# 1NC Round 5

## Off

### 1NC – Core PIC

#### The United States federal government should:

* uniformly and adequately apply the doctrines of contract and patent law to curtail private sector conduct that is more restrictive than reasonably necessary to enable the creation of information technology standards when evaluating whether SEPs violate the FRAND commitments made to become standard-essential;
* and, adequately provide competition-specific expertise to the relevant subdivisions of the appropriate enforcement agencies.

#### The counterplan alone solves patent holdup and avoids chilling innovation or business confidence.

Randi Brown, 2L @ NYU Law, ’18, “Always a Monopoly, Never a Monopolist: Why Antitrust is the Wrong Regulatory Scheme for Protecting Competition in Technical Standards” *NYU Law Proceedings, https://proceedings.nyumootcourt.org/2018/04/always-a-monopoly-never-a-monopolist-why-antitrust-is-the-wrong-regulatory-scheme-for-protecting-competition-in-technical-standards/*

The best approach for looking at these SEP monopolies, is to look at them through the framework of the values behind patent law, rather than antitrust law or unfair trade practice law. Patent law is intended to reward innovation, to compensate for the research and development that leads to such innovation, and to allow such innovation to benefit the public at large.12 These values are reflected in our systems for awarding patents, and in the fact that we recognize intellectual property at all. Private industry derives significant value in intellectual property, and that value comes about as a result of the competitive advantage gained from the right to exclude others from using the fruits of their intellectual labors.13 Standardization, however, largely diminishes these rights.

The right to exclude others still exists for SEP holders, but is lessened by the commitments they make to license their patents on Fair, Reasonable, and Non-Discriminatory (“FRAND”) terms. This commitment is akin to a contractual obligation between the SEP holders and the SSOs, under which implementers of SEP technology are third-party beneficiaries. Because this is a contractual obligation, contract law, which does not police based on market power, is an adequate remedy when SEP holders engage in anticompetitive conduct.14 The Court in Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP noted that “when there exists a regulatory structure designed to deter and remedy anticompetitive harm, the additional benefit to competition provided by antitrust enforcement will tend to be small, and it will be less plausible that the antitrust laws contemplate such additional scrutiny.”15 Here, contract obligations strike the right balance between protecting competition and avoiding overdeterrence.16 In particular, modification of FRAND commitments is workable under contract law as a matter of efficiency, unlike in antitrust where such efficient actions may be deemed patent holdup, a competition violation. Further, even a breach of FRAND commitments may be efficient and benefit competition, and such efficient breaches are deterred under added antitrust scrutiny.

Further, patent law rightly governs the actions of a SEP holder which fall outside of the FRAND commitments. Where there is no applicable FRAND commitment, a SEP holder has the right to refuse to license or deal, which protects intellectual property rights.17 This right of exclusion is the very right conferred through patent, and it is what gives patent holders the ability to extract profits from their innovations, encouraging such innovation in the first place. Patent law can protect SEP holders from abuses by would-be-licensees who infringe on their rights, and can protect SEP implementers by creating a discrete and coherent property right they can license at the value of the technology.

The use of contract and patent law to correctly balance competitive aims and our value of innovation is perfectly acceptable within antitrust law due to the net procompetitive effect of standardization. Looking to anticompetitive conduct alone fails to account for the economic benefits passed on to consumers.18 There will be remedies for breaches of FRAND under contract law which contemplate these economic efficiencies and sanction conduct to the degree which most benefits consumers.19 Even if there is some anticompetitive conduct which would not be addressed by contract law, it is best to err on the side of protecting patent rights, which promote innovation and participation in standards.

Protecting SEP holders from increased scrutiny leads to benefits felt downstream by consumers. This is true because standards facilitate interoperability by establishing a uniform set of building blocks for a given technology. Customers feel the benefits of lowered costs, increased consumer choice, efficiency, and highly valued technology.20 By protecting SEP holders from unneeded antitrust scrutiny, we recognize the value of the patent deemed standard-essential, and reward participation in the standard by patent holders who have innovated. Given the benefits conferred by standards, it is crucial that courts make participation in these standards profitable and elevate the values of patent protection, rather than imposing antitrust remedies. Patents are the right to exclude others from your technology.21 With FRAND commitments, we remove significant benefits to that right. Trying to protect competition through a conventional antitrust scheme has the potential to eliminate the remaining benefits, without adequately recognizing the importance of innovation.

In addition, looking to the market power held by SEP holders in the SEP fails to recognize the downstream competition benefiting consumers. For example, one standard in the tech world is JPEG. JPEG is a method of compressing digital images without losing picture quality. The JPEG standard defines how an image is compressed and decompressed, but not the file format itself.22 Despite standardization, multiple downstream file formats exist and can compete with one another. JPEG itself stands for Joint Photographic Experts Group, which is made up of a cross-section of members of two standard-setting organizations, ISO and ITU.23 JPEG is a great example of both consumer benefits and encouraged innovation. Because of the uniformity of JPEG as a format, photos compressed in this way are able to be opened by hundreds if not thousands of types of software. Consumers can take and save JPEG images and open them with Photoshop, Windows Picture Viewer, Snapseed, and so forth. Further, innovation has not been stymied in the standard itself. One fear with standardization is that a lack of competition in the SEP will result in stagnation in that space. Instead, because technology progresses and innovation downstream can encourage or even require standards to innovate, JPEG has innovated on a number of occasions and is in the process of doing so today.24

Notably, the United States recently moved to an approach that focuses on imposing antitrust liability on implementers and SSOs, rather than SEP holders. Current United States Assistant Attorney General for the Antitrust Division, Makan Delrahim, expressed the view in a speech this past November, that the risk of anticompetitive conduct is greater from implementers than from SEP holders.25 This is because, as a result of the FRAND commitments, buyers are able to hold out for lower prices. Moreover, he noted that the SSOs would also be scrutinized more closely, as these organizations are made up of competitors who have the power to collude and devalue the intellectual property rights.26 Perhaps most importantly, he noted that “patent holders can’t violate the antitrust laws by properly exercising the rights that patents confer.”27 In this, he included the right to refuse to license, calling the FRAND commitments contractual in nature rather than an aspect of competition law.28

Viewing the monopoly that exists in all SEPs as posing antitrust problems results in three negative consequences. First, it discourages standard participation, as antitrust scrutiny can be incredibly costly to innovators. This is especially true for startups and young companies who are able to get a foothold through standardization but may not be able to afford a fight against the weight of the FTC. In addition, standard participants will risk doubly losing value in their patents, as FRAND commitments represent a significant decrease in bargaining power on their own and potential for antitrust liability increases the costs for SEP holders meaningfully.29 Second, antitrust scrutiny above and beyond a contract remedy is inefficient as it doesn’t recognize what may be an efficient denial of a license. Contract law recognizes what is known as “efficient breach,” whereby a participant may breach a contractual obligation so long as they pay for it because the overall net costs are less than the costs of the breach.30 A breach of FRAND may be efficient, and thus should be allowed so long as a contract remedy exists. Third, by adding scrutiny for SEP holders, the value of the underlying technology and patent rights decreases. IP rights are founded on the basic view that creation should result in an ability to exclude.31 Calling the SEP holder a monopolist would diminish if not eliminate this right, as exclusion would be deemed anticompetitive.32 A system which rewards patent holders rather than sanctioning their basic rights reflects the value of innovation in society. Patents reward innovators by allowing them to profit from their inventions. Without profitability, companies will not invest the huge amounts of capital necessary to the research and development process.

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Standard-Essential Patents may be monopolies by default, but those who hold them should not be deemed monopolists without added anticompetitive effect downstream. Because standards result in more competition downstream, contract and patent law effectively prevent harm to competition without deterring innovation or failing to remunerate research and development. In order to protect the IP rights of innovators and encourage their participation in technical standards, courts should apply the doctrines of contract and patent law rather than antitrust law in evaluating SEPs and the FRAND commitments made to become standard-essential.

### 1NC – Regulate CP

#### The United States federal government should:

* adopt reforms to patent law limiting patent holdup by SSO organizations as per the Lemley evidence;
* establish a national innovation policy, with particular emphasis on artificial intelligence and the IoT, to oversee procurement reform, incentives for research and development, and workforce training;
* institute a program of prizes, grants, and tax subsidies to promote innovation in cybersecurity;
* and, ratify and implement a global treaty regulating uses of artificial intelligence and other emerging technologies.

#### Reforming patent law to remove incentives and allowances for anticompetitive behavior solves and is less stifling than antitrust law.

Lemley ‘7, Mark A. - William H. Neukom Professor of Law at Stanford Law School and the Director of the Stanford Law School Program in Law, Science & Technology, as well as a founding partner of the law firm of Durie Tangri LLP ("Ten things to do about patent holdup of standards (and one not to)." BCL Rev. 48 (2007): 149. <https://www.bc.edu/content/dam/files/schools/law/bclawreview/pdf/48_1/06_lemley.pdf>) //S.He

B. Things the Law Can Do

Second, what might the law do to deal with patent holdup? As discussed below, the law can have antitrust get out of the way of SSO attempts to find the true costs of standards and allow discussion of royalty rates before a standard is set, limit abuse of continuation practice, make it harder to claim willful infringement in court, have courts consider all of the patent contributors to a standard in awarding damages, and limit injunctive relief.

1. Antitrust Law Help for Participants in SSOs

The first thing the law can do flows from the above discussions of SSO behavior. Antitrust law ought to get out of the way of a number of mechanisms discussed in Section A that permit SSOs to find out the true cost of a standard and encourage licensing negotiations over essential patents. Specifically, the law ought to permit SSO members the latitude to discuss royalty rates collectively before the standard is set. Antitrust law should even allow SSOs to impose a step-down royalty scheme, so long as there is not a hard cap such that the SSO won’t pay more than X dollars, regardless of how many patents are out there.

Now, antitrust law is justifiably nervous about people in an industry getting together to talk about price. But in this context, the parties are going to have to have these conversations individually or collectively anyway. I think it is far better to have these conversations ex ante, before the group adopts the standard. The only way to plausibly accomplish this is to do it within the context of the SSO. I note in this respect that paragraph 225 of the European Commission’s licensing guidelines, quite wisely, affirmatively permits the negotiation of royalty rates in SSOs before the standard is set.57 And Deborah Platt Majoras, the Chairman of the Federal Trade Commission, has suggested that the government is unlikely to pursue antitrust claims against SSOs that discuss price, though she made it clear that any such acts are subject to rule of reason scrutiny.58

This does not mean that antitrust law should impose no limits on such negotiations. We don’t want the SSO acting as a monolithic block to try to artificially drive down the price that patent owners can charge.59 One solution to this potential problem is to say that SSOs can impose such restrictions only with respect to other members of the group. SSOs should not be able to negotiate collectively with respect to outsiders, because then they really are going to have a concrete set of interests: they know they represent only potential defendants and that the outsider is a potential plaintiff. Further, such negotiations should only be permitted before or simultaneously with discussions about the technical merits of the standard, before the parties know what the standard is and therefore before they know for sure who is actually going to be the owner and who is going to be the licensee. Both of those limits reduce the risk of buyers’ cartel behavior—SSO decisions that artificially diminish the royalty charged.60

2. Limit Abuse of Continuation Practice

The remaining four solutions are not specific to SSOs, but involve reform of the patent law. All of the proposals I’ve offered so far will help, but they will work only for the subset of patent holdup problems that affect group-adopted industry standards, and only for the subset of patent owners that belong to SSOs already. They will not deal with problems created by the outsider, the person who decides to sit and wait and then brings his patents to bear. Solutions two through five are directed at these problems.

My second suggestion is to limit abuse of continuation practice in the U.S. patent system. To an outsider, one of the oddities of the U.S. patent system is that it is impossible for the PTO ever to finally reject a patent application.61 Patent applicants whose claims are rejected can come back to the PTO an unlimited number of times to try to persuade it to grant them a patent. Even if an applicant persuades the PTO to grant a patent, she may still come back and ask for better or broader claims.62 Now, I would not have thought, frankly, that restricting this practice was one of my more controversial proposals. There seem to be few good justifications for continuation practice. But there are a lot of people in the patent bar deeply committed to it. Some patent owners are committed because they get to use continuations to game the system. These owners wait and see what standards get adopted by SSOs and then redraft their patent claims around those standards. This is a particular problem in the IT sector because technology changes rapidly and unscrupulous patentees can use continuation practice to draft patent claims to cover things they had not thought of.

Other patent owners may support continuations for other reasons. For instance, they may be worried about shifts in technology. In the peculiar context of the pharmaceutical industry, there is minimal cost to using continuations, since the drug is unlikely to receive Food and Drug Administration approval for a substantial period of time anyway. But, even if there are reasons to retain them in some circumstances, limiting or eliminating abuse of continuations would help solve the broader holdup problem.

The initial draft of H.R. 2795, the Patent Reform Bill introduced in the U.S. House of Representatives in 2005, would have expressly granted the PTO the power to limit continuation practice.63 Although that provision is no longer in the current bill before Congress, the PTO itself has issued a Notice of Proposed Rulemaking that would limit applicants to one continuation as a matter of right, and permit further continuations only if the applicant could show a special need.64 Although this new rule would not eliminate abuse of continuations, if implemented it will be an important step towards curbing patent holdup.

3. Limiting Willfulness

My third suggestion is to make it harder to claim willfulness in patent law. We all have an intuitive understanding as laypeople of what it means to act willfully: to do something intentionally, knowing the consequences. Patent law’s legal standard for willfulness bears no resemblance to that lay understanding of the term “willfulness.” We should change the law so it does bear such a resemblance. We could limit willfulness to cases in which a defendant actually copied from the inventor, or at least cases in which the defendant knew of the existence of the patents when it adopted a technology.65 Right now, willfulness is mostly used in circumstances where the technology has been in existence for four or five years before the patent owner sends a letter to the developer alleging infringement.66 Suddenly, a company that independently developed the technology becomes a willful infringer, and potentially liable for treble damages. The result is another way that a patent owner can hold up an independent developer.

Alternatively, we could do what H.R. 2795 does.67 H.R. 2795 keeps a broad definition of willfulness, but makes it much harder to prove in court.68 It would prevent plaintiffs from even alleging willfulness until they’ve actually demonstrated infringement at trial, and would therefore change somewhat the dynamics of settlements made in the shadow of willfulness.69 At a minimum, we could prohibit a finding of willfulness on the part of SSO members unless they receive notice of the patent prior to the adoption of the standard.70

Such an approach might work best if coupled with some sort of registry or public disclosure of new standards, so that non-members of the SSO could learn of the standard and submit their patents.71 If members were not aware of the patent—if they made an investment decision not having any idea the patent is out there—then it is hard to call them willful infringers. This doesn’t mean that the SSO members aren’t infringers if they use the standard, and it doesn’t mean they won’t be liable for damages. It would mean, however, that SSO members couldn’t be found to be willfully infringing in adopting a standard so long as they tried to find out whether anyone had patents covering the standard. This, too, would encourage disclosure of essential patents, since patent owners who wanted to enforce their rights would also want to preserve their ability to seek treble damages.

4. Reasonable Royalty Rates and Damages Calculations

My fourth suggestion is that we fix the problem of definitions and proof in reasonable royalties and damages calculation. Carl Shapiro and I are studying the damages rules in royalty-stacking cases right now.72 For a variety of reasons, the royalty rates that courts actually award are surprisingly high to most people who negotiate royalties.73 The average royalty rate in a single-patent “reasonable royalty” damages case is around 13%.74 It varies a little by industry, but not as much as might be expected. In the IT industry, the average royalty rate is 7%, which is still much greater than what license negotiators in the field believe is the benchmark.75 Furthermore, damage royalties drop a little for component inventions, but, again, not much.76 If the patent is one of several components that have to be aggregated together, the court-ordered royalty drops by about 30%.77 This is less than we would expect it to drop if there were only two components in each component industry technology.78

In short, the data suggest that courts don’t calculate damages taking full account of the contributions that other people besides the patent owner have made to a defendant’s product.79 But they could. H.R. 2795 once again takes steps in this direction, requiring that a patent owner seeking damages based on the sale of a multicomponent invention demonstrate that the royalty is attributable to the patentee’s inventive contribution, as distinguished from all the other aspects of the product being sold.80 That requirement would help alleviate some of the holdup problem by reducing patent royalty rates in litigation, and therefore in licensing, to something approximating what it is that the patentee actually contributes.

5. Redefining Injunctive Relief

My final idea is one that has been overtaken by events: I think we ought to take seriously what the patent statute actually says about injunctive relief. The patent statute says that courts “may” grant injunctions “in accordance with principles of equity on such circumstances as they deem reasonable.”81 The U.S. Court of Appeals for the Federal Circuit, by contrast, had adopted a rule that district courts must grant injunctions regardless of the principles of equity, with one possible exception—public health—that is not applicable to most of the IT industry.82 Under that Federal Circuit rule, if you won a patent suit, you got an injunction. In my speech at the Owning Standards Symposium at Boston College in March 2006, I suggested this rule should change. And change it did.

The U.S. Supreme Court reversed the Federal Circuit rule in 2006 in eBay, Inc. v. MercExchange, L.L.C., holding that it contravened the patent code.83 The Court gave district courts the power to consider traditional principles of equity in deciding whether to grant injunctive relief.84 Courts can now consider the public interest, the balance of the hardships, and whether the patentee really needed injunctive relief or was merely using the threat of injunction to leverage its bargaining power.85 There are some early indications that district courts are taking this responsibility seriously, denying injunctive relief where nonmanufacturing patent owners seek it primarily to use as a bargaining lever.86 Denying such relief is the most powerful way to prevent patent holdup and realign the incentives in patent licensing negotiations.87 Applying equitable principles doesn’t mean eliminating patent injunctions. My guess is that the majority of infringement findings will still result in injunctive relief because the patentee is actually using the patent to exclude a competitor. But courts will be empowered in cases of holdup to remove the threat that induces defendants to settle for royalties far in excess of the patentee’s actual contribution.

#### National policy restarts innovation without market disruption.

Sadat ’20 [Mir; November 22; former Policy Director leading interagency coordination on defense and space policy issues, including at the Department of Defense and National Security Council, Ph.D. from Claremont Graduate University; The Hill, “Why innovation is so important to America's global leadership,” <https://thehill.com/opinion/technology/526535-why-innovation-is-so-important-to-americas-global-leadership>]

The U.S. government must mitigate the harm to America’s innovation base. So far, the government has yet to craft a national innovation policy and stand up a true national innovation council to modernize government; coordinate between the government, industry and academia; transform monopolistic or oligopolistic markets into competitive sectors; and ensure that America regains global economic leadership through foreign partnerships. Reform of American innovation is necessary for several reasons.

First, to harness the untapped potential of exponential technologies, the government must democratize its requirements processes that have advantaged legacy systems and traditional technology providers. The government must evolve its industrial age procurement policies, practices and beneficiaries to the digital age by placing innovation at the core of its activities. The innovation base needs public and private investment capital, scaled to the risk and importance of the invention, to level the playing field for startups and scale-ups, and to increase competitiveness. In short, the government must increase funding and incentives for Apollo-scale research and development (R&D) programs.

