign partners and advocating important policy changes. They would be the first to tell you that their investigative resources are limited and that, with more resources, they could conduct and support more successful investigations.

#### Especially in the context of antitrust --- new investigations will require resources from under-the-radar DoJ priorities

**McCabe 18** (David McCabe – covers technology policy from The Times' Washington bureau, formerly of Axios. “Mergers are spiking, but antitrust cop funding isn't,” Axios. https://www.axios.com/antitrust-doj-ftc-funding-2f69ed8c-b486-4a08-ab57-d3535ae43b52.html)

The number of corporate mergers has jumped in recent years, but funding has stagnated for the federal agencies that are supposed to make sure the deals won’t harm consumers. Why it matters: A wave of mega-mergers touching many facets of daily life, from T-Mobile’s merger with Sprint to CVS’s purchase of Aetna, will test the Justice Department's and Federal Trade Commission’s ability to examine smaller or more novel cases, antitrust experts say. What they’re saying: “You have finite resources in terms of people power, so if you are spending all of your time litigating big mergers … there might be some investigations where decisions might have to be made about which investigations you can pursue,” said Caroline Holland, who was a senior staffer in DOJ’s Antitrust Division under President Obama and is now a Mozilla fellow. What's happening: More mergers are underway now than at any point since the recession. The total number of transactions reported to the federal government in fiscal year 2017, and not including cases given expedited approval or where the agencies couldn't legally pursue an investigation, is 82% higher than the number reported in 2010 and 55% higher than the number reported in 2012. Funding for antitrust officials who weigh the deals hasn’t kept pace. The funding for the Department of Justice’s antitrust division has fallen 10% since 2010, when adjusted for inflation. That's in line with the broader picture: not adjusting for inflation, the Department's overall budget increased just slightly in 2016 and 2017. Funding for the FTC has fallen 5% since 2010 (adjusted for inflation). An FTC spokesperson declined to comment on funding levels and Antitrust Division officials didn't provide a comment. Driving the news: Merger and acquisition activity is up 36% in the United States compared to the same time last year, according to Thomson Reuters data from April. Several deals under government review have gotten national attention, including Sinclair’s purchase of Tribune's TV stations or T-Mobile’s deal with Sprint, which stands to reduce the number of national wireless providers from four to three. Meanwhile, the Justice Department is awaiting the ruling on its lengthy legal effort to block AT&T’s proposed $85 billion purchase of Time Warner. Yes, but: It’s not the attention-grabbing mega-mergers that advocates worry will get less of a close look thanks to a shortage of funds. Instead, some say budget limitations are likely to matter when officials are deciding which smaller or "borderline" deals to investigate further. “Sometimes there’s nothing there,” said Holland of the agency's early investigations. “Other times, it might be, ‘This is kind of a close call, and we’ve got three or four close calls and we need to pick one of them.’" "It could mean settlements get accepted that otherwise wouldn’t, or deals that should be challenged aren’t," said Michael Kades of the Washington Center for Equitable Growth, an antitrust-enforcement-friendly think tank that has done extensive research on the topic, in an email.

### 2NC – AT: Aff Is Small

#### Court decisions against state action immunity will require DOJ resources

Lipsky et al ‘18 , Professor and Director of the Competition Advocacy Program at the Global Antitrust Institute with a law degree from Stanford (Tad, Joshua D. Wright, Douglas H. Ginsburg, Bruce H. Kobayashi, John M. Yun, “THE UNITED STATES DEPARTMENT OF JUSTICE ANTITRUST DIVISION PUBLIC ROUNDTABLE SERIES ON COMPETITION AND DEREGULATION, FIRST ROUNDTABLE ON STATE ACTION, STATUTORY EXEMPTIONS AND IMPLIED IMMUNITIES”, George Mason Law & Economics Research Paper No. 18-03, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3140743)

Indeed, that was precisely the situation in the Court’s original state action decision, Parker v. Brown. 43 Parker involved an antitrust challenge to a California regulatory scheme (an output reducing raisin prorate program) that set up a raisin cartel. According to the Court’s opinion, ninety-five percent of U.S. raisins and half of the world’s raisins were grown in California and subject to the state’s anticompetitive prorate program. Moreover, more than ninety percent of the output was shipped through interstate or foreign commerce to consumers outside California. As a result, instate private interests (California raisin growers) captured the vast majority of the benefits of the resulting anticompetitive price increase while ninety percent of the anticompetitive effect (of increased prices) was exported to consumers outside of California. The decision in Parker demonstrates that despite the fact that the state clearly articulated its anticompetitive intentions and actively supervised the cartel, the politicians and voters in the State of California may very well have still approved of the scheme. However, an alternative approach would focus upon the extent to which the effects of anticompetitive state regulations spillover to other states. Easterbrook would replace the Court’s current approach with a single rule that would allow states and local jurisdictions to adopt any regulation they choose, if and only if the anticompetitive effects of the regulation are internalized by residents of that state.44 By focusing solely on the incidence of the anticompetitive overcharge, this approach would be more administrable than attempting to address such regulations through the dormant Commerce Clause and the difficult balancing tests it requires.45 The California raisin prorate program at issue in Parker clearly would fail this test and be subject to antitrust scrutiny. Exclusive focus on the jurisdictional incidence of anticompetitive effects, however, might also result in many of the anticompetitive regulations previously denied immunity by the Court receiving state action protection (e.g., Phoebe Putney,where the anticompetitive price effect of a “hospital authority” monopolizing hospital services in a particular region of the state would be felt exclusively in-state). Accordingly, the substantive policy of the antitrust laws, the Commerce Clause, and other constitutional provisions that limit state economic parochialism might be advanced even more effectively by a hybrid approach: Anticompetitive state action meeting the criteria of the current state action doctrine would be immune from antitrust attack unless the anticompetitive effects of the state action are predominantly exported. This approach would safeguard the sovereign prerogatives of the states where they seek to supervise the local anticompetitive aspects of displacing competition, while still recognizing the clear exception identified in Parker (prohibiting mere authorization of private restraint) and protecting the federal interest in an integrated national economy. Using these insights, the Department of Justice could encourage the Court to revisit and supplement its current criteria for state action immunity by either initiating its own cases or filing amicus briefs in private cases. For example, the Department could challenge a state regulatory regime that meets the Court’s current criteria for immunity – clear articulation and active supervision – but has anticompetitive effects felt predominantly beyond the borders of the regulating state. In either endeavor, however, the Department could aim to persuade the Court to impose a third condition for state action immunity (i.e., the lack of substantial out-of-state anticompetitive effects).

#### It would require so many resources as to necessitate a NEW AGENCY

Scheffler ’19, Professor of Law at Yale (Gabriel, “ Unlocking Access to Health Care: A Federalist Approach to Reforming Occupational Licensing”, https://heinonline.org/HOL/LandingPage?handle=hein.journals/hmax29&div=9&id=&page=)

Finally, a federalist approach would enable the federal government to take advantage of states’ institutional experience in regulating occupations, and to avoid having to create an equivalent institutional apparatus at the federal level. Daniel Gilman, an Attorney Advisor at the FTC’s Office of Policy Planning, notes that there is currently no federal agency “with the authority, expertise, and experience to perform the various licensing functions undertaken by the states, and it would be difficult to create one.”308 He acknowledges that this challenge is not insurmountable: there is plenty of expertise about occupational regulation in the federal government, at agencies like the Department of Labor, HRSA, and the FTC. But some federal preemption proposals, such as creating a federal system of licensure, would necessitate creating an accompanying set of institutions capable of issuing, updating, and enforcing federal occupational licensing laws.309

#### Implementation requires new regulations, regulatory bodies, and lawsuits determining application --- each drain resources.

**Jones & Kovacic 20** (Alison Jones – Professor of Law @ King’s College London. William Kovacic – commissioner of the FTC from 2006 to 2011, professor @ George Washington University Law School and the director of their Competition Law Center. <KEN> “Antitrust’s Implementation Blind Side: Challenges to Major Expansion of U.S. Competition Policy,” *The Antitrust Bulletin*. Vol. 65(2) 227-255. DOI: 10.1177/0003603X20912884)

New legislation envisaged by reform advocates could ease the path for current government agencies seeking to reduce excessive levels of industrial concentration by arresting anticompetitive behavior of dominant enterprises (through interim and permanent relief) and by blocking mergers that pose incipient threats to competition. It seems clear, however, that such dramatic legislative proposals are likely to be fiercely contested through the legislative process and so will take time, and be difficult, to enact. Further, even if armed with a more powerful mandate, the DOJ and the FTC will still have to bring what are likely to be challenging cases applying the new laws (see Section F). The adoption, setting up, and bedding in of new legislation or regulatory structures and bodies is therefore unlikely to happen very quickly and is, consequently, unlikely to meet the demands of those seeking urgent and immediate action now.

#### Even if it’s an *open and shut case*, enforcement takes year, thousands of hours, and buckets of money --- spills over to other issues.

**Dafny 21** (Leemore Dafny – Professor of Business Administration at the Harvard Business School and the John F. Kennedy School of Government, and former Deputy Director for Healthcare and Antitrust in the Bureau of Economics at the Federal Trade Commission. “The Covid-19 Pandemic Should Not Delay Actions to Prevent Anticompetitive Consolidation in US Health Care Markets,” Pro Market. June 10, 2021. <https://promarket.org/2021/06/10/covid-pandemic-consolidation-pandemic-monopoly/>)

However, as Commissioner Rebecca Slaughter, the current acting FTC chair has noted, these efforts have “faced resistance, with two of these recent victories only coming after district court setbacks.” Blocking a horizontal merger, even when it appears to be an “open and shut” case to a layperson, requires extraordinary resources, including large investigation and litigation teams, as well as economic and other subject matter experts who must analyze the transaction, lay out the case for blocking the merger, and rebut arguments advanced by Defendants’ attorneys and experts. To pick a recent example, consider the proposed merger of two hospital systems in the Memphis area, which the FTC filed to block in November 2020. Based on the FTC’s complaint, the merger would have reduced the number of competing systems from four to three and created a system with over a 50 percent market share. In the face of litigation, the parties abandoned the deal—consistent with this being a straightforward case. Although the FTC prevailed without a trial, it took nearly a year from the merger announcement to the abandonment. Over that period, the FTC likely devoted thousands of staff hours to the investigation and lawsuit and expended substantial taxpayer resources on expert witnesses. The higher the payoff from the merger for the merging parties—and the payoff in the case of an increase in market power can be substantial—the greater the incentive for defendants to invest extraordinary resources to fight a merger challenge. Even if there is only a middling (and in some cases, small) chance of getting a merger through, it may well be in the parties’ interest to see if they can prevail, absorbing the agencies’ (i.e., DOJ and FTC’s) scarce resources in that attempt and preventing them from devoting those resources to investigate other transactions or anticompetitive practices.

#### The 1970’s prove --- agencies fumbled other priorities because prosecuting multiple complex cases against large companies is a regulatory slog.

**Jones & Kovacic 20** (Alison Jones – Professor of Law @ King’s College London. William Kovacic – commissioner of the FTC from 2006 to 2011, professor @ George Washington University Law School and the director of their Competition Law Center. <KEN> “Antitrust’s Implementation Blind Side: Challenges to Major Expansion of U.S. Competition Policy,” *The Antitrust Bulletin*. Vol. 65(2) 227-255. DOI: 10.1177/0003603X20912884)

The discussion below, and history, seems to indicate, however, that more courage and more people will not necessarily overcome the implementation obstacles that stand in the way of a program that requires the rapid prosecution of a large number of complex cases against well-resourced and powerful companies. Indeed, the criticisms levied at the current system, the proposals for more effective enforcement and reform, and the scale of the action being demanded bear some resemblance to those that led to a more re-invigorated and aggressive antitrust enforcement policy in the 1960s and early 1970s. For example, atthat time complaints that the FTC was in decay, was obsessed with trivial cases and failingto address matters of economic importance, anticompetitive conduct, and rising concentration,77 led the FTC to embark on a new, bold, and astoundingly broad enforcement program.78 In an effort to meet criticisms of it as a shambolic and failing institution, the FTC sought to upgrade its processes for policy planning, made concerted efforts to improve its human capital in management and case handling, and sought to improve substantive processes and the quality of its competition and consumer protection analysis.