Second, to create exponential technologies in an era of unprecedented disruption, America’s workforce requires continuous training and education. The “lone innovator” is a myth because every American invention is a mix of persistence, genius, teamwork, business model and resource management. The government must establish whole-of-nation policies that stimulate world-class innovators in the areas of science, technology, engineering and mathematics (STEM); support nationwide STEM access and diversity; promote R&D and economic growth in technologically underserved areas using economic opportunity zones; and improve mentorship programs for underrepresented persons.

Third, individual innovators and their teams are challenged to achieve successful outcomes because of the high costs and risks, the uncertainty and gaps in funding, and the vicissitudes of the market’s readiness. America’s innovators are strewn across the federal enterprise, the national security establishment, state and local governments, startups and established corporations, universities and research institutions, and other consortiums. Innovators must collaborate by leveraging innovation multipliers such as diversity of effort, thought and demographics.

Fourth, if rules-based, free-market innovation is to compete economically and demonstrate American leadership, then the government must create and enhance opportunities for innovators to compete in international markets and garner global funding. Innovation is the global competition that transcends borders. We must be the first to disrupt our markets, rather than others who could render particular industries potentially obsolete.

#### Solves NC3 vulnerabilities in critical infrastructure.

Contreras ’13 [Jorge L; professor of law at American University Washington College of Law, two decades of experience as a practicing attorney representing technology-focused companies and organizations, s Co-Chair of the National Conference of Lawyers and Scientists and Co-Chair of the American Bar Association’s Section of Science & Technology Law Committee on Technical Standardization, member of the National Academy of Science’s Committee on Intellectual Property Management in Standard-Setting Processes; 4/8/13; “Developing a Framework to Improve Critical Infrastructure Cybersecurity”; http://dx.doi.org/10.2139/ssrn.2248658; accessed 10/28/21; TV]

First, I commend the NIST on seeking public input regarding this critical and timely subject. As NIST correctly points out in the RFI, “[t]he national and economic security of the United States depends on the reliable functioning of critical infrastructure.” The following two suggestions are offered in an attempt to aid NIST as it develops a national cybersecurity framework (the Framework) to reduce cybersecurity risks throughout the nation:

1. The Framework should expressly require public interest representation in developing and selecting standards for a national cybersecurity infrastructure.

2. The Framework should adopt approaches that prevent patent disputes from disrupting the broadest possible adoption of cybersecurity standards. Such approaches may include selecting standards for inclusion in the cybersecurity infrastructure only if patent holders have (a) agreed to offer licenses on a royalty-free basis, (b) consented to observe an aggregate royalty cap for all patents covering the standard, or (c) waived their rights to seek injunctive relief.

These recommendations are discussed in more detail below.

1. The Framework should require public interest representation.

It is tempting to view standards development purely as a technical exercise in which the most efficient, cost-effective and reliable technology should prevail. Standards for the interconnection of computer components, the transmission of wireless signals and the compression of digital content are largely, though not exclusively, technical in nature. Most such standards are developed in large, open standards-development organizations or smaller industry-focused consortia, in each case the membership of which is comprised of companies that manufacture, purchase and/or use the relevant technology. This well-documented standardsdevelopment ‘ecosystem’ has worked remarkably well to produce standards that have revolutionized the computing, communications and electronics industries.1

But cybersecurity is different; cybersecurity affects all Americans in ways that are deeper and more intimate than the selection of features on a smart phone. Inadequate security invites threats that can severely disrupt individual lives, healthcare and finances, expose personal information to misappropriation and abuse, and endanger individual security and privacy. On the other hand, excessive security measures have been criticized for their potential to limit online freedom, dampen free speech and association, and enable intrusive governmental oversight, surveillance and censorship. Despite years of debate, there is no clear line between inadequate security and overly burdensome security. What is clear, however, is that technical choices that are made when security standards and protocols are developed, selected and mandated will have a profound impact on this balance. As Larry Lessig has written, “[w]e can build … cyberspace to protect values that we believe are fundamental, or we can build … cyberspace to allow those values to disappear. There is no middle ground.”2

In short, cybersecurity affects not only businesses, but individuals. As such, the technical design and selection choices that are made under the Framework will affect individual rights and liberties just as much as they affect security and the safeguarding of business information. For this reason, I urge NIST to include in the Framework a requirement that public interest representatives be included in the process of considering, selecting and approving cybersecurity standards.

### 1NC – Biz Con DA

#### The plan creates a chilling effect that crushes business confidence and investment

Hathout 9/23 – Ahmad Hathout, reporter focusing on the tech and telecommunications industries, citing a panel event hosted by the Institute for Policy Innovation, “Washington’s Antitrust Push Could Create ‘Chilling Effect’ on Startups, Observers Say,” 9/23/21, https://broadbandbreakfast.com/2021/09/washingtons-antitrust-push-could-create-chilling-effect-on-startups-observers-say/

WASHINGTON, September 23, 2021 – Advocates for less government encroachment on big technology companies are warning that antitrust is being weaponized for political ends that may end up placing a “chilling effect” on innovative businesses.

The Institute for Policy Innovation held a web event Wednesday to discuss antitrust and the modern economy. Panelists noted their concern that antitrust law may be welded with political aims that will ultimately create a precedent whereby the federal government will stifle innovators who get too big.

Jessica Melugin, the director of the Center for Technology and Innovation, said technology companies could see what’s happening in Washington – with lots of talk of breaking up companies deemed too big – and be uncertain of the future.

She noted that growing companies largely seek one of two things to make it big: grow to file an initial public offering, where the company’s shares are publicly traded, or wait until a large company buys you out. She said talk emanating from the White House and Washington generally about regulating the industry could deter larger companies from acquiring them, and onerous financial regulations could put a damper on IPO dreams.

“If you start robbing companies of other smaller companies they purchased, it’s going to give a lot of entrepreneurs and a lot of funders in Silicon Valley pause,” Melugin said. “If another path to success gets blocked – the IPO is now harder, and now acquisitions are a little bit questionable…that’s a chilling effect.”

President Joe Biden has made a number of appointments to key positions that is bringing more attention on Big Tech, including known Amazon critic Lina Khan to chair the Federal Trade Commission, which recently filed an amended case against Facebook for alleged anticompetitive practices. He also appointed antitrust expert and Google critic Jonathan Kanter as assistant attorney general in the Justice Department’s antitrust division.

FTC could set a bad precedent if focus is ‘big is bad’

Christopher Koopman, the executive director at the Center for Growth and Opportunity at Utah State University, said he’s concerned about the precedent Khan could set for big companies.

He said the odds are that once Khan starts, she will continue down “this path of ‘big is bad’ because that’s a prior that she has and she’s continued to operate on her entire professional career. It just so happens that the focus of this is on tech companies.

“We may be building a regulatory apparatus that will continue to burrow a hole right down the middle of the American economy before we even have a chance to ask if that’s really what we want,” Koopman added. “We just have to recognize that it doesn’t matter, really, who is running the FTC – once we tell the FTC to go break up big companies, they’re going to go break up big companies.”

#### Unpredictable shifts ruin biz con and overall growth

Cambon 21 – Sarah Chaney Cambon, reporter on The Wall Street Journal's Economics Team, “Capital-Spending Surge Further Lifts Economic Recovery”, 6/27/2021, https://www.wsj.com/articles/capital-spending-surge-further-lifts-economic-recovery-11624798800

Business investment is emerging as a powerful source of U.S. economic growth that will likely help sustain the recovery.

Companies are ramping up orders for computers, machinery and software as they grow more confident in the outlook.

Nonresidential fixed investment, a proxy for business spending, rose at a seasonally adjusted annual rate of 11.7% in the first quarter, led by growth in software and tech-equipment spending, according to the Commerce Department. Business investment also logged double-digit gains in the third and fourth quarters last year after falling during pandemic-related shutdowns. It is now higher than its pre-pandemic peak.

Orders for nondefense capital goods excluding aircraft, another measure for business investment, are near the highest levels for records tracing back to the 1990s, separate Commerce Department figures show.

“Business investment has really been an important engine powering the U.S. economic recovery,” said Robert Rosener, senior U.S. economist at Morgan Stanley. “In our outlook for the economy, it’s certainly one of the bright spots.”

Consumer spending, which accounts for about two-thirds of economic output, is driving the early stages of the recovery. Americans, flush with savings and government stimulus checks, are spending more on goods and services, which they shunned for much of the pandemic.

Robust capital investment will be key to ensuring that the recovery maintains strength after the spending boost from fiscal stimulus and business reopenings eventually fades, according to some economists.

Rising business investment helps fuel economic output. It also lifts worker productivity, or output per hour. That metric grew at a sluggish pace throughout the last economic expansion but is now showing signs of resurgence.

The recovery in business investment is shaping up to be much stronger than in the years following the 2007-09 recession. “The events especially in late ’08, early ’09 put a lot of businesses really close to the edge,” said Phil Suttle, founder of Suttle Economics. “I think a lot of them said, ‘We’ve just got to be really cautious for a long while.’”

Businesses appear to be less risk-averse now, he said.

After the financial crisis, businesses grew by adding workers, rather than investing in capital. Hiring was more attractive than capital spending because labor was abundant and relatively cheap. Now the supply of workers is tight. Companies are raising pay to lure employees. As a result, many firms have more incentive to grow by investing in capital.

Economists at Morgan Stanley predict that U.S. capital spending will rise to 116% of prerecession levels after three years. By comparison, investment took 10 years to reach those levels once the 2007-09 recession hit.

Company executives are increasingly confident in the economy’s trajectory. The Business Roundtable’s economic-outlook index—a composite of large companies’ plans for hiring and spending, as well as sales projections—increased by nine points in the second quarter to 116, just below 2018’s record high, according to a survey conducted between May 25 and June 9. In the second quarter, the share of companies planning to boost capital investment increased to 59% from 57% in the first.

“We’re seeing really strong reopening demand, and a lot of times capital investment follows that,” said Joe Song, senior U.S. economist at BofA Securities.

Mr. Song added that less uncertainty regarding trade tensions between the U.S. and China should further underpin business confidence and investment. “At the very least, businesses will understand the strategy that the Biden administration is trying to follow and will be able to plan around that,” he said.

#### Extended COVID economic decline causes multilateral meltdown – causes nuclear war, climate change, Arctic and space war.

McLennan 21 – Strategic Partners Marsh McLennan SK Group Zurich Insurance Group, Academic Advisers National University of Singapore Oxford Martin School, University of Oxford Wharton Risk Management and Decision Processes Center, University of Pennsylvania, “The Global Risks Report 2021 16th Edition” “http://www3.weforum.org/docs/WEF\_The\_Global\_Risks\_Report\_2021.pdf

Forced to choose sides, governments may face economic or diplomatic consequences, as proxy disputes play out in control over economic or geographic resources. The deepening of geopolitical fault lines and the lack of viable middle power alternatives make it harder for countries to cultivate connective tissue with a diverse set of partner countries based on mutual values and maximizing efficiencies. Instead, networks will become thick in some directions and non-existent in others. The COVID-19 crisis has amplified this dynamic, as digital interactions represent a “huge loss in efficiency for diplomacy” compared with face-to-face discussions.23 With some alliances weakening, diplomatic relationships will become more unstable at points where superpower tectonic plates meet or withdraw.

At the same time, without superpower referees or middle power enforcement, global norms may no longer govern state behaviour. Some governments will thus see the solidification of rival blocs as an opportunity to engage in regional posturing, which will have destabilizing effects.24 Across societies, domestic discord and economic crises will increase the risk of autocracy, with corresponding censorship, surveillance, restriction of movement and abrogation of rights.25 Economic crises will also amplify the challenges for middle powers as they navigate geopolitical competition. ASEAN countries, for example, had offered a potential new manufacturing base as the United States and China decouple, but the pandemic has left these countries strapped for cash to invest in the necessary infrastructure and productive capacity.26 Economic fallout is pushing many countries to debt distress (see Chapter 1, Global Risks 2021). While G20 countries are supporting debt restructure for poorer nations,27 larger economies too may be at risk of default in the longer term;28 this would leave them further stranded—and unable to exercise leadership—on the global stage.

Multilateral meltdown Middle power weaknesses will be reinforced in weakened institutions, which may translate to more uncertainty and lagging progress on shared global challenges such as climate change, health, poverty reduction and technology governance. In the absence of strong regulating institutions, the Arctic and space represent new realms for potential conflict as the superpowers and middle powers alike compete to extract resources and secure strategic advantage.29 If the global superpowers continue to accumulate economic, military and technological power in a zero-sum playing field, some middle powers could increasingly fall behind. Without cooperation nor access to important innovations, middle powers will struggle to define solutions to the world’s problems. In the long term, GRPS respondents forecasted “weapons of mass destruction” and “state collapse” as the two top critical threats: in the absence of strong institutions or clear rules, clashes— such as those in Nagorno-Karabakh or the Galwan Valley—may more frequently flare into full-fledged interstate conflicts,30 which is particularly worrisome where unresolved tensions among nuclear powers are concerned. These conflicts may lead to state collapse, with weakened middle powers less willing or less able to step in to find a peaceful solution.

### 1NC – States CP

#### The fifty states and relevant subnational entities should substantially increase antitrust prohibitions on standard essential patent holders that engage in anticompetitive licensing practices.

#### States solve.

Arteaga ’21 [Juan; 1/28/21; Partner @ Crowell & Moring LLP, JD @ Columbia; and Jordan Ludwig; Partner @ Crowell & Moring LLP, JD @ Loyola Law School, Los Angeles; “The Role of US State Antitrust Enforcement,” *Global Competition Review*; https://globalcompetitionreview.com/guide/private-litigation-guide/second-edition/article/the-role-of-us-state-antitrust-enforcement; AS]

During the 1980s, for example, state attorneys general once again emerged as vigorous antitrust enforcers, especially with respect to the prosecution of resale price maintenance practices and other vertical restraints. The rise in the level and prominence of state antitrust enforcement during this period was largely due to a perceived enforcement void at the federal level, where the DOJ and FTC had mostly limited their focus to ‘prohibiting cartels and large horizontal mergers’. No longer content with ceding antitrust enforcement to federal enforcers, state attorneys general expanded their antitrust dockets from prosecuting purely ‘local matters, such as bid-rigging on state contracts’, to actively investigating and litigating matters with multistate and national implications. To help ensure that they had a larger seat at the antitrust enforcement table, state attorneys general also increased the coordination of their enforcement efforts and competition advocacy through organisations such as the National Association of Attorneys General (NAAG), which created a Multistate Antitrust Task Force and issued state Vertical Restraints and Horizontal Merger Guidelines during this period.

Since the reawakening of state antitrust enforcement nearly 30 years ago, state attorneys general have continued to play an important role in the enforcement of both state and federal antitrust laws. During periods of lax federal antitrust enforcement, state attorneys general have often ramped up their enforcement activity in order to protect consumers from anticompetitive transactions and business practices. During periods of vigorous federal antitrust enforcement, they have often served as strong partners for the DOJ and FTC by, among other things, offering valuable insights about competitive dynamics in local markets, assisting with obtaining information from key market participants (including state governmental entities that are direct purchasers of goods and services), and helping develop and implement litigation strategies for cases being tried before federal judges presiding in their states.

Since January 2017, state attorneys general have increasingly played a leading and independent antitrust enforcement role. State antitrust enforcers have significantly increased their enforcement activity and willingness to act separately from their federal counterparts because many of them believe that there has been ‘under-enforcement’ by the DOJ and FTC. State antitrust enforcers have also been able to enhance their influence over key competition policy issues and the antitrust enforcement agenda within the United States because there appears to have been a significant decline in the coordination and relationship between the DOJ and FTC.

### 1NC – Politics DA

#### Budget passes now – PC is key.

BBC 10-28-2021

(“Biden announces revamped $1.75 trillion social spending plan,” https://www.bbc.com/news/world-us-canada-59081791)

US President Joe Biden unveiled a revamped $1.75tn (£1.27tn) spending plan on Thursday, calling it a historic investment in the country's future. "No one got everything they wanted, including me," he said, acknowledging the struggle within his party to reach consensus on a pair of landmark bills. Narrow margins in Congress require nearly unanimous support from the Democrats for the bills to pass. They include major investments in infrastructure, climate and childcare. Mr Biden's Democratic party suggested this week that an agreement was on the horizon, ahead of Mr Biden's trip to Europe later on Thursday. President Biden will travel to Rome, the Vatican and later to Glasgow, Scotland for the United Nations climate conference, COP26. But it remains to be seen whether Mr Biden has achieved the level of cooperation needed from within his party to move the spending plan forward. This new proposal is thought to be a stripped-down version of the roughly $3.5tn social spending plan favoured by progressives. Mr Biden was expected to use his Thursday morning meeting with House Democrats to convince progressives in the party that this new version is close enough to the original bill, and to persuade progressives in the House of Representative to pass a separate, $1tn infrastructure bill that has already passed in the Senate. It's a delicate balance for Mr Biden, as he tries to appeal to his party's progressives - who say they need action on the social spending bill before passing infrastructure - and some moderates, for whom the infrastructure bill is priority. Others had concerns over the price tag of the original social spending bill. So what's in the proposed new spending plan? $555bn aimed at fighting climate change, mainly through tax-incentives for renewable and low-emission sources of energy $400bn for free and universal preschool for all 3- and 4-year-olds $165bn to lower health care premiums for the nine million Americans covered through the Affordable Care Act - also known as Obamacare $150bn to build one million affordable housing units A 50-50 seat split in the Senate - and certain Republican resistance - means Mr Biden must bring his entire party on board if he hopes to pass the spending bill. Two moderate Democrats, Senators Kyrsten Sinema of Arizona and Joe Manchin of West Virginia, appeared to signal some support for the bill in separate statements on Thursday. "After months of productive, good-faith negotiations with President Biden and the White House, we have made significant progress," Ms Sinema said. "I look forward to getting this done." Both Ms Sinema and Mr Manchin are widely seen to have tanked the original bill by refusing to vote for it. For Mr Biden personally, a lot is riding on the fate of these two bills: his presidential legacy. "I don't think it's hyperbole to say that the House and Senate majorities and my presidency will be determined by what happens in the next week," he told Democrats on Thursday morning, according to US media.

#### Antitrust action saps finite political capital and imperils the agenda.

Karaim 21

(Reed, <http://library.cqpress.com/cqresearcher/document.php?id=cqresrre2021050705>, 5-7)

Stucke, the former U.S. Justice Department antitrust official, says that despite Wu and Khan's credentials and reputation, changing antitrust policy will require a concerted effort. With Biden having an ambitious overall agenda and his Democratic Party holding the slimmest possible majority in the Senate, Stucke says, the question is “to what extent will the Biden administration want to expend political capital on this. They've got some bipartisan support for antitrust reform, but to what extent are they going to mobilize that?”