In the end, FTC’s efforts to improve capability proved insufficient to support the expanded enforcement agenda, partly because the Commission failed to formulate an adequate plan to overcome the full range of implementation obstacles. The FTC seriously overreached because it did not grasp, or devise strategies to deal with, the scale and intricacies of its expanded program of cases and trade regulation rules, the ferocious opposition that big cases with huge remedial stakes would provoke from large defendants seeking to avoid divestitures, compulsory licensing, or other measures striking at the heart of their business, and the resources required to deliver good results. The Commission lacked the capacity to run novel shared monopoly cases that sought the break-up of the country’s eight leading petroleum refiners and four leading breakfast cereal manufacturers79 and simultaneously pursue an abundance of other high stake, difficult matters involving monopolization, distribution practices, and horizontal collaboration. The FTC also overlooked swelling political opposition, stoked by the vigorous lobbying of Congress, that its aggressive litigation program provoked.80

#### Congressional backlash --- corporations will lobby Congress to eviscerate the DoJ

**Jones & Kovacic 20** (Alison Jones – Professor of Law @ King’s College London. William Kovacic – commissioner of the FTC from 2006 to 2011, professor @ George Washington University Law School and the director of their Competition Law Center. <KEN> “Antitrust’s Implementation Blind Side: Challenges to Major Expansion of U.S. Competition Policy,” *The Antitrust Bulletin*. Vol. 65(2) 227-255. DOI: 10.1177/0003603X20912884)

The second path is to lobby the Congress. The FTC is called an “independent” regulatory agency, but Congress interprets independence in an idiosyncratic way.126 Legislators believe independence means insulation from the executive branch, not from the legislature. The FTC is dependent on a good relationship with Congress, which controls its budget and can react with hostility, and forcefully, when it disapproves of FTC litigation—particularly where it adversely affects the interests of members’ constituents. Controversial and contested cases may consequently be derailed or muted if political support for them wanes and politicians become more sympathetic to commercial interests. The FTC’s sometimes tempestuous relationship with Congress demonstrates that political coalitions favoring bold enforcement can be volatile, unpredictable, and evanescent.127 If the FTC does not manage its relationship with Congress carefully, its litigation opponents may mobilize legislative intervention that causes ambitious enforcement measures to the founder.

Imagine, for a moment, that the DOJ and the FTC launch monopolization cases against each of the GAFA giants. Among other grounds, these cases might be premised on the theory that the firms used mergers to accumulate and protect positions of dominance. The GAFA firms have received unfavorable scrutiny from legislators from both political parties over the past few years, but the current wave of political opprobrium is unlikely to discourage the firms from bringing their formidable lobbying resources to bear upon the Congress. It would be hazardous for the enforcement agencies to assume that a sustained, well-financed lobbying campaign will be ineffective. At a minimum, the agencies would need to consider how many battles they can fight at one time, and how to foster a countervailing coalition of business interests to oppose the defendants.

#### Congress will defund the DoJ, even if Congress itself asked for the antitrust. CFPB and past FTC’s prove.

**Vaheesan 18** (Sandeep Vaheesan – legal director at the Open Markets Institute. He previously served as a regulations counsel at the Consumer Financial Protection Bureau. <KEN> “Resurrecting “A Comprehensive Charter of Economic Liberty”: the Latent Power of the Federal Trade Commission,” *University of Pennsylvania Journal of Business Law*. Vol. 19, Issue 3. <https://scholarship.law.upenn.edu/jbl/vol19/iss3/4/>)

Among those sympathetic to an expansive Section 5, some are likely to express reservations about its political feasibility. History certainly lends support to this concern. Congress has been hostile to an activist FTC in the past and could be expected to move to rein in any activism. In the 1970s, the FTC zealously pursued its antitrust and consumer protection missions.251 This period of aggressive enforcement and rulemaking triggered a powerful backlash from corporate America.252 The Washington Post condemned the Commission as the “National Nanny” in a stinging editorial.253 This period of zeal ended poorly for the FTC. Congress asserted new power over the agency and imposed additional procedural conditions on the use of its consumer protection authority.254

This fear of a political backlash from business and Congress may be the strongest line of criticism of an expansive Section 5. Corporations pour money into Congressional campaigns to ensure that their interests are represented and advanced. Although the FTC has been averse to policy activism or innovation for decades, the House has tried to limit the FTC’s authority to challenge mergers under Section 5, in the name of creating harmony between the FTC and the DOJ.255

The recent experience of another federal agency is instructive. Congressional Republicans, with the support of some Democrats, have been trying to hobble the Consumer Financial Protection Bureau (“CFPB”).256 The CFPB is seen as aggressively pursuing its statutory mission, bringing a wide range of enforcement actions and writing a number of rules to regulate consumer finance markets.257 In light of its vigor, the opposition from Congress does not come as a surprise. Even under more favorable political circumstances, an FTC that seeks to breathe life into Section 5 is certain to invite comparable Congressional opposition.

The probable reaction from many ideologically or financially captured members of Congress should not be underestimated, let alone ignored. Corporate interests and their Congressional allies would seek to curtail any Section 5 expansions. The FTC is a creation of Congress and so must answer to Congress. Congress can undertake a range of actions to limit the FTC’s day-to-day ability to function and its statutory power. At an extreme, Congress could repeal the FTC Act and shut down the FTC entirely. The risks to the FTC’s future would include various existential threats and should not be brushed aside. Undertaking a reinterpretation of Section 5 without an awareness of political dynamics on Capitol Hill would be a grave mistake.