#### Key to avert climate change.

Chow 10-28-21

(Denise, Denise Chow is a reporter for NBC News Science focused on general science and climate change, https://www.nbcnews.com/science/environment/bidens-scaled-spending-bill-big-upsides-climate-fight-rcna4061)

Many climate activists are applauding the $1.75 trillion spending bill unveiled Thursday by President Joe Biden, a move that experts say will be crucial to staving off the worst effects of global warming and building a more livable future. Biden’s proposed framework includes $555 billion in clean energy investments, incentives and tax credits that would help the country meet its goal of reducing greenhouse gas emissions by at least 50 percent by 2030. If passed, environmental experts said it’s the type of legislation that could create much-needed momentum to slash pollution levels and address the climate crisis in the United States and on the global stage. The proposal also backs up promises that Biden campaigned on, making climate change a sizable focus of his administration’s biggest spending bill. “This would be an absolutely historic investment in clean energy and environmental justice — both of which are essential for climate progress,” said Abigail Dillen, president of Earthjustice, a nonprofit environmental law group based in San Francisco. “A package that makes all those investments at a scale that will be transformative over the next eight years is incredible.” The new framework comes after prolonged negotiations between the White House and two moderate Democratic senators, Joe Manchin of West Virginia and Krysten Sinema of Arizona, who opposed key parts of Biden’s original “Build Back Better” plan. Some environmental advocates had hoped for an even larger climate package. “The Build Back Better Framework announced by the White House today doesn’t go far enough to address the economic and climate crises facing our generation,” Cristina Tzintzún Ramirez, president of NextGen America, a progressive advocacy nonprofit started by billionaire and former Democratic presidential candidate Tom Steyer, said in a news release. “A few moderate Democrats negotiated against the best interest of the American people, forcing the rest of their party to renege on essential promises.” Biden on Thursday urged Congress to pass the proposal, saying that the investments will “truly transform this nation.” Earlier this year, the Senate passed a nearly $1 trillion infrastructure bill with robust bipartisan support, but the House has yet to vote on that measure, citing the need for parallel action on the social safety net portion of Biden’s agenda. The bill’s timing is crucial as Biden is set to meet with other world leaders in Scotland next week for the United Nations Climate Change Conference, where countries are expected to negotiate and set forth targets to reduce emissions in line with the goals of the Paris Agreement. Stalled negotiations had generated concern among environmentalists around the world that Biden could show up to the conference empty-handed, leaving little incentive for other countries to offer their own aggressive plans to cut carbon emissions. Sam Ricketts, co-founder and co-director of the climate advocacy group Evergreen Action, said lawmakers should feel increased urgency to pass the revamped Build Back Better act, but added that the proposal itself should benefit Biden by demonstrating to other nations that the U.S. is actively working to achieve its emissions targets. “This will show the global community that America really is an ally and can be a leader in driving forward global climate efforts,” Ricketts said. “It shows that after four years of President Trump’s outright climate denial, the U.S. government is moving with leadership against this global crisis.” The proposed climate bill will also give the U.S. stronger footing in Scotland during negotiations with other top emitters, including China. “The Biden administration will have more leverage to push other countries to make strong commitments,” said Danielle Arostegui, a senior climate analyst at the Environmental Defense Fund. “We can show that we’re putting our money where our mouth is.” The bill would significantly boost investments in renewable energy, including for solar and wind power, and would provide clean energy tax credits and an electric vehicle tax credit that would lower the cost of an electric vehicle by up to $12,500 per middle-class family, according to the White House. The framework also prioritizes environmental justice by earmarking 40 percent of the overall benefits of investment for disadvantaged communities. The plan would fund the electrification of ports, in addition to electrifying bus and truck fleets, and would provide grants to communities that are disproportionately affected by climate change and economic injustice. “This marks a new beginning in the fight against injustice in this country, and a long-overdue boost to the communities that have struggled with the toxic legacy of environmental pollution and systemic racism,” officials with the Equitable and Just National Climate Platform, a consortium of climate change and environmental justice advocates, said in a statement. Dan Lashof, U.S. director of the World Resources Institute, a Washington-based research nonprofit group, said the legislation could bring the country significantly closer to meeting its emissions goals, but added that there is still ground to make up. The White House said the bill will reduce greenhouse gas emissions by 1 billion tons by 2030, but Lashof said a total of 2 billion tons of emissions need to be cut to reach Biden’s target by the end of the decade. Still, he said these types of investments could spur other developments in the private sector, or at the state and local level, which could make up the difference. “It’s important to recognize that this is a huge amount of progress,” Lashof said. “This bill together with the infrastructure bill really does lay the foundation for meeting the 2030 target. It’s all moving in the right direction.”

#### Warming causes extinction.

Michael Klare 20. The Nation’s defense correspondent, professor emeritus of peace and world-security studies at Hampshire College, senior visiting fellow at the Arms Control Association in Washington, DC. “How Rising Temperatures Increase the Likelihood of Nuclear War”. The Nation. Jan 13 2020. https://www.thenation.com/article/archive/nuclear-defense-climate-change/

President Donald Trump may not accept the scientific reality of climate change, but the nation’s senior military leaders recognize that climate disruption is already underway, and they are planning extraordinary measures to prevent it from spiraling into nuclear war. One particularly worrisome scenario is if extreme drought and abnormal monsoon rains devastate agriculture and unleash social chaos in Pakistan, potentially creating an opening for radical Islamists aligned with elements of the armed forces to seize some of the country’s 150 or so nuclear weapons. To avert such a potentially cataclysmic development, the US Joint Special Operations Command has conducted exercises for infiltrating Pakistan and locating the country’s nuclear munitions. Most of the necessary equipment for such raids is already in position at US bases in the region, according to a 2011 report from the nonprofit Nuclear Threat Initiative. “It’s safe to assume that planning for the worst-case scenario regarding Pakistan’s nukes has already taken place inside the US government,” said Roger Cressey, a former deputy director for counterterrorism in Bill Clinton’s and George W. Bush’s administrations in 2011.

Such an attack by the United States would be an act of war and would entail enormous risks of escalation, especially since the Pakistani military—the country’s most powerful institution—views the nation’s nuclear arsenal as its most prized possession and would fiercely resist any US attempt to disable it. “These are assets which are the pride of Pakistan, assets which are…guarded by a corps of 18,000 soldiers,” former Pakistani president Pervez Musharraf told NBC News in 2011. The Pakistani military “is not an army which doesn’t know how to fight. This is an army that has fought three wars. Please understand that.”

A potential US military incursion in nuclear-armed Pakistan is just one example of a crucial but little-​discussed aspect of international politics in the early 21st century: how the acceleration of climate change and nuclear war planning may make those threats to human survival harder to defuse. At present, the intersections between climate change and nuclear war might not seem obvious. But powerful forces are pushing both threats toward their most destructive outcomes.

In the case of climate change, the unbridled emission of carbon dioxide and other greenhouse gases is raising global temperatures to unmistakably dangerous levels. Despite growing worldwide reliance on wind and solar power for energy generation, the global demand for oil and natural gas continues to rise, and carbon emissions are projected to remain on an upward trajectory for the foreseeable future. It is highly unlikely, then, that the increase in average global temperature can be limited to 1.5 degrees Celsius, the aspirational goal adopted by the world’s governments under the Paris Agreement in 2015, or even to 2°C, the actual goal. After that threshold is crossed, scientists agree, it will prove almost impossible to avert catastrophic outcomes, such as the collapse of the Greenland and Antarctic ice sheets and a resulting sea level rise of 6 feet or more.

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

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

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

All things being equal, rising temperatures will increase the likelihood of nuclear war, largely because climate change will heighten the risk of social stress, the decay of nation-states, and armed violence in general, as I argue in my new book, All Hell Breaking Loose. As food and water supplies dwindle and governments come under ever-increasing pressure to meet the vital needs of their populations, disputes over critical resources are likely to become more heated and violent, whether the parties involved have nuclear arms or not. But this danger is compounded by the possibility that several nuclear-armed powers—notably India, Pakistan, and China—will break apart as a result of climate change and accompanying battles over disputed supplies of water.

Together, these three countries are projected by the UN Population Division to number approximately 3.4 billion people in 2050, or 34 percent of the world’s population. Yet they possess a much smaller share of the world’s freshwater supplies, and climate change is destined to reduce what they have even further. Warmer temperatures are also expected to diminish crop yields in these countries, adding to the desperation of farmers and very likely resulting in widespread ethnic strife and population displacement. Under these circumstances, climate-related internal turmoil would increase the risk of nuclear war in two ways: by enabling the capture of nuclear arms by rogue elements of the military and their possible use against perceived enemies and by inciting wars between these states over vital supplies of water and other critical resources.

The risk to Pakistan from climate change is thought to be particularly acute. A large part of the population is still engaged in agriculture, and much of the best land—along with access to water—is controlled by wealthy landowners (who also dominate national politics). Water scarcity and mismanagement is a perennial challenge, and climate change is bound to make the problem worse. Climate and Social Stress: Implications for Security Analysis, a 2013 report by the National Research Council for the US intelligence community, highlights the danger of chaos and conflict in that country as global warming advances. Pakistan, the report notes, is expected to suffer from inadequate water supplies during the dry season and severe flooding during the monsoon—outcomes that will devastate its agriculture and amplify the poverty and unrest already afflicting much of the country. “The Pakistan case,” the report reads, “illustrates how a highly stressed environmental system on which a tense society depends can be a source of political instability and how that source can intensify when climate events put increased stress on the system.” Thus, as global temperatures rise and agriculture declines, Pakistan could shatter along ethnic, class, and religious lines, precisely the scenario that might trigger the sort of intervention anticipated by the US Joint Special Operations Command.

Assuming that Pakistan remains intact, another great danger arising from increasing world temperatures is a conflict between it and India or between China and India over access to shared river systems. Whatever their differences, Pakistan and western India are forced by geography to share a single river system, the Indus, for much of their water requirements. Likewise, western China and eastern India also share a river, the Brahmaputra, for their vital water needs. The Indus and the Brahmaputra obtain much of their flow from periods of heavy precipitation; they also depend on meltwater from Himalayan glaciers, and these are at risk of melting because of rising temperatures. According to the IPCC, the Himalayan glaciers could lose as much as 29 percent of their total mass by 2035 and 78 percent by 2100. This would produce periodic flooding as the ice melts but would eventually result in long periods of negligible flow, with calamitous consequences for downstream agriculture. The widespread starvation and chaos that could result would prove daunting to all the governments involved and make any water-related disputes between them a potential flash point for escalation.

As in Pakistan, water supply has always played a pivotal role in the social and economic life of China and India, with both countries highly dependent on a few major river systems for civic and agricultural purposes. Excessive rainfall can lead to catastrophic flooding, and prolonged drought has often led to widespread famine and mass starvation. In such a setting, water management has always been a prime responsibility of government—and a failure to fulfill this function effectively has often resulted in civil unrest. Climate change is bound to increase this danger by causing prolonged water shortages interspersed with severe flooding. This has prompted leaders of both countries to build ever more dams on all key rivers.

India, as the upstream power on several tributaries of the Indus, and China, as the upstream power on the Brahmaputra, have considered damming these rivers and diverting their waters for exclusive national use, thereby diminishing the flow to downstream users. Three of the Indus’s principal tributaries, the Jhelum, Chenab, and Ravi rivers, flow through Indian-controlled Kashmir (now in total lockdown, with government forces suppressing all public functions). It’s possible that India seeks full control of Kashmir in order to dam the tributaries there and divert their waters from Pakistan—a move that could easily trigger a war if it occurs at a time of severe food and water stress and one that would very likely invite the use of nuclear weapons, given Pakistan’s attitude toward them.

The situation regarding the Brahmaputra could prove equally precarious. China has already installed one dam on the river, the Zangmu Dam in Tibet, and has announced plans for several more. Some Chinese hydrologists have proposed the construction of canals linking the Brahmaputra to more northerly rivers in China, allowing the diversion of its waters to drought-stricken areas of the heavily populated northeast. These plans have yet to come to fruition, but as global warming increases water scarcity across northern China, Beijing might proceed with the idea. “If China was determined to move forward with such a scheme,” the US National Intelligence Council warned in 2009, “it could become a major element in pushing China and India towards an adversarial rather than simply a competitive relationship.”

Severe water scarcity in northern China could prompt yet another move with nuclear implications: an attempted annexation by China of largely uninhabited but water-rich areas of Russian Siberia. Thousands of Chinese farmers and merchants have already taken up residence in eastern Siberia, and some commentators have spoken of a time when climate change prompts a formal Chinese takeover of those areas—which would almost certainly prompt fierce Russian resistance and the possible use of nuclear weapons.

In the Arctic, global warming is producing a wholly different sort of peril: geopolitical competition and conflict made possible by the melting of the polar ice cap. Before long, the Arctic ice cap is expected to disappear in summertime and to shrink noticeably in the winter, making the region more attractive for resource extraction. According to the US Geological Survey, an estimated 30 percent of the world’s remaining undiscovered natural gas is above the Arctic Circle; vast reserves of iron ore, uranium, and rare earth minerals are also thought to be buried there. These resources, along with the appeal of faster commercial shipping routes linking Europe and Asia, have induced all the major powers, including China, to establish or expand operations in the region. Russia has rehabilitated numerous Arctic bases abandoned after the Cold War and built others; the United States has done likewise, modernizing its radar installation at Thule in Greenland, reoccupying an airfield at Keflavík in Iceland, and establishing bases in northern Norway.

Increased economic and military competition in the Arctic has significant nuclear implications, as numerous weapons are deployed there and geography lends it a key role in many nuclear scenarios. Most of Russia’s missile-carrying submarines are based near Murmansk, on the Barents Sea (an offshoot of the Arctic Ocean), and many of its nuclear-armed bombers are also at bases in the region to take advantage of the short polar route to North America. As a counterweight, the Pentagon has deployed additional subs and antisubmarine aircraft near the Barents Sea and interceptor aircraft in Alaska, followed by further measures by Moscow. “I do not want to stoke any fears here,” Russian President Vladimir Putin declared in June 2017, “but experts are aware that US nuclear submarines remain on duty in northern Norway…. We must protect [Russia’s] shore accordingly.”

On the other side of the equation, an intensifying arms race will block progress against climate change by siphoning resources needed for a global energy transition and by poisoning the relations among the great powers, impeding joint efforts to slow the warming.

With the signing of the Paris Agreement, it appeared that the great powers might unite in a global effort to slash greenhouse gas emissions quickly enough to avoid catastrophe, but those hopes have since receded. At the time, Obama emphasized that limiting global warming would require nations to work together in an environment of trust and peaceful cooperation. Instead of leading the global transition to a postcarbon energy system, however, the major powers are spending massively to enhance their military capabilities and engaging in conflict-provoking behaviors.

Since fiscal year 2016, the annual budget of the US Department of Defense has risen from $580 billion to $738 billion in fiscal year 2020. When the budget increases for each fiscal year since 2016 are combined, the United States will have spent an additional $380 billion on military programs by the end of this fiscal year—more than enough to jump-start the transition to a carbon-​free economy. If the Pentagon budget rises as planned to $747 billion in fiscal year 2024, a total of $989 billion in additional spending will have been devoted to military operations and procurement over this period, leaving precious little money for a Green New Deal or any other scheme for systemic decarbonization.

Meanwhile, policy-makers in Washington, Beijing, and Moscow increasingly regard one another as implacable and dangerous adversaries. “As China and Russia seek to expand their global influence,” then–Director of National Intelligence Dan Coats informed Congress in a January 2019 report, “they are eroding once well-established security norms and increasing the risk of regional conflicts.” Chinese and Russian officials have been making similar statements about the United States. Secondary powers like India, Pakistan, and Turkey are also assuming increasingly militaristic postures, facilitating the potential spread of nuclear weapons and exacerbating regional tensions. In this environment, it is almost impossible to imagine future climate negotiations at which the great powers agree on concrete measures for a rapid transition to a clean energy economy.

In a world constantly poised for nuclear war while facing widespread state decay from climate disruption, these twin threats would intermingle and intensify each other. Climate-​related resource stresses and disputes would increase the level of global discord and the risk of nuclear escalation; the nuclear arms race would poison relations between states and make a global energy transition impossible.

### 1NC – FTC Tradeoff DA

#### FTC’s increasing enforcement in privacy now---it’s focused on algorithmic bias.

James V. Fazio 21. Special counsel in the Intellectual Property Practice Group at Sheppard, Mullin, Richter & Hampton LLP, with Liisa M. Thomas, 3/11. “What Is FTC’s Course Under Biden?” https://www.natlawreview.com/article/what-ftc-s-course-under-biden

The new acting FTC chair, Rebecca Kelly Slaughter, recently signaled that the FTC may increase enforcement and penalties in the privacy and data security realm. Slaughter pointed to several areas of focus for the FTC this year, which companies will want to keep in mind: Notifying Consumers About FTC Allegations: Slaughter referred favorably to two recent cases: (1) the Everalbum biometric settlement from earlier this year (which we wrote about at the time); and (2) the Flo Health settlement over alleged deceptive data sharing practices (which we also wrote about at the time). In drawing on these two cases, Slaughter indicated that in future cases the FTC intends to include as part of any settlement a requirement to notify customers of any FTC allegations. This, she said, would allow consumers to “vote with their feet” and help them decide whether to recommend their services to others. FTC Intent to Plead All Relevant Violations: According to Slaughter, another lesson the FTC is taking from the Flo case is to include in the cases it brings all potentially applicable violations of all relevant privacy-related laws. In the Flo case, Slaughter said the FTC should have pleaded a violation of the Health Breach Notification Rule, which requires that vendors of personal health records notify consumers of data breaches. Focus on Ed Tech and COPPA: Given the explosive growth of education technology during COVID-19, the FTC is conducting an industry sweep of the industry. Related to this, the FTC is reviewing its Children’s Online Privacy Protection Act Rule. This goes beyond the refresh the agency did of their FAQs earlier in the pandemic (which we wrote about at the time). For now, Slaughter reminds companies that parental consent is needed before collecting information online from children under the age of 13. Examination of Health Apps: The FTC will take a closer look at health apps, including telehealth and contact tracing apps, as more and more consumers are relying on such apps to manage their health during the pandemic. Overlap Between Competition and Privacy: Slaughter also indicated that it is worth looking at situations where there may be not only privacy concerns, but antitrust as well. Because the FTC has a dual mission (consumer protection and competition) she notes that it has a “structural advantage” over other regulators in that it can look at these issues, especially since -she states- “many of the largest players in digital markets are as powerful as they are because of the breadth of their access to and control over consumer data.” Racial Equality and AI/Biometrics/Geotracking: Slaughter noted that COVID-19 is exacerbating racial inequities. She pointed to the unequal access to technology, as well as algorithmic discrimination (the idea that discrimination offline becomes embedded into algorithmic system logic). The FTC intends to focus on algorithmic discrimination, as well as on the discrimination potentially embedded into facial recognition technologies. (This mirrors concerns that gave rise to the recent Portland facial recognition law, which we recently wrote about). Finally, Slaughter commented on the use of location data to identify characteristics of Black Lives Matter protesters, and said she is concerned about the misuse of location data to track Americans engaged in constitutionally protected speech. Putting it Into Practice: Companies that operate health apps, that are in the education technology space, or that use algorithms or facial recognition tools will want to keep in mind that these are areas of focus for the FTC. And for everyone, keep in mind that the FTC has indicated it will beef up privacy law penalties and will ask for more notification to injured consumers.