### 2NC – AT: Thumpers

#### Only the fiated nature of the plan disrupts this prioritization effort

**O’Neill 4** (Michael Edmund O’Neill, Associate Professor @ George Mason University School of Law, 2004, “UNDERSTANDING FEDERAL PROSECUTORIAL DECLINATIONS: AN EMPIRICAL ANALYSIS OF PREDICTIVE FACTORS,” The American Criminal law Review, Vol. 41, Issue 4, ProQuest)

4. The Prioritization of Criminal Prosecutions The designation of certain law enforcement efforts as priorities does make a difference in terms of what matters are declined.36 Congress, for example, has the ability to dictate priorities-at least to a certain extent-by increasing the number of DEA or INS agents or by increasing the funds available for securities fraud enforcement. Merely by bringing public attention to a law enforcement matter, Congress or the President may affect law enforcement efforts. Similarly, through the use of its oversight authority, Congress can press the DOJ to focus law enforcement efforts on particular areas of concern. As a result, the DOJ, as well as the local U.S. Attorneys' Offices, are able to designate certain matters as national and/or district priorities. Below, Table 5 contains data on the proportion of matters declined depending upon their priority classification as supplied in the original data set. As might be expected, the general finding is that matters designated as national priorities are less likely to be declined. Furthermore, as the data show, if a referred matter is both a national and a district priority, there is a low probability that it will be declined. If the referred matter is neither a national nor a district priority, however, there is a greater probability that it will be declined. Interestingly, the bulk of matters referred for prosecution constitute neither district nor national priorities. Because it appears that the vast majority of criminal matters investigated simply do not fall within the national or district priority categories, it would be useful to know whether the investigative agencies themselves are aware of the priorities that have been established at the DOJ. If emphasis is to be placed on certain sorts of crime control (e.g. fighting terrorism, combating the distribution of illegal weapons, etc.), it is important that the investigative agencies be on board as well. Criminal cases necessarily start out as investigations, and if the DOJ hopes to prioritize certain types of criminal enforcement, it must start on the front lines, with those who investigate criminal matters in the field.

#### Data from a wide range of industries proves this.

**Dafny 6-10** (Leemore Dafny – Professor of Business Administration at the Harvard Business School and the John F. Kennedy School of Government, and former Deputy Director for Healthcare and Antitrust in the Bureau of Economics at the Federal Trade Commission. <KEN> “The Covid-19 Pandemic Should Not Delay Actions to Prevent Anticompetitive Consolidation in US Health Care Markets,” Pro Market. June 10, 2021. <https://promarket.org/2021/06/10/covid-pandemic-consolidation-pandemic-monopoly/>)

The substantial resources required to challenge transactions, paired with stagnating enforcement budgets, may explain why authorities have elected not to challenge some horizontal transactions they would likely have challenged in previous eras. Using data on a wide range of industries, antitrust scholar John Kwoka documents that enforcers rarely raise concerns about changes in market structure that used to draw scrutiny—that is, mergers that yield five or more market participants.

#### 2 --- the order doesn’t do anything --- it’s just an FYI that competition is declining

**Masuda et. al. 21** (Funai, Eifert & Mitchell, Ltd. Masuda, Funai, Eifert & Mitchell, Ltd. is a U.S. law firm headquartered in Chicago, Illinois, “The Implications of President Biden's "Executive Order on Promoting Competition in the American Economy" August 18, 2021. <https://www.masudafunai.com/articles/the-implications-of-president-bidens-executive-order-on-promoting-competition-in-the-american-economy?utm_source=Mondaq&utm_medium=syndication&utm_campaign=LinkedIn-integration>)

On July 9, 2021, President Joe Biden signed a sweeping executive order titled the “Executive Order on Promoting Competition in the American Economy” (the “Order”), affirming the policy of the Biden administration to “enforce the antitrust laws to combat the excessive concentration of industry, the abuses of market power, and the harmful effects of monopoly and monopsony.” To achieve this, the Order, among other things, directs regulatory agencies to assert oversight over certain business practices and encourages regulatory agencies to develop and/or strengthen rules. The Order includes 72 initiatives by more than a dozen federal agencies.

The Order specifically cites the areas of “labor markets, agricultural markets, Internet platform industries, healthcare markets (including insurance, hospital, and prescription drug markets), repair markets, and United States markets directly affected by foreign cartel activity.” The scope of this order is broad. On the other hand, the Order itself does not create new regulations or laws, leaving the specific implications of it vague.

#### 3 --- thumpers don’t require resources --- they’ll be shot down in court *immediately*.

**Wright 21** (Joshua D. Wright – JD, PhD, University Professor and the Executive Director, Global Antitrust Institute, Scalia Law School at George Mason University, former FTC Commissioner. “Lina Khan Is Icarus at the FTC,” July 13, WSJ)

All that has been overshadowed by an executive order aimed at competition and loaded with goodies, good intentions, new regulatory regimes and a blissful ignorance of unintended consequences (“Joe Biden, 20th Century Trustbuster,” Review & Outlook, July 10). Some of its pronouncements, like occupational-licensing reform, are to the good. But the FTC’s competition authority is about to become a free-for-all for the Biden administration to reshape the economy. One wonders how the Republicans going along with all this to “get Big Tech” are feeling right now; I’m guessing “played.” If not, they’ll catch up soon enough.

Imagining the FTC as Icarus flying without the constraints of history, economics or law is a fun thought experiment, but we’ve been here before. Ms. Khan’s initial steps are indicative of a regulatory overreach that will end with the FTC’s wings melting in the courts. This path does not lead to incremental, much less radical, change. I predict early headlines that appease a rabid base, frustration for FTC staff and a new, volatile partisanship at the agency, but actual results that leave unsatisfied the progressives aching for radical change.

#### Trump XO’s prove

**McCabe and Tankersly 21** (David McCabe, Jim Tankersly – Tech & White House correspondents @ the New York Times. “Biden Urges More Scrutiny of Big Businesses, Such as Tech Giants,” New York Times, https://www.nytimes.com/2021/07/09/business/biden-big-business-executive-order.html)

But Mr. Biden may find it difficult to address the decline in competition across diverse parts of the economy — including Silicon Valley, Wall Street, chain restaurants and large hospital networks — solely through executive action. Experts warn that in many areas, the president will need to work with Congress to change federal laws if he hopes to have more success than former President Donald J. Trump, who also issued competition-focused executive orders and who saw limited results from them.

#### Conservative courts will shoot down the thumpers immediately

**Jones & Kovacic 20** (Alison Jones – Professor of Law @ King’s College London. William Kovacic – commissioner of the FTC from 2006 to 2011, professor @ George Washington University Law School and the director of their Competition Law Center. “Antitrust’s Implementation Blind Side: Challenges to Major Expansion of U.S. Competition Policy,” *The Antitrust Bulletin*. Vol. 65(2) 227-255. DOI: 10.1177/0003603X20912884)

Judicial Resistance to Extensions of Existing Antitrust Doctrine As noted in Section II.A, judicial decisions since the mid-1970s have reshaped antitrust law; created more permissive substantive standards governing dominant firm conduct, mergers, and vertical restraints; and raised the bar to antitrust claims in a number of ways. This remolding has been facilitated by the Court’s conclusion that the Sherman Act constitutes “a special kind of common law offense,”81 so that Congress “expected the courts to give shape to the statute’s broad mandate by drawing on common-law tradition.”82 This has allowed the statutory commands to be interpreted flexibly and the law to evolve with new circumstances and new wisdom;83 for example, where there is widespread agreement that the previous position is inappropriate or where the theoretical underpinnings of those decisions have been called into question.84 The proposed solutions will depend, in the short term at least, on the ability of enforcement agencies to navigate the described jurisprudence to find an antitrust infringement and, in some instances, a further rethinking, refinement, and/or development of doctrine, through softening, modification, or even a reversal of current case law. Although such an evolution could, in theory, result, as it did over the last forty years, from a steady stream of antitrust cases, judicial appointments since 2017 have arguably made such a change in direction unlikely. Rather, it seems more probable that successful prosecution of major antitrust, and especially Section 2 Sherman Act monopolization cases, will remain challenging and may even become more difficult. Cases will be litigated before judges who are ordinarily predisposed to accept the current framework, either by personal preference or by a felt compulsion to abide by forty years of jurisprudence that tells them to do so.85 A new president could gradually change the philosophy of the federal courts by appointing judges sympathetic to the aims of the proposed transformation.86 The reorientation of the courts through judicial appointments is, however, likely to take a long time.87 Until then, trial judges and the Court of Appeals will be compelled to abide by the existing jurisprudence and will only be at liberty to develop a more flexible approach in the “gaps” or spaces left by Supreme Court opinions—for example, in relation to mergers and rebates—and through creative interpretations of the law. Such cases are, however, likely to be hard fought. Indeed, Judge Lucy Koh’s finding in Federal Trade Commission v. Qualcomm, Inc. 88 that Qualcomm’s licensing practices constituted unlawful monopolization of the market for certain telecommunications chips has provoked hostile attacks, not only from practitioners and academics but also from the DOJ, the U.S. Departments of Defense and Energy, and even one of the FTC’s own members. In a scathing op-ed in the Wall Street Journal,89 Commissioner Christine Wilson attacked Judge Koh’s “startling new creation” of legal obligations that may trigger a new wave of enforcement actions and undermine intellectual property rights. Commissioner Wilson condemned the judge’s “judicial innovations,” and “alchemy,” through reviving and expanding the Supreme Court’s 1985 opinion in Aspen Skiing Co v. Aspen Highlands Skiing Corp 90 (which she stresses was described by the Supreme Court in Trinko 91 as “at or near the outer boundary” of U.S. antitrust law), turning contractual obligations into antitrust claims, and for departing from current federal agency practice, by imposing remedies requiring Qualcomm to negotiate or renegotiate contracts with customers and competitors worldwide. She has thus urged the Ninth Circuit (on appeal), and if necessary the Supreme Court, to assess the wisdom of these sweeping changes and to stay the ruling.92 It seems likely therefore that, at the same time as bringing cases seeking to develop procedural, evidential, and substantive antitrust standards under the existing regime, additional antidotes to the stringencies of existing jurisprudence will be required, including more extensive, and expansive, use of Section 5 FTC Act to plug the gaps created by the narrowing of the scope of Section 2 Sherman Act; and/or the adoption of legislation that directs courts to apply a wider goals framework. B. Infirmities of Section 5 of the Federal Trade Commission Act One possible solution to rigidities that have developed in Sherman Act jurisprudence is for the FTC to rely more heavily on the prosecution, through its own administrative process, of cases based on Section 5 of the FTC Act and its prohibition of “unfair methods of competition.”93 This section allows the FTC94 to tackle not only anticompetitive practices prohibited by the other antitrust statutes but also conduct constituting incipient violations of those statutes or behavior that exceeds their reach. The latter is possible where the conduct does not infringe the letter of the antitrust laws but contradicts their basic spirit or public policy.95 There is no doubt therefore that Section 5 was designed as an expansion joint in the U.S. antitrust system. It seems unlikely to us, nonetheless, that a majority of FTC’s current members will be minded to use it in this way. Further, even if they were to be, the reality is that such an application may encounter difficulties. Since its creation in 1914, the FTC has never prevailed before the Supreme Court in any case challenging dominant firm misconduct, whether premised on Section 2 of the Sherman Act or purely on Section 5 of the FTC Act.96 The last FTC success in federal court in a case predicated solely on Section 5 occurred in the late 1960s.97 The FTC’s record of limited success with Section 5 has not been for want of trying. In the 1970s, the FTC undertook an ambitious program to make the enforcement of claims predicated on the distinctive reach of Section 5, a foundation to develop “competition policy in its broadest sense.”98 The agency’s Section 5 agenda yielded some successes,99 but also a large number of litigation failures involving cases to address subtle forms of coordination in oligopolies, to impose new obligations on dominant firms, and to dissolve shared monopolies.100 The agency’s program elicited powerful legislative backlash from a Congress that once supported FTC’s trailblazing initiatives but turned against it as the Commission’s efforts to obtain dramatic structural remedies unfolded.101 C. Designing Effective Remedies Important issues arising for the new enforcement strategy proposed will be what remedies should be sought; how can an order, or decree, be fashioned to ensure that the violation is terminated, that competition on the market is restored, the opportunity for competition is re-established, and that future violations are not committed and deterred; and will a court be likely to impose any such remedy.102 The Sherman Act treats infringements of its key commands as crimes attracting severe sanctions, including fines (corporate and individual) and imprisonment. Although since 1980, the DOJ has used criminal prosecutions only to challenge hard-core horizontal cartels,103 some antitrust reform proponents are calling for the introduction of fines to sanction illegal monopolization, and some commentators have proposed that the DOJ reconsider its policy of not seeking criminal penalties beyond the Section 1 conspiracy context.104 For the time being, however, it would appear that existing civil sanctions will remain the tool of choice for DOJ in dealing with antitrust infringements and will be the only set of remedies available to the FTC, which has no mandate to bring criminal cases. The civil remedial options, which can broadly be grouped into three categories, for the federal agencies, are nonetheless powerful in principle. The first and, perhaps, the most common form of remedy consists of controls on conduct. Conduct-related relief ordinarily takes the form of cease and desist orders that forbid certain behavior or, in a smaller number of cases, compel firms to engage in affirmative acts, such as providing a competitor access to an asset needed to compete. The second major form of remedy is structural relief in the form of divestitures or the compulsory licensing of intellectual property that enables a firm to enter a previously monopolized market. The boundary between purely conduct-based and structural remedies is not always clear. A compulsory licensing decree has strong structural features (it directly facilitates new entry) and conduct elements (it may require the owner of the patent to provide the licensee know-how and updates of the patented technology). The third remedy consists of civil monetary relief in the form of disgorgement of ill-gotten gains or the restitution of monopoly overcharges to victims. A number of Supreme Court decisions in monopolization cases in the late 1940s and early 1950s appeared to hold that these forms of recovery are encompassed in the mandate of courts to order equitable remedies to cure antitrust violations. The federal agencies have not used this power expansively, though it would appear to be available to recoup overcharges in Section 2 or other cases.105 The cures envisaged by many of the advocates of change call for the bold application of the full portfolio of civil remedies, including unwinding past mergers, divestment of assets, restructuring concentrated markets, limiting or reversing vertical integration or through the imposition of licensing obligations. Such advocates thus wish the DOJ and FTC to use the antitrust laws as an effective and simple mechanism for deconcentrating both monopolistic and oligopolistic markets, rapidly introducing new competition into a market; and reversing what they consider to be severe structural problems that have been allowed to develop on the market.106 Structural remedies, in particular, have always been a real and important part of the antitrust remedial arsenal,107 not only in merger cases where a violation of the antitrust rules may consist of an unlawful acquisition of shares or stock108 but also in Sherman Act cases.109 In the 1960s