#### Antitrust enforcement saps up FTC resources and personnel, which are finite.

Tara L. Reinhart, et al. 21. \*\*Head of Skadden, Arps, Slate, Meagher & Flom LLP’s Antitrust/Competition Group. \*\*Steven C. Sunshine, Co-head of Skadden, Arps, Slat, Meagher & Flom LLP’s Antitrust/Competition Group. \*\*David P. Whales, antitrust lawyer with over 25 years of experience in both private and public sectors. \*\*Julia Y. York, partner at Skadden, Arps, Slat, Meagher & Flom LLP. \*\*Bre Jordan, associate at Skadden, Arps, Slat, Meagher & Flom LLP focusing on antitrust law. “Lina Khan’s Appointment as FTC Chair Reflects Biden Administration’s Aggressive Stance on Antitrust Enforcement.” 6/18/21. https://www.skadden.com/insights/publications/2021/06/lina-khans-appointment-as-ftc-chair

Second, like all antitrust enforcers, Ms. Khan and the FTC will face resource constraints. Bringing antitrust litigation is an expensive and laborious process, often requiring millions of dollars for expert fees and a large army of FTC staff attorneys and taking many months or even years to accomplish. Typically, the FTC can only litigate a handful of antitrust matters at a time. It seems likely that Congress will provide more funding to the FTC in the current environment, but even with these extra resources, the FTC will still have to pick its cases carefully and cannot challenge every deal or every instance of alleged unlawful conduct.

#### That trades off with the necessary resources for privacy enforcement.

McGinnis & Sun ’21 [John; George C. Dix Professor @ Northwestern University, JD @ Harvard Law School; and Linda; Associate @ Wilmer Pickering Hale & Dorr LLP, JD @ Northwestern Pritzker School of Law; “Unifying Antitrust Enforcement for the Digital Age,” *Washington and Lee Law Review* 78(1), p. 305-378; AS]

The FTC needs more resources to adequately address the nation's growing privacy concerns. 3 17 Currently, the FTC oversees both consumer protection-encompassing privacy-and antitrust, 318 making the FTC the chief federal agency on privacy policy and enforcement 319 and the nation's de facto privacy agency. 320 The agency has long-standing experience in enforcing privacy statutes 321 and also has special privacy assets, such as an internet lab capable of high-quality tech forensics to track invasions of privacy. 322 The FTC, however, has failed to keep pace with the massive growth of privacy concerns-a phenomenon also driven by modern technology. 323 Very few Americans feel confident in the privacy of their information in the digital age. 324 According to a 2019 study, over 80 percent of Americans feel that they have little to no control over the data collected on them by companies and the government. 325 To adequately address privacy concerns, the FTC needs more resources. 32 The agency has been explicit that it needs more manpower to police tech companies. 32 7 In requesting increased funding from Congress, FTC Director Joseph Simons said the money would allow the agency to hire additional staff and bring more privacy cases. 328 A former director of the FTC's Bureau of Consumer Protection, which houses the privacy unit, has called the FTC "woefully understaffed." 329

As of the spring of 2019, the FTC had only forty employees dedicated to privacy and data security, compared to 500 and 110 employees at comparable agencies in the U.K. and Ireland, respectively. 330 Without more lawyers, investigators, and technologists, the FTC will be forced to conduct privacy investigations less thoroughly, and in some cases, forgo them altogether. 331 Currently, the FTC's resources are spread thin across multiple missions, to the detriment of its privacy efforts. Removing the agency's antitrust responsibilities would reallocate resources from the antitrust department to its privacy unit and other areas of consumer protection. 332 Further, it would free up the scarce time of the commissioners to oversee this essential effort. 333

This reallocation of resources is especially timely because the FTC's privacy responsibilities are expected to grow in the future. The FTC is already on its way to becoming a consumer protection agency primarily focused on privacy. 334 In its 2019 budget request to Congress, over half of the agency's budget was allocated to privacy. 335 In addition, lawmakers on both sides of the political spectrum have proposed federal privacy legislation. 336 Such legislation would expand the FTC's jurisdiction, empower it to bring more privacy actions, and increase the demands on its privacy resources. 337 Right now, the U.S. is one of the only Western countries that does not have a comprehensive federal privacy law.338 Public pressure is great from both industry and scholars to change that, which would lead to increased privacy action at the federal level. 339 Moving the FTC's antitrust duties to the DOJ would cleanly complete a readjusting of priorities that is already happening organically.

#### Unchecked algorithmic bias risks extinction.

Mike Thomas 20. Quoting AI experts including MIT Physics Professors, Senior Features Writer for BuiltIn. THE FUTURE OF ARTIFICIAL INTELLIGENCE: 7 ways AI can change the world for better ... or worse, Updated: April 20, 2020, <https://builtin.com/artificial-intelligence/artificial-intelligence-future>

Klabjan also puts little stock in extreme scenarios — the type involving, say, murderous cyborgs that turn the earth into a smoldering hellscape. He’s much more concerned with machines — war robots, for instance — being fed faulty “incentives” by nefarious humans. As MIT physics professors and leading AI researcher Max Tegmark put it in a 2018 TED Talk, “The real threat from AI isn’t malice, like in silly Hollywood movies, but competence — AI accomplishing goals that just aren’t aligned with ours.” That’s Laird’s take, too. “I definitely don’t see the scenario where something wakes up and decides it wants to take over the world,” he says. “I think that’s science fiction and not the way it’s going to play out.” What Laird worries most about isn’t evil AI, per se, but “evil humans using AI as a sort of false force multiplier” for things like bank robbery and credit card fraud, among many other crimes. And so, while he’s often frustrated with the pace of progress, AI’s slow burn may actually be a blessing. “Time to understand what we’re creating and how we’re going to incorporate it into society,” Laird says, “might be exactly what we need.” But no one knows for sure. “There are several major breakthroughs that have to occur, and those could come very quickly,” Russell said during his Westminster talk. Referencing the rapid transformational effect of nuclear fission (atom splitting) by British physicist Ernest Rutherford in 1917, he added, “It’s very, very hard to predict when these conceptual breakthroughs are going to happen.” But whenever they do, if they do, he emphasized the importance of preparation. That means starting or continuing discussions about the ethical use of A.G.I. and whether it should be regulated. That means working to eliminate data bias, which has a corrupting effect on algorithms and is currently a fat fly in the AI ointment. That means working to invent and augment security measures capable of keeping the technology in check. And it means having the humility to realize that just because we can doesn’t mean we should. “Our situation with technology is complicated, but the big picture is rather simple,” Tegmark said during his TED Talk. “Most AGI researchers expect AGI within decades, and if we just bumble into this unprepared, it will probably be the biggest mistake in human history. It could enable brutal global dictatorship with unprecedented inequality, surveillance, suffering and maybe even human extinction. But if we steer carefully, we could end up in a fantastic future where everybody’s better off—the poor are richer, the rich are richer, everybody’s healthy and free to live out their dreams.”

## Innovation

### 1NC – Innovation

#### Innovation high now.

Andrew G. Isztwan BSE, JD, VP of Litigatation @ Interdigital (25+ years as counsel) , ’19, BRIEF OF AMICUS CURIAE OF INTERDIGITAL, INC. IN SUPPORT OF NEITHER PARTY Case: 19-16122, 08/30/2019, ID: 11417354, DktEntry: 87, Page 1 of 18 https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-interdigital-inc-in-support-of-neither-party.pdf

Cellular wireless technology has advanced to incredible levels of speed, quality, and ubiquitous adoption. It is no exaggeration to say that the advent of cellular devices has been revolutionary, changing countless aspects of how people experience their daily lives. Cellular adoption began with the first widespread 2G (second generation) cellular phones in the 1990s. Companies like InterDigital and others made enormous investments of time and engineering work to enable steady improvements in technology via the development of 3G standards that became available in the 2000s and 4G standards that became available in the 2010s. Over time, these efforts led to improved stability and data throughput to the point where it is now commonplace to stream high quality video over wireless networks. Looking forward to the 2020s, the move toward 5G standards is now well underway, the culmination of many years of research and development. 5G represents the next widespread deployment of even faster and more robust cellular technology. 5G standards will deliver these improvements through numerous innovations, including expansion into the millimeter wave spectrum and advanced spectrum sharing techniques. The use cases that can be enabled by 5G go far beyond those that have been implemented with current 4G technology. For example, new uses of 5G technology are expected to include:  Virtual reality (VR) and augmented reality (AR) applications via cellular-enabled devices;  Broad expansion of the capabilities of self-driving and autonomous vehicles;  Interconnection of household and commercial products such as large appliances and smart home devices;  Telehealth applications, such as remote surgery; Remote control of critical infrastructure for businesses and governmental users;  Smart city initiatives to integrate traffic, public safety, first response, and more; and  Options for home internet beyond those offered by legacy providers. Rollouts of 5G cellular networks in the United States are currently underway, with a handful of 5G-compatible phones available on the market and infrastructure in place in a few large cities. Within the next one to two years, 5G adoption is expected to quickly accelerate.

#### Applying antitrust to FRAND suppresses a range of innovations across emerging tech sectors. Only preserving the scope of patent law secures US tech leadership.

Leih & Teece ’18 [Sohvi & David J; Assistant Professor, Loyola Marymount University; Thomas Tusher Professor of Global Business, Haas School of Business, University of California at Berkeley, and Chairman, Berkeley Research Group; May 2018; “Introduction: Antitrust, Standard Essential Patents, and the Fallacy of the Anticommons Tragedy: Legal and Industrial Policy Concerns”; <https://btlj.org/data/articles2017/vol32/32_4/Leih_web.pdf>; Berkeley Technology Law Journal, Vol. 32, Issue 4; accessed 10/13/21; TV]

At the turn of the millennium, David Teece noted that fundamental changes in the global economy were changing the basis of competitive advantage.' These changes strip away traditional sources of competitive differentiation and expose a new foundation for wealth creation: the development, astute deployment, and utilization of intangible assets, of which knowledge, capabilities, and intellectual property are the most significant.2

The development of markets for knowhow and intellectual property has broken the traditional nexus between tangible and intangible assets. Previously, the principal business model firms employed for extracting value from inventive and creative activities was to both create and commercialize new ideas and technology. Firms bundled ideas, inventions, and the results of creative activities into tangible objects and offered them for sale to capture value from the creative idea. In the case of music, for example, a creative entity might sell records or CDs. For quite some time, as intellectual property regimes have strengthened, it has been possible to specialize in what one did well-either the tangible objects or the abstract ideas. In the case of an "idea" generator, the creators and inventors can simply license their ideas to other entities that are better equipped to implement the idea.

A system of properly designed and adequately enforced IP rights benefits not simply the creative individuals, groups, and organizations that generate intangible assets, but also consumers. New technologies such as artificial intelligence, machine learning, and automation **are becoming increasingly important**. Soon, robots will make robots, more products will be 3D-printed, and robots will deliver services. The work of creative and inventive people is going to be even more salient to the United States economy in the future. 3 As such, it is incredibly important to properly protect intellectual property rights. Otherwise, the inventive and creative activities-the lifeblood of economies-will decline or, at a minimum, be put at risk. Rights over intangible property must not be second-class**.**

At this critical junction in the evolution of our society and the economy, if policymakers and courts reward the production of tangible goods while shortchanging intangibles, they will be out of step with technological progress and the march of civilization. Creative and inventive people may have to revert to making a living by producing tangible assets within large, vertically-integrated firms. Such firms take ideas, embed them in objects, and then move them from the laboratory to the market. If a failure to enforce intellectual property relegates creative innovators to low-wage activities, the development of highly innovative small- and medium-sized enterprises will be stunted because they will not have the resources, capabilities, or passion to vertically integrate. Instead, large-scale vertically integrated firms-that pay low wages and experience lackluster growth with only modest levels of innovation-will populate the landscape.

This special issue of Berkeley Technology Law Journal is based on a special symposium, wherein the authors expressed deep concern that some legal scholars and economists who engage in debates about the patent system and FRAND licensing appear unfamiliar with, or do not consider, the empirical evidence (or lack thereof) on patent holdups and patent thickets that allegedly stifle innovation. They have mounted attacks on intellectual property-patents in particular-but typically have not stated the implicit assumptions in their theories. These critics frequently assert that patent holders too often engage in holdup, charge too much for a license to patent rights, and generally hinder the system of innovation itself through patent thickets.4 These arguments have gained momentum and even impacted court opinions. Maureen Ohlhausen, as acting chair of the FTC, recently noted, "U.S. and international antitrust agencies have lost their way in recent interventions in standard setting space . . . [which] threatens to upset the balance between patent holders' rights and consumers' access to technology." 5 Makan Delrahim, the U.S. Assistant Attorney General for the Antitrust Division of the Department of Justice, would seem to agree.6

The situation echoes the concerns of famous economist John Maynard Keynes that those "in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back." 7 More recently, Columbia University economist Paul Romer identified a "disturbing blind spot" in economics and explained that "the trouble is not so much that macroeconomists say things that are inconsistent with the facts. The real trouble is that other economists do not care."8 He further noted that "an indifferent tolerance of obvious error is ever more corrosive to science than committed advocacy of error." 9

Each contributor to this special issue is endeavoring not to fall into the trap Romer warned about. Indeed, reflecting similar concerns to Romer, our first contributor, Jonathan M. Barnett asks: "Has the Academy Led Patent Law Astray?"10 He questions the allegedly adverse effects of a strong patent system and examines the disconnect between theory and evidence on this subject." Bartnett determines that the assumptions underlying patent holdup and stacking models strip away the reality of sophisticated repeat players and standards evolution.1 2 He finds little evidence of thickets or holdup and stacking effects.' 3 He thus revisits the theoretical models used to support predictions of transactional blockages and harm to innovation.14

Barnett is also deeply critical of ongoing and proposed restrictions on injunctions." His assessment is that there are substantial social costs in substituting liability rules for property rules.1 6 He also notes that the patent ambush literature received widespread endorsement after early Rambus cases.' 7 Indeed, the FTC case against Rambus became the "poster child for patent holdup" even though, ironically, the "government lost . .. twice."" Barnett concludes that given Rambus's vindication, this is "not an especially compelling illustration of patent holdup."' 9

The predicament described resonates well with Romer's concerns mentioned earlier. Too many scholars have an "indifferent tolerance of obvious error." 20 Barnett points out that "the conceptual triplet" of stacking, holdup, and thickets, has "been presented in the context of stylized theoretical settings" but has never "matured into descriptively reliable statements about real-world markets." 2 1 He asserts that "remarkably, all available empirical evidence fails to confirm these ... theories." 22 The above are only a selection of Barnett's trenchant comments and conclusions. We intend them to pique the reader's interest in his Article and his call for courts and regulators to revisit recent decisions displacing property rules with liability rule protections.

Richard A. Epstein and Kayvan B. Noroozi follow Barnett's analysis with a more specific focus on standards-essential patents (SEPs). 2 3 They focus on similar issues to Barnett, but their Article is more specific to FRAND and mobile phones. They are highly cognizant of the changing economic landscape and the importance of intellectual property rights to the advancement of an emerging knowledge economy, where objects made by machines are ubiquitous and creative works generated by people are scarce. 24 Epstein and Noroozi are also acutely aware of how a wellfunctioning system of intellectual property and FRAND licensing has powered the highly dynamic mobile phone industry. 25 They recognize that the European Telecommunications Standards Institute (ETSI) and the FRAND framework support the powerful technologies underlying standards development that have enabled establishment and growth of a global mobile telecommunications industry.26

Epstein and Noroozi remind readers that standards are not just about interoperability rules. They note that new technologies enable new standards and orders-of-magnitude improvement in upload and download speeds on a limited spectrum, in addition to enhancing many other aspects of wireless performance. Innovators and implementers work together in standards development organizations (SDOs) to select new enabling technologies developed and tested by members and others. The best technologies get incorporated into new standards that are then made available to all, subject to a FRAND royalty contract. Implementers are third-party beneficiaries of the FRAND licensing contract. Epstein and Noroozi acknowledge that ETSI, the leading SDO in mobile phone technology, is the manifestation of what distinguished patent law expert Professor Robert Merges calls "an institution that lowers the cost of IPR exchange." 27

Epstein and Noroozi further contend that the historic high performance of the intellectual property rights (IPR) marketplace is put at risk once the bargain between innovator and implementer is revised or reinterpreted in ways that shortchange innovators upstream or downstream.28 They point to the first ETSI IPR rules of 1992, which included Most Favored Nation (MFN) and other provisions unpalatable to upstream innovators. 29 In 1994, when ETSI adopted a balanced approach that respected the patent rights of contributors to the SDO, innovation and concomitant standards development gained momentum. Epstein and Noroozi do recognize, however, that the balance that ETSI intended is not spelled out in detail but is left to the parties to negotiate.30 They note that in the context of deep heterogeneity of circumstances facing licensors and licensees, the nature of the exchange is "deliberately vague," allowing room for negotiation. 3 ' They see this as a virtue and not as "an invitation for courts to fill in the gaps or clarify the boundaries . . . ."32

Epstein and Noroozi draw attention to "an influential body of literature, led by Mark Lemley and Carl Shapiro, [that] has ... focused primarily on the risk of 'patent holdup' . . . while paying short shrift to the correlative risk of 'patent holdout' ... . They also note that "the principal focus of Lemley and Shapiro's work has been to discourage the availability of injunctions in the context of products that practice multiple patents . .. ."34 Citing to work by Robert Merges, Epstein and Noroozi maintain that "strong property rights rule[s] for patents facilitates contractual solutions ... whereas liability rules 'work against the flexible, voluntary institutions that are formed to overcome the costs faced by transactors'."35 They are critical of eBay, Inc. v. MercExchange, L.L. C.36 for having "jettisoned that subtle and flexible mixed remedial approach and instead reverted to a stark and simplistic opposition between 'property rules' and 'liability rules."' 37

Epstein and Noroozi vividly attack the "royalty stacking" paradigm and view it as nothing more than a "horror fiction." 38 They are likewise critical of recent court decisions that they see eroding the FRAND framework, including Apple v. Motorola39 and Microsoft v. Motorola.40 They worry that, under Microsoft, perhaps one can no longer make an offer outside of the FRAND range even as an opening bid; it must somehow be FRAND from the outset. Implementers, of course, like to make counteroffers; yet, the net effects of Microsoft and Apple are that "innovators are pressured to begin at FRAND, and only go lower." 4 1 Epstein and Noroozi raise concerns of a slippery slope under the nondiscriminatory component of FRAND, with each implementer trying to convert the nondiscriminatory term into a de facto most-favored licensee clause. The authors' concern appears to be that under the specter of Microsoft, Apple, and government antitrust intervention into leveraging activities, there is a drift towards litigation and a movement away from negotiated resolutions of licensing issues.42 The primary culprit is a misallocation of rights, as implementers in the United States now face virtually no credible injunction risk. Meanwhile, breach of contract, and breach of duty of good faith and fair dealing claims based on opening offers alone threaten upstream innovators.43

#### That means the plan crushes US tech leadership. Lack of guarantee of market capture spooks venture funds and discourages investment.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

Reviving Antitrust Defenses to the Enforcement of Patents Will Further Erode the Incentives That Patents Are Intended to Provide.