the FTC also sought, using its powers under Section 5 FTC Act to deconcentrate the petrol and breakfast cereal markets110 and in 1969 the Neal Report,111 commissioned by President Lyndon Johnson, proposed the adoption of laws which would allow oligopolistic industries to be deconcentrated and the condemnation of mergers on markets that were already concentrated.112 Modern antitrust has, however, had less appetite for the use of antitrust to break up companies. Although the District Court in United States v Microsoft Corp113 ordered, at the request of the DOJ, that Microsoft be broken into two parts, the Court of Appeals, despite affirming the violation of section 2, reversed and remanded the finding that Microsoft should be split into two. Setting out a high bar for structural relief, the Court stressed that the lower court had not (1) held a remedies-specific hearing114 or (2) provided adequate reasons for the decreed remedies.115 A number of factors seem responsible for the trend away from structural remedies. First, the change in antitrust thinking that has evolved since the early 1970s, from a belief that antitrust intervention and structural remedies can improve performance116 to the current more laissez-faire one.117 Second, concerns about the effectiveness of previous attempts to deconcentrate industries,118 especially given the length of time that antitrust proceedings take.119 Third, the difficulty involved in constructing and overseeing a structural remedy effectively. Although in cases involving a merger or acquisition it may be relatively easy to structure such a remedy through disentangling assets that were once owned separately,120 outside of this situation, the question of how and what to divest might be much more speculative, seem much more risky and may in fact be complex and difficult to administer (involving significant restructuring, separation of physical facilities, and allocation of staff from integrated teams).121 These types of concern make it a challenge to persuade a court that a structural remedy is warranted and will be successful in achieving its objective.122 In the discussion above, we have been addressing the types of remedies that are imposed at the conclusion of a lawsuit. A problem in highly dynamic markets, however, is that the lag between the initiation of a case and a final order on relief may be so great that market circumstances have changed dramatically or the victim of allegedly improper exclusion may have left the market or otherwise lost its opportunity to expand and contest the position of the incumbent dominant firm. In this context, the antitrust cure arrives far too late to protect competition. The relatively slow pace of antitrust investigations and litigation (with appeals that follow an initial decision) has led some observers to doubt the efficacy of antitrust cases as effective policy-making tools in dynamic commercial sectors. There are at least five possible responses to concerns about the speed of antitrust litigation, particularly matters involving dominant firms. First, agencies could experiment with ways to accelerate investigations, and courts could adopt innovative techniques to shorten the length of trials. In the United States, we perceive that greater integration of effort among the public agencies would permit the more rapid completion of investigations (e.g., by pooling knowledge and focusing more resources on the collection and evaluation of evidence). Courts could use methods tested with success in the DOJ prosecution of Microsoft in the late 1990s to truncate the presentation of evidence. These types of measures have some promise to bring matters to a close more quickly. Second, the initiation of a lawsuit could be recognized as being, in some important ways, its own remedy; the prosecution of a case by itself causes the firm to change its behavior in ways that give rivals more breathing room to grow. Moreover, the visible presence of the enforcement authority, manifest by its investigations and lawsuits, causes other firms to reconsider tactics that arguably violate the law. Seen in this light, the entry of a final order that specifies remedies may not be necessary for all instances to have the desired chastening effect. A third response is to experiment more broadly with interim relief that seeks to suspend certain types of exclusionary conduct pending the completion of the full trial.123 Effective interim measures would require the enforcement agency to develop a base of knowledge about the sector that enables it to accurately identify the practices to be enjoined on an interim basis and to give judges a confident basis for intervening in this manner. A fourth approach would be that the remedies achieved in protracted antitrust litigation may not be so imperfect or untimely as they might appear to be. There have been a number of instances in which the remedy achieved in a monopolization case was rebuked as desperately insufficient when ordered but turned out to have positive competitive consequences.124 This is a humbling and difficult aspect of policy making. It may not be easy for an agency to persuade its political overseers—or other external audiences—that the chief benefits of its intervention will emerge in, say, two or three decades. Yet the positive results may take a long time to become apparent. A fifth technique would be to rely more heavily on ex-ante regulation in the form of trade regulation rules that forbid certain practices. A competition authority—most likely the FTC—would use its rulemaking powers to proscribe specific types of conduct (e.g., self-preferencing by dominant information services platforms). In this article, we do not purport to solve the problems of the remedial design set out above. There is, however, a fairly clear conclusion about how enforcement agencies should go about thinking of remedies. As we note below, there is considerable room for public agencies to design remedies more effectively by systematically examining past experience and collaborating with external researchers to identify superior techniques. In this regard, the FTC’s collection of policy tools would appear to make it the ideal focal point for the development of more effective approaches to remedial design. D. Political Backlash As we have already indicated, the government’s prosecution of high stakes antitrust cases often inspires defendants to lobby elected officials to rein in the enforcement agency. Targets of cases that seek to impose powerful remedies have several possible paths to encourage politicians to blunt enforcement measures. One path is to seek intervention from the President. The Assistant Attorney General of the Antitrust Division serves at the will of the President, making DOJ policy dependent on the President’s continuing support. The White House ordinarily does not guide the Antitrust Division’s selection of cases, but there have been instances in which the President pressured the Division to alter course on behalf of a defendant, and did so successfully.125 The second path is to lobby the Congress. The FTC is called an “independent” regulatory agency, but Congress interprets independence in an idiosyncratic way.126 Legislators believe independence means insulation from the executive branch, not from the legislature. The FTC is dependent on a good relationship with Congress, which controls its budget and can react with hostility, and forcefully, when it disapproves of FTC litigation—particularly where it adversely affects the interests of members’ constituents. Controversial and contested cases may consequently be derailed or muted if political support for them wanes and politicians become more sympathetic to commercial interests. The FTC’s sometimes tempestuous relationship with Congress demonstrates that political coalitions favoring bold enforcement can be volatile, unpredictable, and evanescent.127 If the FTC does not manage its relationship with Congress carefully, its litigation opponents may mobilize legislative intervention that causes ambitious enforcement measures to the founder. Imagine, for a moment, that the DOJ and the FTC launch monopolization cases against each of the GAFA giants. Among other grounds, these cases might be premised on the theory that the firms used mergers to accumulate and protect positions of dominance. The GAFA firms have received unfavorable scrutiny from legislators from both political parties over the past few years, but the current wave of political opprobrium is unlikely to discourage the firms from bringing their formidable lobbying resources to bear upon the Congress. It would be hazardous for the enforcement agencies to assume that a sustained, well-financed lobbying campaign will be ineffective. At a minimum, the agencies would need to consider how many battles they can fight at one time, and how to foster a countervailing coalition of business interests to oppose the defendants. E. Opposition to Legislative Reform Although statutory reform might at first sight appear to be a direct, effective solution to some of the impediments (such as entrenched judicial resistance to intervention), there are good reasons to expect that powerful business interests will also stoutly oppose any proposals for legislation to expand the reach of the antitrust laws or to create a new digital regulator.128 One can envisage the formidable financial and political resources of the affected firms will amass to stymie far-reaching legislative reforms. Legislative steps that threaten the structure, operations, and profitability of the Tech Giants and other leading firms are fraught with political risk. These risks are surmountable, but only by means of a clever strategy that anticipates and blunts political pressure. One element of such a strategy is to mobilize countervailing support from consumer and business interests to sustain an enabling political environment to enact ambitious new laws. Even if successful, “[l]egislative relief from existing jurisprudential structures might take years to accomplish”;129 acts taken under new legislation—even with the establishment of presumptions that improve the litigation position of government plaintiffs—may still be relatively complex and difficult to prosecute. Rulemaking is an alternative to litigation, but it is no easy way out of the problem. On the contrary, promulgation and defense, in litigation, of a major trade regulation rule is liable to take as long as the prosecution of a Section 2 case. It can also be anticipated that a judiciary populated with many regulation skeptics will subject new rules or related measures to demanding scrutiny.

### 2NC – AT: Terror Defense

#### you don’t need to steal any material or do any illegal activities to build a nuke --- it’s already been done

**Jabr 18** (Ferris Jabr – contributing writer to The New York Times Magazine and Scientific American, MA in Journalism from NYU. Alex Wellerstein – historian of science at the Stevens Institute of Technology, PhD in the History of Science from Harvard. “This Is What a Nuclear Bomb Looks Like,” New York Magazine. June 2018. http://nymag.com/daily/intelligencer/2018/06/what-a-nuclear-attack-in-new-york-would-look-like.html)

Once terrorists obtained the uranium, they would need only a small team of sympathetic engineers and physicists to build what is known as a gun-type nuclear bomb, like the one dropped on Hiroshima. A gun-type nuke uses traditional explosives to fire a slug of uranium through a tube directly into another chunk of uranium, fracturing huge numbers of atoms and unleashing a massive amount of energy. Compared to modern nuclear missiles, which are far more powerful and complex, constructing a crude gun-type nuke is fairly straightforward. In 2002, when Joe Biden was chairman of the Senate Foreign Relations Committee, he asked several nuclear laboratories whether a terrorist group could construct an off-the-shelf nuclear weapon. Several months later, they gave their answer: Without resorting to any illegal activities or drawing on classified information, and using only commercially available parts, they had built a nuclear bomb that was “bigger than a breadbox but smaller than a dump truck.” To underscore the danger, Biden had them bring the device to the Senate.

#### Construction and transport are easy

**Jabr 18** (Ferris Jabr – contributing writer to The New York Times Magazine and Scientific American, MA in Journalism from NYU. Alex Wellerstein – historian of science at the Stevens Institute of Technology, PhD in the History of Science from Harvard. “This Is What a Nuclear Bomb Looks Like,” New York Magazine. June 2018. http://nymag.com/daily/intelligencer/2018/06/what-a-nuclear-attack-in-new-york-would-look-like.html)

What made the false alarm all the more frightening is just how plausible the prospect of a nuclear strike has become. The U.S. and Russia, both of which maintain massive nuclear arsenals, are increasingly at odds. Iran has announced plans to ramp up its production of enriched uranium. North Korea may already have nuclear missiles capable of striking anywhere in the U.S., and there is no way to know whether Trump’s negotiations with Kim Jong-un will wind up increasing or decreasing the prospect of nuclear war. But the current state of dread, while entirely understandable, has overshadowed two crucial realities about the threat of a nuclear calamity. First, a nuclear attack on the United States could well come not from the skies but from the streets. Experts warn that it would be relatively easy for terrorists to build an “improvised nuclear bomb” and smuggle it into America. Building a ten-kiloton bomb nearly as destructive as the one dropped on Hiroshima would require little more than some technical expertise and 46 kilograms of highly enriched uranium — a quantity about the size of a bowling ball.