Quite apart from its potential impact on Appellant and the cellular communications industry, another danger in the ruling of the court below is its potential impact on patent owners seeking to license their patents in the future. The decision below is a bad outcome generally for the development of new technologies, for entrepreneurs that give up comfortable and secure jobs to pursue new ideas, for the investors that have great but not unlimited tolerance for risk, and for the United States as a whole. A significant portion of the mechanism by which patents provide incentives for investment and entrepreneurial activities is one of perception – if inventors do not believe that their patents allow the capture of the market value of their inventions, many will simply focus their attentions elsewhere. The decision below, which would have the effect of destroying billions of dollars’ worth of R&D investment – after the fact – can only discourage future investment by Appellant and others.

From the 1930s until the 1980s, both the U.S. Supreme Court and the antitrust enforcement agencies took a narrow view of patent licensing, with the result that patent owners were constantly at risk of running afoul of the antitrust laws, or in some cases just the spirit of the antitrust laws, whenever they attempted to license their patents.15 The result was predictable in that, over time, entire industries that started in the U.S. – color television, video cassette recorders, and DRAMs to name a few – began to move from the U.S. to other countries, never to return.

A Presidential Commission on Industrial Competitiveness headed by John Young, then CEO of Hewlett Packard, was asked to determine the causes and to propose ways of containing the trend. The Commission’s Report, issued in 1985, analyzed this massive migration of technology and industry from the United States to Germany, Japan, Korea, Taiwan and elsewhere. Among the recommendations of the Commission was the restoration of meaningful intellectual property protection: “Research and development are always risky. If the developers of a new technology cannot be assured of gaining adequate financial benefits from its commercialization, they have few incentives to make the huge investments required. … Today, the need to protect intellectual property is greater than ever. A wave of commercial counterfeiting, copyright and design infringement, technology pirating, and other erosions of intellectual property rights is seriously weakening America’s comparative advantage in innovation.”

This earlier era of antitrust was later characterized in a 2003 report of the FTC on patents and innovation as one of “overzealous antitrust enforcement … lacking a sound economic foundation”: “[A]ntitrust dominated and patents were disfavored during the 1960s and 70s. … Overzealous antitrust enforcement culminated in the Department of Justice’s ‘Nine No-Nos,’ a list of nine licensing practices that the Justice Department generally viewed as automatically illegal. Most now believe that antitrust’s ascendency during this period lacked both a sound economic foundation and a sufficient appreciation of the incentives for innovation that patents and patent licensing can provide.”16

FTC’s pursuit of its theories here, which also “lack a sound economic foundation and a sufficient appreciation of the incentives for innovation,” and the district judge’s acceptance of those theories, smack of a return to the overzealous application of our antitrust laws at the expense of innovation. This outcome, if affirmed, bodes poorly for our country and its technology leadership throughout the world.

#### The predominant issue is patent holdout, not patent holdup. Uniqueness goes neg – the aff can only further disrupt innovation.

Epstein & Noroozi ’17 [Richard A & Kayvan B; Laurence A. Tisch Professor of Law, New York University School of Law; Peter and Kirsten Bedford Senior Fellow, The Hoover Institution; James Parker Hall Distinguished Service Professor of Law Emeritus and Senior Lecturer, University of Chicago Law School; Principal at Noroozi PC and CEO of Koios Pharmaceuticals LLC; 2017; “WHY INCENTIVES FOR “PATENT HOLDOUT” THREATEN TO DISMANTLE FRAND, AND WHY IT MATTERS”; <https://btlj.org/data/articles2017/vol32/32_4/Epstein_web.pdf>; Berkeley Technology Law Journal, Vol. 32; accessed 10/23/21; TV]

In particular, at their inception, FRAND obligations arose as contractual commitments intended to serve the interests of both innovators and implementers by making both sides to the exchange better off than before. To be sure, that contractual point has been recognized in the abstract in many cases,11 but nonetheless it has been insufficiently appreciated in application. A proper understanding of FRAND principles thus begins not with a view toward patent law, antitrust law, or regulatory policy, but with reference to the underlying contractual architecture and quid pro quo of the FRAND bargain. Since FRAND contracts are willing agreements between highly competent parties, it logically follows that such agreements, correctly interpreted, must generate valuable benefits to innovators and implementers alike.

No one should underestimate the difficulty of realizing these benefits. In most situations it is easier to reach an agreement, or to develop a series of customary practices, when the two parties stand in a symmetrical relationship with each other as opposed to when they occupy distinct roles. Thus, the customary obligations of partners to each other are easier to determine than those of a buyer and seller, or a landlord and tenant, or a licensor and licensee. In these last three cases, the gains from trade may be enormous, but it is no longer possible to adopt parallel obligations on both parties. Therefore, it is necessary to determine how the differences in role determine obligations, a more complex problem for which the dominant solution is less clear and harder to ascertain.12

Part III applies these observations to a discussion of the prior academic contributions and concludes that, in view of the particularly high transaction costs at play and the significant informational advantage the parties hold over the courts, a correct and socially efficient treatment of FRAND disputes should shift the parties’ incentives toward negotiated solutions through a recognition of strong property rights. To achieve that aim, injunctions should be the presumptive remedy in infringement actions involving declared standard–essential patents. The defendant, in turn, can rebut that presumption (or obviate the question of remedies altogether) upon a showing that its own pre–suit negotiation conduct was in good faith—that is, that the defendant either made a good faith licensing offer in view of FRAND or else was justified in making no offer at all because it has proven noninfringement or invalidity of the patent(s) in suit. The damages remedy would occupy a subordinate, yet important position—growing in significance where mutual good faith discussions have reached a genuine impasse or when it is necessary to determine compensation for attorneys’ fees that are incurred due to a breach of the patent holder’s good faith covenant.

By contrast, any principal reliance on liability rules comes out second best because it is likely to miss the reciprocal benefits underlying the voluntary FRAND agreement and encourages implementers to engage in inefficient and opportunistic “holdout” from good faith discussions. With this in mind, Part III proposes a mixed system that is subtler and more flexible than an all–or–nothing choice between “property rules” and “liability rules,” as those terms were used by Guido Calabresi and A. Douglas Melamed in their path–breaking article on the subject.13 That article, in an unspoken artificial limitation, only considered legal remedies that embodied the pure form of one or the other type of remedy, without asking what mix of the two forms of relief could outperform the exclusive reliance on one remedy or the other.14 This approach also diverges from the writings of commentators like Mark Lemley and Carl Shapiro—who have expressed a near–categorical aversion to the injunctive remedy for fear of the risks of “patent holdup” and “royalty stacking.”15 Instead, it incorporates the insights of others, like Robert Merges, who have recognized the superiority of strong property rights as a starting point for resolving the high transaction costs that are inherent to intellectual property exchanges in general and patents in particular.16 The FRAND agreement is itself an example of the positive effect of a presumptive injunctive remedy, for FRAND obligations owe their existence to the presumption of injunctive relief. Part III also discusses the example of patent pools, which present another (and complementary) market solution to the problem of patent transaction costs, and further counsel against hasty judicial interventions into the complex machinations of the innovation marketplace.

Finally, Part III describes the detailed empirical studies that have all come to the same conclusion: theoretical concerns regarding patent holdup and royalty stacking have not borne out in industries subject to innovation– driven standardization, such as mobile handsets. Instead, the evidence points to the sharp lowering of prices, continuous innovation, low aggregate patent royalty payments, and increasing market penetration.17

Part IV then tests the framework described in Part III against recent court decisions and an intellectual property rights (“IPR”) policy revision by the Institute of Electrical and Electronics Engineers (“IEEE”).18 In so doing, it identifies the significant distortions and social inefficiencies that arise from ex post, one–sided revisionism of the FRAND contract, which evidences the unjustified preference for liability rules over property rights. Part IV proposes, in particular, an alternative approach to the IEEE’s policy revision and to decisions such as Apple v. Motorola19 and Microsoft v. Motorola20—all of which have failed to take a balanced view of the duty of good faith and fair dealing underlying the FRAND agreement. In particular, implementers should be held to a reciprocal duty to negotiate a FRAND license in good faith, the breach of which should automatically trigger an injunction upon a finding that the patents at issue are valid and infringed, unless the innovator’s pre–suit offer is itself found not to have been in good faith. In this context, we discuss the European Union Court of Justice’s decision in Huawei v. ZTE, 21 as well as the United Kingdom High Court’s more recent decision in Unwired Planet v. Huawei, 22 both of which have advanced rules similar to those proposed here. Part IV then turns to a discussion of another aspect of the IEEE’s policy revision, as well as two Federal Circuit decisions, which have incorrectly deprived innovators of any share of the benefits from the standardization of their technological contributions, creating further distortions in the FRAND framework with significant negative follow–on effects in the innovation marketplace.

Part V concludes with a broader discussion of the significance of these issues to the emergence of the “ideas economy,” in which it has become more critical than ever both to reduce transaction costs around the patent right and to protect and reward innovation. Part V observes the sharp disconnect between the philosophical underpinnings of redefining the FRAND contract in favor of implementers—a primacy of implementation over innovation—and the much larger forces shaping the future of the American and global economies. The current preference for, as it were, “things over ideas” is rooted in an implicit premise captured by the maxim, “easier said than done.” In other words, because our historical economic experience has taught that ideas are “easy,” but their execution is difficult, modern courts and commentators have exhibited a specious attraction to the notion that “building” tangible objects—even if through means like programming software—should capture more value than the simple contribution of “ideas” to that endeavor. Yet this conventional view is dangerously outdated.

Today, the United States is at the forefront of an ideas economy in which new forces such as globalization, 3D printing, and robotics (to name a few) are rapidly rendering it much easier to build an embodiment of a great innovation than to develop the innovation itself. Thus, for instance, two of the five top–selling smartphone manufacturers in the world are now Oppo and Vivo23—relatively new entrants with no history of developing significant smartphone innovations either as part of SDOs24 or independently at a device–specific level. As another example, Tesla has vowed to build fully automated factories in which robots alone will build its fleet of vehicles without human involvement.25 As yet a third example, ARM—the company behind the design of virtually every smartphone processor chip—does not make or sell any actual chips.26 Instead, it designs groundbreaking and fundamental chip architecture, and licenses its architectural designs to nearly every major player in the smartphone space.27

In order for the ideas economy to develop and thrive in its most dynamic and accessible form, it is imperative that ideas be valued, protected, and rewarded in accordance with their contributions, without relying on outdated presuppositions favoring incumbents who own the means of production.

Thus, as this Article demonstrates, the prevailing mishandling of FRAND is a trend in precisely the wrong direction. As such, these recent developments are part of an important and broader misstep away from protecting and valuing intellectual property at precisely the wrong time.

#### Patent holdup is fake. All studies concur.

Barnett ’17 [Jonathan M; Professor, University of Southern California, Gould School of Law; 2017; “HAS THE ACADEMY LED PATENT LAW ASTRAY?”; <https://btlj.org/data/articles2017/vol32/32_4/Barnett_web.pdf>; Berkeley Technology Law Journal, Vol. 32; accessed 10/23/21; TV]

Multiple studies have used survey and other methods to identify patent thicket or “anticommons” effects in the biomedical research community. This research segment is important because it is the field with respect to which the “anticommons thesis” was originally asserted, at the time reflecting concerns that increased patenting in the biomedical research field116 would generate transactional thickets that would impede research. The survey studies are remarkably consistent in finding little to no evidence that these concerns have ever materialized.117 Interviewees widely reported the use of workarounds to potential patent thickets, including nonenforcement by the patentholder,118 nominal fees being assessed by the patent holder,119 design arounds,120 licenses or informal industry understandings.121 This literature can be summarized by the conclusion of a leading study: “[L]egal excludability due to patents does not appear in practice to impose an important impediment to academic research in biomedicine . . . .”122

2. Evidence for Market Self–Correction: Collective Rights Organizations and Patent Pools

A related line of scholarly inquiry has considered whether markets have capacities to anticipate patent roadblocks and to take steps to prevent it. This has important implications for the thicket thesis: if markets have robust self– correction capacities, then it would be unlikely that thickets would ever arise or persist in practice.123 In an early contribution that predates the “anticommons” literature, Professor Robert Merges had argued that firms use contractual arrangements to preempt or resolve IP roadblocks through pooling and cross–licensing mechanisms.124 As a principal example, Merges showed how the market for performance rights in musical compositions had avoided transactional blockage by developing collective rights societies for efficiently administering copyrights held by large numbers of dispersed holders.125 Building on this line of inquiry in subsequent research, I identified over one hundred documented IP (mostly patent) pooling arrangements from 1900 through 2014, finding that content and technology markets have regularly formed IP pools, except during a roughly three–decade period following World War II during which antitrust policy effectively prohibited them.126 In other work, I documented intricate contractual and organizational solutions to potential patent thickets that have been devised by external pooling entities, as well as industry consortia, in the ICT markets starting in the late 1990s.127 These transactional innovations support the deployment of data compression, data transmission and other technologies that lie behind everyday fixtures of the digital economy, including Blu-Ray players, Firewire and Bluetooth systems, MP3 players, LAN systems, cable television set–top boxes, and online streaming of audio and visual content.128 Contrary to the thicket thesis, widely dispersed ownership of large numbers of patents relating to critical technologies has not impeded rapid dissemination of these technologies to the end–user market.

3. Historical Research: Revisiting the “Clear Cases” of Patent Thickets

Ron Katznelson, John Howells, and I have revisited classic patent litigations that are widely cited to illustrate how strong patents can pose transactional obstacles that slow down technological progress. Some of these classic litigations include the litigation over the Wright patent in the early aircraft industry,129 litigation over the “De Forest” and other patents in the early radio communications industry,130 and litigation over the “Selden” patent in the early automotive industry.131 The Howells and Katznelson studies find that intensive patent litigation in the early aircraft and radio communications industries had little effect on entry opportunities or market growth, in large part because the principal stakeholders took steps to reach a mutually agreeable settlement through cross–licensing and other arrangements.132 I confirmed those findings through a review of the authors’ primary sources (as well as additional sources) and, consistent with the market self–correction thesis, described how the early petroleum refining and automotive industries had similarly addressed potential thickets through pooling and cross–licensing arrangements. Contrary to widespread assumptions, the extended patent infringement litigation between Ford Motor Co. and the holder of the Selden patent, which claimed the internal combustion engine, had no apparent effect on the expansion of the U.S. motor vehicle market or the economic performance of Ford, which thrived throughout this period and regularly released product and process innovations into the market.133 In the petroleum refining industry, intensive patent litigation involved even more entities and extended over a substantially longer period. Again contrary to the thicket thesis, this economically critical industry showed the signs of a healthy innovation market throughout this period: accelerating R&D expenditures, robust competition for market share, and declining royalty rates.134 These historical studies all converge toward a common interpretation: markets are adept at anticipating transactional blockage and taking steps to preempt it, so that intensive patent acquisition and enforcement have little persistent adverse effect on innovation, even without taking into account positive effects on innovation incentives and transactional opportunities.

4. Reevaluation: Why Evidence for Patent Thickets Is So Weak

In hindsight, it is perhaps unsurprising to learn that markets are so adept at identifying and preempting potential patent thickets. This result derives from pure self–interest: a thicket prevents patent holders from earning a return on their R&D investment, giving them a powerful incentive to avoid litigation and, following Coasean logic,135 reach a mutually agreeable allocation of property rights and split of the surplus value that is unlocked as a result. So long as antitrust or other regulatory interventions do not impede contract enforcement, stakeholders tend to exhibit robust capacities to resolve potentially conflicting patent claims for mutual advantage. Relatedly, given the rapid product life cycle of technology–intensive markets and actual or potential competition from alternative technologies, patent holders incur a large opportunity cost by failing to reach an agreement that enables the market to deploy and commercialize the relevant technology.

Of course, markets’ self–correction capacities in any particular case are sensitive to transaction costs. Hence, it would be expected that Coasean bargaining would perform well, and thickets would be unlikely to persist, in low transaction–cost settings involving small numbers of repeat–play patent holders with approximately homogenous IP portfolios. These holders can more easily enter into patent cross–licensing arrangements or industry understandings that avoid the complexities of formal enforcement, side payments, and ongoing royalty payments. Contrary to expectations, however, the thicket thesis does not even seem to hold true in high transaction–cost settings involving large numbers of holders with heterogeneous IP portfolios. Even in those settings, profit–motivated transactional entrepreneurs devise pooling and licensing solutions that can suppress actual or potential thickets among multiple patent holders.136 Since the effective lifting of the de facto prohibition on patent pools following release of the 1995 revised antitrust guidelines on IP licensing137 and a business review letter issued by the DOJ in 1997 (in connection with a proposed patent pool),138 this externally administered structure has become the most prevalent pooling structure in ICT markets.139 This type of transactional engineering may explain why contemporary ICT markets have enjoyed rapid and widespread deployment of new technologies concurrent with the intensive acquisition and enforcement of patents.

#### SEPs aren’t essential. Most implementers receive licenses on generous terms and easily win cases.

Lemley & Simcoe ’19 [Mark A & Timothy; William H. Neukom Professor at Stanford Law School and partner at Durie Tangri LLP; Associate Professor of Strategy and Innovation at Boston University Questrom School of Business; 2019; “HOW ESSENTIAL ARE STANDARD-ESSENTIAL PATENTS?”; <https://www-cdn.law.stanford.edu/wp-content/uploads/2019/07/104-Cornell-Law-Review-607-2019.pdf>; Cornell Law Review, Vol. 104; accessed 10/26/21; TV]

A. Maybe SEPs Aren’t So Essential After All

One implication seems to be that overdisclosure of SEPs is rampant. When SEPs are asserted in court, most of them turn out not to be infringed.69 That is a surprising finding for a set of patents that were declared essential to the standard by participants in the SSO at the time the standard was adopted. These are not patents only claimed to cover a successful standard years later in litigation, a circumstance in which we might expect strategic overclaiming in an effort to reach the standard.70 The overclaiming of patents as standard-essential seems to happen much earlier than litigation, often when the standard itself is adopted.71 And it is done by the participants in the standard-setting process themselves, not those who later have an incentive to read the patent creatively to cover something it was not intended to reach.

There is prior evidence that suggests that overdisclosure of SEPs is common.72 Companies might rationally err on the side of disclosing rather than concealing, perhaps because they might view it as giving them an advantage in later royalty negotiations but also because the failure to disclose SEPs might violate the antitrust laws.73 Some literature suggests that downstream firms and those with weaker patents tend towards broader disclosures than firms with specific technologies that are actually essential inputs.74

Policy makers have mostly worried about the problem of strategic nondisclosure because it permits a patent owner to lure an SSO into adopting a standard without understanding the full costs of implementation. The patent owner could then hold up adopters of the standard, charging a higher royalty after the industry becomes locked in to the standard.75 Rambus engaged in just such a strategy.76

It is less clear that we should be troubled by overdisclosure as a policy matter. True, claiming as standard-essential patents that aren’t creates clutter, and so it might increase the cost of figuring out what licenses we need. It might also distort the true cost of a standard, making it appear more encumbered than it is or changing the allocation of royalties among patent owners.77 That risk will be compounded if courts use counts of declared essential patents to apportion royalties in damages calculations, as some have done.78 If a FRAND royalty is determined by how many other patents have been declared essential, which makes some sense,79 overdeclaration can skew the royalty payments towards companies that overdeclare and away from those that don’t. It can also complicate the adoption of standards.