The second reality we have failed to understand is what a nuclear detonation and its aftermath would actually look like. In our imaginations, fueled by apocalyptic fictions like The Road and The Day After, the scale and speed of nuclear annihilation seem too vast and horrific to contemplate. If nuclear war is considered “unthinkable,” that is in no small part because of our refusal to think about it with any clarity or specificity. In the long run, the best deterrent to nuclear war may be to understand what a single nuclear bomb is capable of doing to, say, a city like New York — and to accept that the reality would be even worse than our fears.

The Bomb

There are currently at least 2,000 tons of weapons-grade nuclear material stored in some 40 countries — enough to make more than 40,000 bombs approximately the size of the one that devastated Hiroshima. Stealing the material would be challenging but far from impossible. Russia stockpiles numerous bombs built before the use of electronic locks that disable the weapons in the event of tampering. Universities that handle uranium often have lax security. And insiders at military compounds sometimes steal radioactive material and sell it on the black market. Since 1993, there have been 762 known instances in which radioactive materials were lost or stolen, and more than 2,000 cases of trafficking and other criminal activities.

Once terrorists obtained the uranium, they would need only a small team of sympathetic engineers and physicists to build what is known as a gun-type nuclear bomb, like the one dropped on Hiroshima. A gun-type nuke uses traditional explosives to fire a slug of uranium through a tube directly into another chunk of uranium, fracturing huge numbers of atoms and unleashing a massive amount of energy. Compared to modern nuclear missiles, which are far more powerful and complex, constructing a crude gun-type nuke is fairly straightforward. In 2002, when Joe Biden was chairman of the Senate Foreign Relations Committee, he asked several nuclear laboratories whether a terrorist group could construct an off-the-shelf nuclear weapon. Several months later, they gave their answer: Without resorting to any illegal activities or drawing on classified information, and using only commercially available parts, they had built a nuclear bomb that was “bigger than a breadbox but smaller than a dump truck.” To underscore the danger, Biden had them bring the device to the Senate.

The last step in the process — smuggling the weapon into the United States — would be even easier. A ten-kiloton bomb, which would release as much energy as 10,000 tons of TNT, would be only seven feet long and weigh about 1,000 pounds. It would be simple to transport such a device to America aboard a container ship, just another unseen object in a giant metal box among millions of other metal boxes floating on the ocean. Even a moderate amount of shielding would be enough to hide its radioactive signature from most detectors at shipping hubs. Given all the naturally radioactive items that frequently trigger false alarms — bananas, ceramics, Brazil nuts, pet deodorizers — a terrorist group could even bury the bomb in bags of Fresh Step or Tidy Cats to fool inspectors if a security sensor was tripped. In 1946, a senator asked J. Robert Oppenheimer, the physicist who played a key role in the Manhattan Project, what instrument he would use to detect a nuclear bomb smuggled into the United States. Oppenheimer’s answer: “A screwdriver.” Amazingly, our detection systems have still not caught up to this threat: One would essentially have to open and visually inspect every single crate and container arriving on America’s shores. Once the container ship reached a port like Newark, terrorists would have no trouble loading the concealed bomb into the back of an unassuming white van and driving it through the Lincoln Tunnel directly into Times Square.

#### *Five* groups have capability and will

**Hayes 18** (Peter Hayes – Director of the Nautilus Institute and Honorary Professor at the Centre for International Security Studies at the University of Sydney. <KEN> "Non State Terrorism and Inadvertent Nuclear War," January 18, 2018. Nautilus Institute for Security and Sustainability. https://nautilus.org/napsnet/napsnet-special-reports/non-state-terrorism-and-inadvertent-nuclear-war/)

For non-state actors to succeed at complex engineering project such as acquiring a nuclear weapons or nuclear threat capacity demands substantial effort. Gary Ackerman specifies that to have a chance of succeeding, non-state actors with nuclear weapons aspirations must be able to demonstrate that they control substantial resources, have a safe haven in which to conduct research and development, have their own or procured expertise, are able to learn from failing and have the stamina and strategic commitment to do so, and manifest long-term planning and ability to make rational choices on decadal timelines. He identified five such violent non-state actors who already conducted such engineering projects (see Figure 3), and also noted the important facilitating condition of a global network of expertize and hardware. Thus, although the skill, financial, and materiel requirements of a non-state nuclear weapons project present a high bar, they are certainly reachable.

Figure 3: Complex engineering projects by five violent non-state actors & Khan network Source: G. Ackerman, “Comparative Analysis of VNSA Complex Engineering Efforts,” Journal of Strategic Security, 9:1, 2016, at: <http://scholarcommons.usf.edu/jss/vol9/iss1/10/>

Along similar lines, James Forest examined the extent to which non-state actors can pose a threat of nuclear terrorism.[10] He notes that such entities face practical constraints, including expense, the obstacles to stealing many essential elements for nuclear weapons, the risk of discovery, and the difficulties of constructing and concealing such weapons. He also recognizes the strategic constraints that work against obtaining nuclear weapons, including a cost-benefit analysis, possible de-legitimation that might follow from perceived genocidal intent or use, and the primacy of political-ideological objectives over long-term projects that might lead to the group’s elimination, the availability of cheaper and more effective alternatives that would be foregone by pursuit of nuclear weapons, and the risk of failure and/or discovery before successful acquisition and use occurs. In the past, almost all—but not all—non-state terrorist groups appeared to be restrained by a combination of high practical and strategic constraints, plus their own cost-benefit analysis of the opportunity costs of pursuing nuclear weapons. However, should some or all of these constraints diminish, a rapid non-state nuclear proliferation is possible.

Although only a few non-state actors such as Al Qaeda and Islamic State have exhibited such underlying stamina and organizational capacities and actually attempted to obtain nuclear weapons-related skills, hardware, and materials, the past is not prologue. An incredibly diverse set of variously motivated terrorist groups exist already, including politico-ideological, apocalyptic-millenarian, politico-religious, nationalist-separatist, ecological, and political-insurgency entities, some of which converge with criminal-military and criminal-scientist (profit based) networks; but also pyscho-pathological mass killing cults, lone wolves, and ephemeral copy-cat non-state actors. The social, economic, and deculturating conditions that generate such entities are likely to persist and even expand.