At the same time, overdisclosure of patents can benefit the world. Most SSOs (and almost all of the ones in our study) require that disclosed SEPs be licensed on specified terms, most commonly on FRAND terms but sometimes royalty-free. Indeed, 322 of the 355 patents in our study were encumbered by such a requirement, and a FRAND requirement applied to 317 of those patents. Those commitments should bind their patent owners even if the patent wasn’t truly essential and so did not have to be disclosed at all.80 So overdisclosure of patents may mean overgenerous licensing—patentees making concessions (such as the absence of injunctive relief)81 that they didn’t have to make.82 We can see why patentees wouldn’t want to do that; that’s why we worry about them hiding SEPs until after the standard has been chosen. But if they decide (deliberately or accidentally) to err in the other direction, society may benefit by getting license terms (like the absence of injunctions or treble damages) it wouldn’t otherwise have been able to insist on. It may also get more transparency about patent ownership of related technologies.

#### No internal link to innovation – Corl card is about acquisitions undermining startups, not patent rights.

#### No internet impact

Lewis 15—Senior Fellow and Director of the Strategic Technologies Program at the CSIS and a PhD from the University of Chicago [James A, “Managing Risk for the Internet of Things,” *CSIS*, December, p. iv-v, <https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/151201_Lewis_ManagingRiskIoT_Web.pdf>]

The majority of Internet “users” are machines, not people. The devices that make up “the Internet of Things” (IoT) connect to the Internet, take action, and create immense amounts of data. These devices will perform progressively more functions, creating new risks for safety and security, but we need more than anecdotes to assess risk and devise useful policies. An initial conclusion about security and the Internet of Things is that popular portrayals significantly exaggerate and misrepresent risk. • The Internet of Things will be no more secure than the conventional Internet and may be more vulnerable, since many IoT devices will use simple computers with limited functionality • Increased vulnerability, however, does not mean an increased risk. The benefits of IoT outweigh the potential for harm, and one risk usually not considered is that premature or overreaching measures for security or privacy will stifle economic growth and innovation. • IoT devices allow hackers to produce physical effects. Researchers have demonstrated many vulnerabilities in IoT devices, but the consequences of these vulnerabilities largely qualify as malicious pranks. Only IoT devices that perform sensitive functions or where disruption can produce mass effect will increase risk. This means most IoT devices pose little risk. • The state of online privacy is so dreadful it is unlikely that IoT will make it worse. • The same problems that keep us from making cyberspace more secure will slow progress in IoT security: technological uncertainty, limited international cooperation, lack of incentives for improvement, limited regulatory authority, weak online identities, and an Internet business model based on exploitation of personal data • We can accelerate risk reduction with the same approaches we use for general cybersecurity: research, liability, international cooperation, and regulation. The White House could repeat its approach to critical infrastructure and task sector-specific agencies to work with companies to improve the security of IoT devices they use or sell. • Autonomy will be a key determinant for IoT risk. Limiting device autonomy or providing a way to override autonomy reduces risk. IoT standards should require a higher degree of human intervention and control for sensitive functions. • A secure device connecting to an unsecured network does little to reduce risk. Given the weak state of security on most networks, making IoT more secure requires better use of encryption, strong authentication, and increased resilience for both devices and networks. • We can use three metrics—the value of data, the criticality of a function, and scalability of failure—to assess IoT risk. Devices that create valuable data, perform crucial functions, or can produce mass effect need to be held to higher standards. Those that do not can be left to market forces and the courts to correct • Risk is dynamic. It decreases as technology matures and as familiarity and experience grow. As we gain experience with IoT, risk will decrease.

#### No resource wars.

Vestby ’18 [Vestby, Ida Rudolfsen, and Halvard Buhaug; 5-18-18; Doctoral Researcher at the Peace Research Institute Oslo; doctoral researcher at the Department of Peace and Conflict Research at Uppsala University and PRIO; Research Professor at the Peace Research Institute Oslo (PRIO); Professor of Political Science at the Norwegian University of Science and Technology (NTNU); and Associate Editor of the Journal of Peace Research and Political Geography; “Does hunger cause conflict?” Prio, https://blogs.prio.org/ClimateAndConflict/2018/05/does-hunger-cause-conflict/]

It is perhaps surprising, then, that there is little scholarly merit in the notion that a short-term reduction in access to food increases the probability that conflict will break out. This is because to start or participate in violent conflict requires people to have both the means and the will. Most people on the brink of starvation are not in the position to resort to violence, whether against the government or other social groups. In fact, the urban middle classes tend to be the most likely to protest against rises in food prices, since they often have the best opportunities, the most energy, and the best skills to coordinate and participate in protests.

Accordingly, there is a widespread misapprehension that social unrest in periods of high food prices relates primarily to food shortages. In reality, the sources of discontent are considerably more complex – linked to political structures, land ownership, corruption, the desire for democratic reforms and general economic problems – where the price of food is seen in the context of general increases in the cost of living. Research has shown that while the international media have a tendency to seek simple resource-related explanations – such as drought or famine – for conflicts in the Global South, debates in the local media are permeated by more complex political relationships.

#### No internal link to tech leadership – Molling ev says civilian tech incorporation by authoritarians undermines stability – plan can’t stop that.

#### No cyber impact.

Lewis ’20 [James Andrew; 8/17/20; senior vice president and director of the Strategic Technologies Program at the Center for Strategic and International Studies; "Dismissing Cyber Catastrophe," https://www.csis.org/analysis/dismissing-cyber-catastrophe]

More importantly, there are powerful strategic constraints on those who have the ability to launch catastrophe attacks. We have more than two decades of experience with the use of cyber techniques and operations for coercive and criminal purposes and have a clear understanding of motives, capabilities, and intentions. We can be guided by the methods of the Strategic Bombing Survey, which used interviews and observation (rather than hypotheses) to determine effect. These methods apply equally to cyberattacks. The conclusions we can draw from this are:

Nonstate actors and most states lack the capability to launch attacks that cause physical damage at any level, much less a catastrophe. There have been regular predictions every year for over a decade that nonstate actors will acquire these high-end cyber capabilities in two or three years in what has become a cycle of repetition. The monetary return is negligible, which dissuades the skilled cybercriminals (mostly Russian speaking) who might have the necessary skills. One mystery is why these groups have not been used as mercenaries, and this may reflect either a degree of control by the Russian state (if it has forbidden mercenary acts) or a degree of caution by criminals.

There is enough uncertainty among potential attackers about the United States’ ability to attribute that they are unwilling to risk massive retaliation in response to a catastrophic attack. (They are perfectly willing to take the risk of attribution for espionage and coercive cyber actions.)

No one has ever died from a cyberattack, and only a handful of these attacks have produced physical damage. A cyberattack is not a nuclear weapon, and it is intellectually lazy to equate them to nuclear weapons. Using a tactical nuclear weapon against an urban center would produce several hundred thousand casualties, while a strategic nuclear exchange would cause tens of millions of casualties and immense physical destruction. These are catastrophes that some hack cannot duplicate. The shadow of nuclear war distorts discussion of cyber warfare.

State use of cyber operations is consistent with their broad national strategies and interests. Their primary emphasis is on espionage and political coercion. The United States has opponents and is in conflict with them, but they have no interest in launching a catastrophic cyberattack since it would certainly produce an equally catastrophic retaliation. Their goal is to stay below the “use-of-force” threshold and undertake damaging cyber actions against the United States, not start a war.

This has implications for the discussion of inadvertent escalation, something that has also never occurred. The concern over escalation deserves a longer discussion, as there are both technological and strategic constraints that shape and limit risk in cyber operations, and the absence of inadvertent escalation suggests a high degree of control for cyber capabilities by advanced states. Attackers, particularly among the United States’ major opponents for whom cyber is just one of the tools for confrontation, seek to avoid actions that could trigger escalation.

The United States has two opponents (China and Russia) who are capable of damaging cyberattacks. Russia has demonstrated its attack skills on the Ukrainian power grid, but neither Russia nor China would be well served by a similar attack on the United States. Iran is improving and may reach the point where it could use cyberattacks to cause major damage, but it would only do so when it has decided to engage in a major armed conflict with the United States. Iran might attack targets outside the United States and its allies with less risk and continues to experiment with cyberattacks against Israeli critical infrastructure. North Korea has not yet developed this kind of capability.

#### No China/Russia war impacts – alliances and nuclear deterrence check.

#### No transition wars – new tech doesn’t change balance of power.

Lanoszka 19 – Alexander Lanoszka, Political Science Professor at the University of Waterloo. [How Emerging Technologies Might Affect Baltic Security, in *The Return of Deterrence: Credibility and Capabilities in a New Era*, eds. William G. Braun III, Stéfanie von Hlatky, and Kim Richard Nossal]

The Baltic Countries and Emerging Technologies

So where does this leave the Baltic countries? The discussion above suggests that in the foreseeable these emerging technologies will marginally enhance Russia’s military capabilities while the United States will gradually and cautiously adopt them. The local balance of power will remain largely static. For one, Russia already enjoys a massive military advantage over the Baltic countries, with or without autonomous weapons. For another, these emerging technologies do not alter how the Baltic countries receive an Article 5 commitment from their NATO partners. Any military activity that triggers this clause of the Washington Treaty could lead to escalatory dynamics that Russia would prefer to avoid. As for the Baltic countries, capabilities remain underdeveloped. Having already embraced digital technologies for its governance, Estonia has been the most advanced of the three Baltic countries in thinking about AI. In March 2018 the Estonian government announced the development of a national strategy towards AI.53 It will also contemplate how to address AI in its legal structures, with one subject being the provision of a special legal status conferred upon robots.

Military robotics and AI could be leveraged for various purposes in the Baltic context. In the long-term, military robots might compensate for the lack of available manpower that Estonia, Latvia, and Lithuania might face in the future due to high emigration, low birthrates, and low immigration. As Mick Ryan argues, “it is possible that a technologically advanced country with a smaller population could build a significant advantage using AI-based military systems and fielding large numbers of robotic warfighters.”54 Such systems — redolent of many Hollywood films — remain a distant possibility. In the medium term, military robotics and AI could serve logistical as well as intelligence, surveillance, and reconnaissance (ISR) purposes.

In the more immediate term, however, AI would be most useful for early warning, especially with respect to the monitoring of social media, energy flows, or even encrypted communications between Russia and sources inside the Baltic countries. Consider how AI could help bolster Baltic defences in such a way as to defeat, if not to prevent, some of the tactics that Russia used against Ukraine in its annexation of Crimea in early 2014. Recall that so-called “little green men” — military personnel bearing no insignia or other identifying marks — suddenly appeared in Crimea manning checkpoints, clearing areas, and intimidating members of the local population in the run-up to the independence referendum that Russia used to lend legitimacy to its effort. The Baltic countries fear that Russia might attempt something similar against them, not least because — especially in the case of Estonia and Latvia — their populations contain Russian-speakers who may sympathize with the Kremlin enough to do its bidding.55 One measure that they have taken is to practice retaking sites from paramilitary forces of unknown origin.56

AI is useful for such situations because the Baltic countries have home-field advantage. As such, they can amass data on certain environments and sites most at risk of being targeted by Russia. Such data could thus be used to understand regular patterns of behaviour of individual contained within those environments, thereby offering earlier detection and warning in the event that something untoward or irregular is happening. Of course, this technology is not impervious to countermeasures. Algorithms could be vulnerable to a battery of malicious queries by adversaries, leading those very algorithms to make faulty or bad predictions.57

As for 3D printing, the Baltic countries could benefit in at least two ways. To begin with, observers believe that because they face such a massive imbalance of power, the Baltic countries should not prepare their armed forces for fighting set-piece battles with the Russian military. Instead, they should prepare to wage an insurgency campaign designed to make themselves difficult to swallow and to occupy.58 Because 3D printing might reduce supply chains, violent organizations may be able to make their own weapons or weapons parts. 3D printed guns have so far proven to be unreliable, but as one Deloitte report warns, 3D printing “can help terrorist groups not only acquire new weapons or capabilities, but also allow them to do so more rapidly and stealthily than before, across a wider range of locations.”59 This can apply equally to insurgent groups, with such capabilities being homemade firearms and improvised explosive devices. 3D printers are not impervious to countermeasures, however. A RAND study cautions that 3D printers — if they are connected to the global internet — can be susceptible to sabotage if a malicious actor hacks into the system and encodes a flaw into the designs of a product that would be printed.60 Moreover, if Russia could mass firepower and saturate hostile environments by using killer robots, then the advantage gained from 3D printing weapons could be offset. Finally, 3D printing could allow forward deployed forces — like the NATO battlegroups stationed on Baltic territory as part of the alliance’s “Enhanced Forward Presence” — to buy more time before reinforcements arrive. They can replenish themselves “on the spot” without relying too much on supply chains and logistical tails. Such additional time could help if Russian aerial and naval assets located in Kaliningrad complicate NATO efforts to enter, and to move within, the theater of operations if war were to erupt.61

Conclusion  
Some security analysts argue that the introduction of emerging technologies on the battlefield will have a transformational impact on international security. Military robots, AI, and additive manufacturing (3Dprinting) could allow non-state or weak actors to level the playing field with more powerful countries. Yet the preceding discussion suggests that a more tentative attitude is appropriate. In the long-term, the impact of these technologies could be dramatic. However, in the foreseeable future at least, the changes generated by these technologies will be gradual, if not modest. Their significance for Baltic regional security will remain limited despite Russian investments in military robotics and AI. Nevertheless, AI holds some promise for the Baltic countries, especially if it enables them to improve their early warning capabilities so as to thwart “little green men” scenarios.

This essay offers some policy implications for NATO to consider. First, the United States, the Baltic countries, and their fellow allies should be mindful of how these emerging technologies might affect interoperability. If progress in robotics, AI, and 3D printing will be more evolutionary than revolutionary, then the development of these technologies could produce further capability gaps between the United States and its NATO allies. Buying American might help prevent a greater widening of those gaps, but European countries — especially those in the Baltic region — will need to invest in their own research and development (R&D) so that they can tailor these technologies to their own needs.62 Indeed, capability gaps could develop between the Baltic countries. Since Estonia may already be ahead of the curve, Latvia and Lithuania could find themselves lagging too far behind. Capability gaps could create gaps in coverage if AI has the potential for enhancing early warning.

Second, because AI draws on deep learning methods to improve prediction, more data would allow for a more robust understanding of trends and behaviour patterns. NATO’s new Baltic-focused regional command could provide a clearinghouse of the data drawn from individual allies. Of course, European allies have already agreed to a Declaration of Cooperation on AI in order to share information and to foster research and development links. Yet the regional command can focus on the peculiarities of the Baltic security economy and exploit economies of scale. This regional command can offset the risk of stove piping between the three NATO Centers of Excellence in the Baltic countries. The one in Riga focuses on strategic communications; the one in Tallinn addresses cyber security; and the one in Vilnius is dedicated to energy security. Although these centers of excellence should preserve their specialisations, they admittedly work on overlapping areas and AI is most effective when algorithms crunch the largest amount of relevant data possible. Indeed, another advantage of data sharing and aggregation is to reduce the possibility of bias and to improve the quality of algorithms.

Third, emerging technologies offer no “absolute weapon,” since countermeasures are possible. This could be both good news and bad news. For example, if Russia leans too heavily on military robotics, then it would face new problems that manned systems might not have to confront. Latvia has many forests, but it also has marshes and swamps like the Teiči State Reserve in its east. This terrain would already be difficult for military robots to overcome without further intervention. Russian RPAs might also be vulnerable to man-portable air-defence systems. If Russia comes to rely on AI for military purposes, then it might be susceptible to hacking and manipulation. NATO should also heed these issues. Hence the importance of regional cooperation: no one country should find itself a potential weak link that can be exploited.

#### Patent law and breach of contract solve licensing dispute – antitrust is overkill.

JOHN J. VECCHIONE et al, Senior Litigation Counsel @ Cause of Action, MICHAEL PEPSON JESSICA THOMPSON, ’19, CAUSE OF ACTION INSTITUTE BRIEF OF AMICUS CURIAE CAUSE OF ACTION INSTITUTE IN SUPPORT OF DEFENDANT-APPELLANT QUALCOMM INCORPORATED https://causeofaction.org/wp-content/uploads/2019/09/CoA-Inst.-Amicus-Br.-FTC-v.-Qualcomm-No.-19-16122.pdf

5. No Enforcement-Related Need

Finally, preclusion is appropriate where, as here, “any enforcement-related need for an antitrust lawsuit is unusually small.” See Billing, 551 U.S. at 283. First, the USPTO, ITC, and the Federal Circuit already actively supervise and enforce the boundaries SEP holders must abide by. See, e.g., Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1331-32 (Fed. Cir. 2014). Second, sophisticated, well-resourced private parties and SSOs are fully capable of vindicating their legal rights under patent and contract law without the aid of FTC.28 These sophisticated parties have shown themselves capable of protecting their interests through patent litigation without need to resort to the FTC Act. There is simply no need for antitrust intervention here.

#### Circumvention – plan creates type 2 errors. FTC defines “anticompetitive licensing” clumsily because they lack expertise.

JOHN J. VECCHIONE et al, Senior Litigation Counsel @ Cause of Action, MICHAEL PEPSON JESSICA THOMPSON, ’19, CAUSE OF ACTION INSTITUTE BRIEF OF AMICUS CURIAE CAUSE OF ACTION INSTITUTE IN SUPPORT OF DEFENDANT-APPELLANT QUALCOMM INCORPORATED https://causeofaction.org/wp-content/uploads/2019/09/CoA-Inst.-Amicus-Br.-FTC-v.-Qualcomm-No.-19-16122.pdf

1. FTC Lacks Intellectual Property Expertise

Under Billing, a “need for [industry]-related expertise” to effectively regulate, 551 U.S. at 283, 285, weighs in favor of preclusion. Where permitting two separate regulatory regimes undermines consistency and creates a risk of arbitrary enforcement, see id. at 281-82, conflict is more likely. So too here. Effective administration of patent law requires deep understanding of the relevant technology and the economics of innovation—an expertise the USPTO, ITC, and the Federal Circuit have developed. See Sipe, supra, at 460-63. By contrast, FTC is a generalist agency. “It is…a difficult task for an antitrust regulator or court to identify and distinguish anticompetitive patent licenses from neutral or welfare-increasing behavior.”23

## China

### 1NC – AT: China

#### C/A everything from advantage 1 – the internal links and impacts are all the same.

#### China doesn’t hurt US tech leadership.

Economist ’18 [5-3-2018, “Fears that China has hurt innovation in the West are overblown,” https://www.economist.com/finance-and-economics/2018/05/03/fears-that-china-has-hurt-innovation-in-the-west-are-overblown]

POPULAR concern about free trade with China has focused on the loss of manufacturing jobs in America and Europe. Policymakers have an additional worry: that China’s rise is hurting innovation in the West. This fear is among the small set of issues that unites American Democrats and Republicans. In 2016 Barack Obama’s commerce secretary said that China’s state-driven economy would weaken the world’s innovation ecosystem. Donald Trump’s advisers allege that China makes it harder for foreign firms to invest in innovation by squeezing their returns. Mr Trump’s trade team was expected to raise this complaint, among others, with Chinese officials during talks in Beijing on May 3rd and 4th, as The Economist went to press. There is one problem. Data suggest that competition with China has coincided with more innovation in America, not less. The relationship between competition and innovation is complex, even before considering trade with China. Economists agree that the right competitive landscape fosters innovation. But they disagree about what exactly that landscape looks like. More competition might prod companies to try harder to develop new products in the hope of gaining market share. Alternatively, if competition is cut-throat, profits might evaporate to the point that companies have little incentive to take risks. The fear is that China generates the wrong kind of competition and stunts the good kind. Businesspeople elsewhere worry that when the Chinese government decides to fund this or that industry, investment soars and margins collapse. Overcapacity in steel was caused in part by Chinese investment in steel processing; semiconductor firms think their industry might be next. At the same time, argues Robert Lighthizer, the US Trade Representative, foreign companies that beat their Chinese competitors are not adequately rewarded because China presses them to transfer their intellectual property. The two main academic papers on this question looked at the years around China’s accession to the World Trade Organisation in 2001. Far from settling the matter, they were contradictory. Economists studying European companies found that competition from Chinese imports both caused firms to improve their technology and led to a shift in jobs to the most advanced firms. They concluded that 15% of the upgrading of technology in Europe between 2000 and 2007 could be attributed to the increase in imports from China. But economists examining the impact on America argued that, on the contrary, Chinese competition had led companies to spend less on research as profits fell. They calculated that imports from China explained 40% of a slowdown in American patenting between 1999 and 2007, compared with the preceding decade. The IMF has now weighed in with more recent figures. Its conclusion is rather more cheerful, at least for those who think a trade war with China is a rotten idea. In a report published in April the fund showed that, following an extended period of decline, high-quality patents granted to American companies had risen sharply between 2010 and 2014. It also pointed to a big increase in American spending on research and development during the same years—even as America’s trade deficit with China rocketed (see chart). The growth in patents was more sluggish in Europe and Japan. But both patents and research spending soared in South Korea, the country most directly exposed to manufacturing competition from China. A separate IMF working paper late last year unpicked some of what is happening in America. Competition from Chinese imports has caused research spending to be reallocated within certain industries, away from also-rans and towards the most productive and profitable firms. At the same time, many researchers left manufacturing industries and moved into service sectors such as data-processing and finance. Both results are consistent with an American economy that is playing to its strengths. The IMF’s analysts concluded that Chinese imports were not a threat to innovation in America, after all, and that policymakers could take a deep breath. No loud inhaling sounds have yet been reported from the White House.

#### SSO leadership not key to beating China – Sokol ev is about China setting rates and Jain ev is about 3D printing and the broader tech race.

#### No emerging tech impact.

Pinker et al. ’20 [Steven; PhD, Professor of Psychology @ Harvard; Stuart Russell, Professor of Computer Science @ UC Berkeley; Lucas Perry; “Steven Pinker and Stuart Russell on the Foundations, Benefits, and Possible Existential Threat of AI”; June 29th, 2020; https://futureoflife.org/2020/06/15/steven-pinker-and-stuart-russell-on-the-foundations-benefits-and-possible-existential-risk-of-ai/]

Lucas Perry: Now that’s quite a beautiful picture of the future. There’s a lot of existential hope there. The other side to existential hope is existential risk. Now this is an interesting subject, which Steve and you, Stuart, I believe have disagreements about. So pivoting into this area, and Steve, you can go first here, do you believe that human beings, should we not go extinct in the meantime, will we build artificial superintelligence? And does that pose an existential risk to humanity?

Steven Pinker: Yeah, I’m on record as being skeptical of that scenario and dubious about the value of putting a lot of effort into worrying about it now. The concept of superintelligence is itself obscure. In a lot of the discussions you could replace the word “superintelligence” with “magic” or “miracle” and the sentence would read the same. You read about an AI system that could duplicate brains in silicon, or solve problems like war in the Middle East, or cure cancer.  It’s just imagining the possibility of a solution and assuming that the ability to bring it about will exist, without laying out what that intelligence would consist of, or what would count as a solution to the problem.

So I find the concept of superintelligence itself a dubious extrapolation of an unextrapolable continuum, like human-to-animal, or not-so-bright human-to-smart-human. I don’t think there is a power called “intelligence” such that we can compare a squirrel or an octopus to a human and say, “Well, imagine even more of that.”

I’m also skeptical about the existential risk scenarios. They tend to come in two varieties. One is based on the notion of a will to power: that as soon as you get an intelligent system, it will inevitably want to dominate and exploit. Often the analogy is that we humans have exploited and often extinguished animals because we’re smarter than them, so as soon as there is an artificial system that’s smarter than us, it’ll do to us what we did to the dodos. Or that technologically advanced civilizations, like European colonists and conquistadors subjugated and sometimes wiped out indigenous peoples, so that’s what an AI system might do to us. That’s one variety of this scenario.

I think that scenario confuses intelligence with dominance, based on the fact that in one species, Homo sapiens, they happen to come bundled together, because we came about through natural selection, a competitive process driven by relative success at capturing scarce resources and competing for mates, ultimately with the goal of relative reproductive success. But there’s no reason that a system that is designed to pursue a goal would have as its goal, domination. This goes back to our earlier discussion that the ability to achieve a goal is distinct from what the goal is.

It just so happens that in products of natural selection, the goal was winning in reproductive competition. For an artifact we design, there’s just no reason that would be true. This is sometimes called the orthogonality thesis in discussions of existential risk, although that’s just a fancy-schmancy way of referring to Hume’s distinction between our goals and our intelligence.

Now I know that there is an argument that says, “Wouldn’t any intelligence system have to maximize its own survivability, because if it’s given the goal of X, well, you can’t achieve X if you don’t exist, therefore, as a subgoal to achieving X, you’ve got to maximize your own survival at all costs.” I think that’s fallacious. It’s certainly not true that all complex systems have to work toward their own perpetuation. My iPhone doesn’t take any steps to resist my dropping it into a toilet, or letting it run out of power.

You could imagine if it could be programmed like a child to whine, and to cry, and to refuse to do what it’s told to do as its power level went down. We wouldn’t buy one. And we know in the natural world, there are plenty of living systems that sacrifice their own existence for other goals. When a bee stings you, its barbed stinger is dislodged when the bee escapes, killing the bee, but because the bee is programmed to maximize the survivability of the colony, not itself, it willingly sacrifices itself. So it is not true that by definition an intelligent system has to maximize its own power or survivability.

But the more common existential threat scenario is not a will to power but collateral damage. That if an AI system is given a single goal, what if it relentlessly pursues it without consideration of side effects, including harm to us? There are famous examples that I originally thought were spoofs, but were intended seriously, like giving an AI system the goal of making as many paperclips as possible, and so it converts all available matter into paperclips, including our own bodies (putting aside the fact that we don’t need more efficient paperclip manufacturing than what we already have, and that human bodies are a pretty crummy source of iron for paperclips).

Barely more plausible is the idea that we might give an AI system the goal of curing cancer, and so it will  conscript us as involuntary guinea pigs and induce tumors in all of us, or that we might give it the goal of regulating the level of water behind a dam and it might flood a town because it was never given the goal of not drowning a village.

The problem with these scenarios is that they’re self-refuting. They assume that an “intelligent” artifact would be designed to implement a single goal, which is not true of even the stupid artifacts that we live with. When we design a car, we don’t just give the goal of going from A to B as fast as possible; we also install brakes and a steering wheel and a muffler and a catalytic converter. A lot of these scenarios seem to presuppose both idiocy on the part of the designers, who would give a system control over the infrastructure of the entire planet without testing it first to see how it worked, and an idiocy on the part of the allegedly intelligent system, which would pursue a single goal regardless of all the other effects. This does not exist in any human artifact, let alone one that claims to be intelligent. Giving an AI system one vaguely worded, sketchy goal, and empowering it with control over the entire infrastructure of the planet without testing it first seems to me just so self-evidently moronic that I don’t worry that engineers have to be warned against it.

I’ve quoted Stuart himself, who in an interview made the point well when he said, “No one talks about building bridges that don’t fall down. They just call it building bridges.” Likewise, AI that avoids idiocies like that is just AI, it’s not AI with extra safeguards. That’s what intelligence consists of.

#### No tech race impact– interdependence guarantees cooperation.

Sherman ’19 [Justin; Cybersecurity Policy Fellow @ New America; “Stop calling artificial intelligence research an ‘arms race’”; https://www.washingtonpost.com/outlook/2019/03/06/stop-calling-artificial-intelligence-research-an-arms-race/?utm\_term=.a8fe09dcfad5]

We see the phrase everywhere — the United States and China are in an artificial intelligence “arms race.” It manifests in op-eds, news articles and television segments. It’s in books, think tank pieces and government documents. All this to capture the fear that another country might develop AI more powerful than our own. But calling the AI competition an “arms race” is both wrong and dangerous. It suggests AI development is winner-take-all, in that two isolated national AI sectors struggle for total domination, leading to policies that cut off valuable interconnection. Simultaneously, it misrepresents AI research more generally by implying that this varied field is a single technology, almost inevitably focusing too heavily on AI’s military applications. The premise that AI research is a zero-sum endeavor is especially easy to debunk. In reality, American firms invest billions of dollars in Chinese AI companies, and Chinese firms have invested tens of billions of dollars in the other direction. American firms also depend heavily on Chinese manufacturing, which will have an even greater impact on AI development, as artificial intelligence is increasingly deployed in hardware such as that of drones and robots. The interconnections between U.S. and China AI development are also knowledge-related: To name just a few examples, China’s Tsinghua University opened in June an Institute for Artificial Intelligence, where Google’s AI Chief, Jeff Dean, is an adviser; Baidu, the Chinese search company, belongs to the U.S.-based Partnership for AI, which aims to develop best practices for AI technology; and China’s largest retailer has a research partnership with Stanford University’s Artificial Intelligence Lab to fund research areas such as computer vision, machine learning and forecasting. The open-source nature of some elements of AI research further contributes to a near-constant flow of information across borders. [Five myths about artificial intelligence] To speak of AI as an arms race is also to ignore the many areas of AI development, such as the potential for improved public health outcomes, that may benefit both countries. Algorithms that better detect cancer, for instance, could notably reduce costs of care and increase the accuracy of early-stage cancer prediction. This could benefit the United States and China at once, not to mention other countries around the world. With a winner-takes-all “arms race” framing, though, U.S. policymakers may enact policies that hurt American AI development and foreclose opportunities by cutting off vital pipelines of funding, knowledge and other resources. Trump’s sweeping export controls on AI, for example, aim to limit the diffusion of certain knowledge and resources around AI to China. In the process, they might cut off beneficial relationships and exchanges and “substantially reduce” commercial opportunities for American companies. The “arms race” metaphor is also misguided because it incorrectly treats “artificial intelligence” as a single technology. From recognizing a face to detecting skin cancer to assessing a convict’s likelihood of recidivism, different applications of AI have different properties and different sets of training data. These technologies also develop at different speeds, as they may require different data or computing power and may rely on different computer science techniques. Some (such as lethal autonomous weapons) may have wide-ranging effects on state power, while others (such as sophisticated chess programs) may function more as corporate showpieces. Equating these and other fields could easily lead us to prioritize the wrong things for the wrong reasons. But with this “arms race” framing, policymakers and commentators talk of China “beating” the United States without understanding what “winning” means for either side. What happens if Chinese tech giant Alibaba develops better facial recognition systems than Google? Or what if China’s military drones autonomously fly faster than those developed by a San Francisco start-up? The end result for these and other scenarios is unclear, which means policymakers may not adequately invest in areas of AI development with the greatest strategic effect. Additionally, an “arms race” framing may very well lead policymakers to mishandle the varied risks that some AI technologies present. The social, political, economic, legal and ethical challenges of a facial recognition algorithm deployed by a city’s police department are quite different from those of a racially biased skin cancer predictor or a “black box” missile-firing system. If we’re going to manage those dangers, we need to think about them carefully and discretely, which becomes more difficult when we’re just rushing to produce them first. At a time when the United States should be setting strong democratic norms around the design and use of AI — in opposition to the Chinese government’s digital authoritarianism — treating these technologies as if they were the same may yield disastrous risk management. [AI is more powerful than ever. How do we hold it accountable?] This doesn’t mean that the United States and China aren’t competing over AI — or that the competition is irrelevant. On the contrary, artificial intelligence will bolster national economies and enhance military capabilities, both of which are bound to have an effect on state power. As many countries around the world decide on the role of AI in society, their choices will inevitably affect the world order — influencing whether AI is used to bolster democratic or authoritarian forms of governance. That adds another worrisome complication to the “arms race” metaphor, which suggests that the United States and China are both coursing along the same track toward the same finish line. This premise could make it harder for the United States to pursue research according to more democratic norms, as it suggests that we’re just trying to snatch away whatever it is that China is grasping at before it can get to it. The United States needs to design a cohesive national AI strategy — the recent executive order does not count, as it’s too vague and doesn’t adequately discuss a long-term American vision for AI — that addresses the many technologies at hand. China, on the other hand, does address AI’s many forms in its many documents that outline the government’s plans and ambitions for AI development in numerous domains. It’s a demonstration of commitment to AI development “at the highest levels,” from education to industrial transformation to driverless vehicles. An American strategy that approaches AI development as one “arms race” is going to fall short because it tells a story that is far too simple about technologies that are getting more complex every day.

# 2NC

## PIC – Core

### 2NC – Overview

#### The counterplan alone avoids the innovation turn. Including antitrust law allows companies to sue for treble damages which is too significant of a penalty for innovators to risk. The penalties for patent law are sufficient to deter, but not high enough to over deter.

Andrew G. Isztwan BSE, JD, VP of Litigatation @ Interdigital (25+ years as counsel) , ’19, BRIEF OF AMICUS CURIAE OF INTERDIGITAL, INC. IN SUPPORT OF NEITHER PARTY Case: 19-16122, 08/30/2019, ID: 11417354, DktEntry: 87, Page 1 of 18 https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-interdigital-inc-in-support-of-neither-party.pdf

A Sherman Act claim requires a showing of harm to competition, not merely harm to a competitor. Gorlick Distrib. Ctrs., LLC v. Car Sound Exhaust Sys. Inc., 723 F.3d 1019, 1024 (9th Cir. 2013). However, obtaining relatively high royalties is not sufficient to demonstrate harm to the competitive process. The Court should not adopt or affirm any interpretation of the district court’s ruling that suggests that an SEP owner’s receipt of purportedly “unreasonable” royalties by itself is enough to demonstrate anticompetitive harm as a predicate for a Sherman Act violation. In general, courts reject the premise that higher prices necessarily equate to harm to the competitive process for purposes of an antitrust claim. See Harrison Aire, Inc. v. Aerostar Int’l, Inc., 423 F.3d 374, 381 (3d Cir. 2005) (“Competitive markets are characterized by both price and quality competition, and a firm’s comparatively high price may simply reflect a superior product.”). To the contrary, “mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system.” Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004).

In particular, in a case addressing alleged monopolization via standardsessential patents, the D.C. Circuit held that under Supreme Court precedent, a monopolization claim cannot exist where the alleged exclusionary behavior caused increased royalties but had no effect on competitive structure. Rambus Inc. v. FTC, 522 F.3d 456, 466 (D.C. Cir. 2008) (finding that “supposition that there is a cognizable violation of the Sherman Act when a lawful monopolist’s deceit has the effect of raising prices (without an effect on competitive structure)” is improper because it “conflicts with NYNEX”); see also NYNEX Corp. v. Discon, 525 U.S. 128 (1998) (fraud that raised prices cannot be Sherman Act Section 2 violation in absence of effect on competition). A theory that rests solely on obtaining higher prices does not explain in any coherent manner how the competitive structure of a market is affected, and therefore does not make out a Sherman Act Section 2 violation. Rambus, 522 F.3d at 466 (“[A]n otherwise lawful monopolist’s end-run around price constraints, even when deceptive or fraudulent, does not alone present a harm to competition in the monopolized market.”).

Antitrust law is also ill-suited to address claimed breaches of FRAND commitments based on allegedly excessive royalties, where plaintiffs can instead seek to enforce the commitments as a contractual matter to the extent any breaches have actually occurred.2

Transforming simple breaches of contract into trebledamages antitrust violations would serve only to enable hold-out by implementers who refuse to pay adequate and fair compensation for the patented technology they use in their products. This, in turn, would strongly deter standards participation and reduce investments in innovation, undermining the progress of standards development, ultimately to the detriment of consumers.

Increasingly, the most intractable FRAND disputes are not based on genuine disagreements raised by a potential licensee about the appropriate and fair value to be paid as royalties in return for use of patented technologies. Instead, implementers may opportunistically threaten (and even assert) antitrust claims seeking injunctions and treble damages as part of a hold-out strategy to gain unwarranted leverage in license negotiations. Implementers thereby seek to coerce patent owners into accepting minimal, sub-FRAND royalties that are not nearly sufficient to provide an adequate and fair reward for use of the intellectual property. Under a threat of treble damages, the patent owner is faced with a tremendously outsized risk, which inappropriately tilts the balance of negotiating power far in favor of the implementer asserting the claim. Often the intellectual property in question has been developed over many years as a result of the investment of enormous sums in research and development. Yet the prospects of obtaining an adequate and fair return on this investment are significantly reduced to the extent unwilling licensees are able to use strategic antitrust claims to force royalty terms far below FRAND levels—or even to avoid payment of royalties completely.

### 2NC – AT: PDCP

#### 1. The counterplan PICS out of “core antitrust law” because it doesn’t the three federal “core antitrust laws” – prefer contextual evidence defining conjunctive phrases. Severance is a voting issue for neg ground.

Sonia Kuester Pfaffenroth et al, Justin Hedge and Monique N. Boyce Arnold & Porter, ‘21 “ A Comparison Of Proposed Antitrust Legislation In 2021: Federal And New York State”

At the federal level, there are three core antitrust laws: (1) the Sherman Act, in which Section 1 outlaws "every contract, combination, or conspiracy in [unreasonable] restraint of trade," and Section 2 outlaws any "monopolization, attempted monopolization, or conspiracy or combination to monopolize";1 (2) the Federal Trade Commission Act, which prohibits "unfair methods of competition" and "unfair or deceptive acts or practices";2 and (3) Section 7 of the Clayton Act, which prohibits mergers and acquisitions where the effect "may be substantially to lessen competition, or to tend to create a monopoly."3 Criminal violations of the Sherman Act carry a maximum penalty of a $100 million fine for corporations, and a maximum penalty of 10 years in prison and a $1 million fine for individuals. A prevailing plaintiff in a civil suit can recover treble damages and attorneys' fees. But federal law currently does not provide for civil penalties when the government brings an antitrust case, only injunctive relief.

#### 2. Their definition of “scope” is unlimiting and would allow affs to expand CFIUS, the 14th amendment, or any regulatory prohibition as a topical mechanism. A more limiting definition of scope refers only to the total number of prohibited business practices.

Keith N. Hylton, Professor of Law, Boston University, and Fei Deng, and Consultant, NERA Economic Consulting, ‘7, “ANTITRUST AROUND THE WORLD: AN EMPIRICAL ANALYSIS OF THE SCOPE OF COMPETITION LAWS AND THEIR EFFECTS” Antitrust Law Journal [Vol. 74 2007] https://www.jstor.org/stable/pdf/27897550.pdf?refreqid=excelsior%3A424f12ccaeba1aa8d4150377ebe7192d

We turn our attention now to dominance law – or, in the language of American antitrust specialists, monopolization law. The Dominance Score is an attempt to measure the number of types of conduct specified in a country's competition law as unlawful abuse of a dominant position. For those familiar with American law, the dominance measure is an attempt to measure the scope of laws equivalent to Section 2 of the Sherman Act. One can think of the Dominance Score as the size of the net specifically designed to capture dominant firms that engage in anticompetitive con duct.3

#### 3. Antitrust and patent law are conceptually and legally distinct.

Feldman 8 - Arthur J. Goldberg Distinguished Professor of Law and Director of the Center for Innovation at UC Hastings. (Robin, "Patent and antitrust: Differing shades of meaning." Va. JL & Tech. 13 (2008): 1. <https://web.stanford.edu/dept/law/ipsc/pdf/feldman-robin.pdf>) //S.He

The relationship between patent law and antitrust law has challenged legal minds since the emergence of antitrust law in the late 19th century. In reductionist form, the two concepts pose a natural contradiction: One encourages monopoly while the other restricts it. The inherent tension can be framed in the following manner: Can a body of case law that grants monopoly opportunities be reconciled with a body of case law that curtails monopolization.2

To avoid uncomfortable dissonance, the trend across time has been to try to harmonize patent and antitrust law. Since the 1930s, for example, the Supreme Court has ruled that antitrust law operates only when patent holders reach beyond the boundaries inherent in the patent grant. 3

It is an inspired attempt at reconciling the two bodies of case law. Unfortunately, no one has been able to determine what boundaries are inherent in the patent grant, a confusion that has spawned almost a century of consternation and conflict over what exercise of power lies within the patent grant and what lies outside. In recent decades, harmonization efforts have led Congress and the courts to engage in a series of attempts, some aborted and some half-formed, to graft antitrust doctrines onto patent law. 4 In addition, many scholars have advocated various harmonization approaches. 5

These efforts, too, have failed to resolve the conflicts. This piece argues that the deviations between patent law and antitrust law run far deeper than courts and commentators recognize. The problem isn't just that one encourages monopoly while the other limits it. Rather, patent law and antitrust law often use the same concepts and terminology with differing meanings and contexts. In other words, it may appear that they are talking about the same things, and yet, they are not.

Our tendency to assume parallel meanings threatens any attempt to reconcile the two bodies of law. Most importantly, ignoring asymmetries can lead to both underprotection and overprotection of patent rights, as well as the improper application of antitrust laws. To highlight the problem, this piece explores a number of examples of differing meanings in hopes of promoting a more subtle understanding of the patent/antitrust terrain.

The relationship between patent and antitrust is particularly important at this moment in time. Patent law is experiencing a moment in the sun, both in the courts and in the public eye. In particular, after accepting relatively few patent cases over the last decade, the Supreme Court accepted a record number of patent cases last term and this term, including ones that touch on the boundaries of the exercise of power permitted to patent holders6 . The Supreme Court also has accepted an unusually large number of antitrust cases. As both patent and antitrust law enjoy the spotlight of focus, it is particularly important to develop a more nuanced understanding of the shades of meaning in patent law and how those differ from antitrust.

### 2NC – AT: Uncertainty

#### Patent law cannot be any more amorphous or uncertain than the antitrust regime.

Lim ’14 [Daryl; Assistant Professor, The John Marshall Law School; 2014; “Patent Misuse and Antitrust: Rebirth or False Dawn?”; <https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1191&context=mttlr>; Michigan Telecommunications and Technology Law Review; accessed 10/28/21; TV]

The prevailing zeitgeist favors certainty. Until the Supreme Court decides to speak further on misuse, Windsurfing will remain the controlling precedent on the law of misuse in the lower courts. The Federal Circuit should explain why Windsurfing’s formulation makes sense and how its antitrust scaffold will provide better guidance to stakeholders.

Antitrust law has moved in recent years from a per se to a rule of reason analysis.371 But Chief Justice Roberts in Actavis warned that antitrust law’s rule of reason was “amorphous”, going so far as to write “[g]ood luck to the district courts that must, when faced with a patent settlement, weigh the ‘likely anticompetitive effects, redeeming virtues, market power, and potentially offsetting legal considerations present in the circumstances.’”372

Alan Greenspan suggests that one reason for the vagueness of antitrust law stems from the economics underpinning it. Commenting on the state of antitrust policy in the 1960s, he observed that “[t]he entire structure of antitrust statutes in this country is a jumble of economic irrationality and ignorance. It is the product of (a) a gross interpretation of history, and (b) of rather na¨ıve, and certainly unrealistic, economic theories.”373 This observation may have arisen because, although the articulated goal of modern antitrust is the promotion of market efficiency, the antitrust laws were used for socio-political goals such as promoting small business interests.374

Another reason for that vagueness is the lack of statutory guidance. One judge interviewed noted that, whereas patent law was bound more strictly by detailed statutory provisions, antitrust law gave judges more room to maneuver because antitrust legislation was extremely vague and terse.375 Antitrust statutes are vague because “Congress apparently did not want to get involved in articulating a specific definition of competition or in determining which practices might promote or undermine it. Rather it enacted a few general principles derived from the common law, and left it largely to the courts to determine what practices violate them.”376

Commenting on the rule of reason, Merges observed that: “[n]ot only is [it] a notoriously difficult standard for an antitrust plaintiff to meet, it is also a standard that is very difficult to apply. Thus, it is ironic that advocates of greater certainty in the law of patent misuse would propose a unified rule of reason approach when this is arguably one of the least certain legal rules ever propounded.”377 Congress twice considered and rejected revisions to a patent misuse law that would have required a successful showing of an antitrust violation, despite the law’s proponents arguing that antitrust law provided greater certainty.378

The tributaries of antitrust law are carved out and filled in by the ideologies flowing from the wellspring deep within the recesses of the judge’s own views of patents, economic monopolies, and market competition in general.379 Although people generally agree that a competitive market structure fosters competition in product markets, “[t]here is not yet a universally accepted consensus as to the kind of market structure that best facilitates innovation.”380

Those favoring visible competition from rivals advocate antitrust intervention to dilute the patentees’ influence on the relevant market, whereas those who favor protecting the incentives of patentees resist the incursion of antitrust law’s reliance on the market and internal regulation to correct any imbalances. Modern antitrust may be grounded in economic theory, but the chain of succession from the Harvard to Chicago to post-Chicago Schools of antitrust over the years nonetheless makes the assertion that antitrust provides a clearer and more stable vehicle than misuse suspect. Similarly, those advocating the Windsurfing formulation of misuse will find themselves dealing with an equally amorphous framework.

#### Rule of reason links.

Hanley 4-6 – policy analyst at Open Markets Institute (Daniel, "How Antitrust Lost Its Bite," Slate Magazine, <https://slate.com/technology/2021/04/antitrust-hearings-congress-legislation-bright-line-rules.html> APRIL 06, 2021)//gcd

In the late 1970s, however, judges began to adopt a malevolent antitrust framework, which they claimed was beneficial to consumers, while actually relishing, [praising](https://www.law.cornell.edu/supct/html/02-682.ZS.html), and [incentivizing](https://en.wikipedia.org/wiki/Brooke_Group_Ltd._v._Brown_%26_Williamson_Tobacco_Corp.) the concentration of corporate power. This new consumer welfare standard emerged in large part because of the “rule of reason.” The rule of reason was initially created by the Supreme Court [in 1911](https://en.wikipedia.org/wiki/Standard_Oil_Co._of_New_Jersey_v._United_States) to help the judiciary navigate the vast range of variance in antitrust harms. The rule of reason allows judges to determine whether ostensibly predatory or exclusionary corporate conduct is legal based on the reasonableness of the suspected violator’s behavior. Exclusionary antitrust conduct analyzed under a rule of reason analysis generally functions by allowing each side of a lawsuit to argue the predatory effects and the justifications for the conduct. Although the rule of reason is perceptually fair by giving each side of the litigation an opportunity to argue about the conduct at issue, in practice it is anything but. Judges began using the ambiguity of the rule of reason to push a standard focused on consumer welfare, one that [favors corporate concentration](https://www.yalelawjournal.org/note/amazons-antitrust-paradox) and turns away from strict antitrust rules. Courts initially only applied the rule of reason selectively. After adopting the consumer welfare framework, the Supreme Court now applies the rule of reason to most antitrust violations. Antitrust is about determining and [allocating the rights](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3337861), privileges, and duties of all economic actors. When Congress originally enacted the Sherman Act, the law was intended to [protect consumers, workers, and democracy](https://digitalcommons.law.umaryland.edu/mlr/vol78/iss4/4/) from excessive concentrations of corporate power. Because of this reality, it is an inherently political area of law. The shift toward rooting it in economics, and making its application substantially more obscure than a bright-line rule, is effectively a means by the judiciary to strip the historical foundations of antitrust from the record and instead substitute its own judgment on what the priorities are for the economy and how it should be structured. When combined with the rule of reason, the judiciary’s consumer welfare framework effectively erases Congress’ intent for the antitrust laws to operate as a “[comprehensive charter of economic liberty](https://supreme.justia.com/cases/federal/us/356/1/)” that “[does not confine its protection to consumers, or to purchasers, or to competitors, or to sellers](https://supreme.justia.com/cases/federal/us/334/219/).” Such values are best determined by members of the elected legislature rather than unelected judges, a point ironically acknowledged by the [Supreme Court in 1972](https://supreme.justia.com/cases/federal/us/405/596/). Lower federal courts today continue to push the consumer welfare standard even further by, in violation of [controlling Supreme](https://supreme.justia.com/cases/federal/us/405/596/) [Court precedent](https://supreme.justia.com/cases/federal/us/374/321/), weighing the competitive harms of a dominant firm’s conduct against one group to the benefits provided to another group. In [ongoing litigation against the NCAA](https://www.scotusblog.com/case-files/cases/national-collegiate-athletic-association-v-alston/) that was heard by the Supreme Court last week, the district court judge ruled that the NCAA’s compact with universities to set a ceiling on the amount of compensation that student-athletes can receive is legal because of the reputed benefit consumers derive from watching athletes knowing there is a cap on their compensation. The court employed the rule of reason to arrive at this result. In an alternative enforcement regime, the NCAA would be a per se illegal employer cartel that is suppressing workers’ wages. Comprehensive empirical analysis has revealed that the rule of reason has been a rubber stamp for even the most egregious antitrust conduct. A [2009 analysis](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1480440) revealed that 97 percent of cases analyzed under the rule of reason result in victories for defendants. That means corporations are effectively shielded from most antitrust violations. Part of the reason for such a skewed result in favor of antitrust defendants is that dominant firms have access to high-salaried economists that are able to manipulate analyses to mask the corporation’s conduct to look like it is operationally efficient instead of engaging in predatory practices. Such a situation also deters antitrust litigation because a plaintiff will also have to incur the cost of an economist—which can cost several thousand dollars and, [in some cases](https://www.propublica.org/article/these-professors-make-more-than-thousand-bucks-hour-peddling-mega-mergers), [several hundred thousand dollars](https://www.law.cornell.edu/supremecourt/text/12-133). Thus, the battle over the legality of a business tactic under a consumer welfare framework and rule of reason legal analysis depends on access to immense financial capital and judicial appeasement of policies that favor corporate integration rather than common notions of fairness, equity, and deconcentrated markets—which was the original purpose of the antitrust laws. Despite [controlling](https://supreme.justia.com/cases/federal/us/370/294/) Supreme Court [precedent](https://supreme.justia.com/cases/federal/us/374/321/) prohibiting the use of economics in certain antitrust violations, courts now routinely use it to justify corporate consolidation. For example, in the context of merger analysis, the economization of antitrust has led courts to believe and depend on theoretical assumptions on how mergers are beneficial for society and consumers. In the case of AT&T and its pursuit of acquiring Time Warner in 2018, the corporation [stated](https://www.courtlistener.com/recap/gov.uscourts.dcd.191339/gov.uscourts.dcd.191339.121.0_1.pdf) its merger would produce efficiencies and save customers money. District Court Judge Richard Leon was persuaded by AT&T’s statements [holding that](https://casetext.com/case/united-states-v-at-t-inc-2) vertical integration is able to shrink its costs and will “lead to lower prices for consumers.” But such assumptions have been categorically repudiated by researchers. In one example, the economist John Kwoka [found that](https://mitpress.mit.edu/books/mergers-merger-control-and-remedies) 80 percent of studied mergers led to high prices and even reduced output. [Other studies](https://www.antitrustinstitute.org/wp-content/uploads/2019/04/Carstensen-Lande-Final.pdf) have found equivalent results. In the context of AT&T, subsequent evidence showed that AT&T did [raise prices](https://arstechnica.com/information-technology/2018/07/att-promised-lower-prices-after-time-warner-merger-its-raising-them-instead/) on consumers.

### 2NC – AT: Sham itigation

#### It invites widespread private litigation that deters even competitive and innovative business conduct. Only antitrust links.

Ginsburg et al. ’19 [Douglas H. Ginsburg, Joshua D. Wright, Lindsey M. Edwards; Professor of Law, Scalia Law School at George Mason University, and Senior Judge, United States Court of Appeals for the District of Columbia, Chairman, International Board of Advisors, Global Antitrust Institute; University Professor and Executive Director, Global Antitrust Institute, Scalia Law School at George Mason University; Antitrust Associate, Wilson Sonsini Goodrich & Rosati; 8/7/19; “Section 2 Mangled: FTC v. Qualcomm on the Duty to Deal, Price Squeezes, and Exclusive Dealing”; <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3433564&download=yes>; George Mason Law & Economics Research Paper No. 19-21; accessed 10/28/21; TV]

MetroNet correctly focused upon this simple inquiry: Did the firm forsake short-term profits to achieve an anticompetitive end? The long and short of the analysis thus comes down to whether Qualcomm’s changing its business model by switching to device-level licensing sacrificed profits that could be recouped only in the long term after rival chipmakers were driven out of the market. The district court unequivocally found that Qualcomm decided to stop licensing its SEPs to chipmakers because it was more lucrative to license only to OEMs.56 The conclusion that Qualcomm’s conduct meets the legal standard required under Aspen Skiing—a standard that has been carefully limited by the Supreme Court and subsequently applied with equal care by the Ninth Circuit—simply cannot be reconciled with the district court’s findings.

The Trinko Court clearly stated that Aspen Skiing “is at or near the outer boundary of § 2 liability.”57 Companies therefore may still be held liable for refusing to deal if a plaintiff is able to prove facts similar to the facts of that case, but the Supreme Court has “been very cautious in recognizing such exceptions, because of the uncertain virtue of forced sharing and the difficulty of identifying and remedying anticompetitive conduct by a single firm.”58 The district court, however, appears to have thrown the Supreme Court’s caution to the wind. FTC v. Qualcomm does precisely what a unanimous Court refused to do in Trinko— create a new, broader exception to the proposition that there is no duty to deal with competitors.59 The district court expands Aspen Skiing well beyond the “outer boundary” of Section 2 by applying it to all contracts previously negotiated by the defendant firm and by inferring the firm was willing to sacrifice profits even in the face of evidence the firm had changed its business model to increase current profits.

If affirmed, the district court decision will have substantial adverse consequences. First and foremost, the longstanding and well-settled refusal-todeal doctrine will be significantly compromised. Though courts have found liability for refusals to deal only in rare circumstances, the Trinko Court reinforced the importance of a company’s right freely to decide with whom to transact—a right recognized in enforcement of the Sherman Act for over a century.60 Expanding the narrow exception recognized in Aspen Skiing, after the Supreme Court had instead narrowed it so dramatically in Trinko, will create a perilous uncertainty for companies seeking only to make legitimate profitincreasing—not profit sacrificing—business decisions.

That uncertainty, combined with the risk of treble damages, will undoubtedly deter much innocent and procompetitive business conduct. Particularly troublesome in this regard is the district court’s conclusion that Qualcomm’s dealings with rival chipmakers that ended long ago provide the requisite prior course of dealing required by Trinko. This invites a new wave of private antitrust litigation initiated by virtually any company that has ever transacted with a rival that subsequently decides, for whatever legitimate reason, to discontinue the relationship.

### 2NC – AT: L2NB (Innovation)

#### 2. The counterplan solves without wielding the “blunt weaponry” of antitrust.

Wright ’13 [Joshua D; former Commissioner of the Federal Trade Commission, professor of law at George Mason University's Antonin Scalia Law School, executive director of its Global Antitrust Institute; 9/12/13; “SSOs, FRAND, and Antitrust: Lessons from the Economics of Incomplete Contracts”; <https://www.ftc.gov/sites/default/files/documents/public_statements/ssos-frand-and-antitrust-lessons-economics-incomplete-contracts/130912cpip.pdf>; Inaugural Academic Conference: The Commercial Function of Patents in Today’s Innovation Economy; accessed 10/26/21; TV]

In my view, the antitrust laws are not well suited to govern contract disputes between private parties in light of remedies available under contract or patent law. The same concerns extend to attempts by antitrust agencies to influence SSOs’ IPR policies. Caution should be exercised in both situations. Indeed, economists have long viewed the hold-up problem and ex post opportunism more generally as a problem sounding in contract law with its default substantive rules and remedies rather than in antitrust law. 55 The risk of imposing antitrust remedies in pure contract disputes can have harmful effects in terms of dampening incentives to participate in standard setting bodies and to commercialize innovation. These would be unfortunate consequences of policy reforms and enforcement efforts designed to improve the competitive process. They are also avoidable consequences. The sanctions available to address patent holdup and related concerns under other legal regimes are more than adequate to provide optimal deterrence against patent hold-up.56 Antitrust enforcement remains available in cases of true anticompetitive price-fixing or deceptively manipulating standards. In the absence of robust empirical evidence to suggest that SSOs’ adaptation of their IPR policies over time have been inadequate in minimizing the probability of hold-up, there is little reason to bring to bear the blunt weaponry of antitrust rules and remedies to micromanage the competitive process in the name of improving SSO contracts.

#### The plan is over-deterrence, because it allows companies to pursue treble damages, which are far greater than the penalties in patent and contract law. The counterplan is sufficient and goldilocks, the plan is overkill. That’s Itzwan in the overview AND

Kobayashi & Wright ‘8 [Bruce H & Joshua D; Professor of Law, George Mason University School of Law; , Scholar in Residence, Federal Trade Commission; Assistant Professor, George Mason University School of Law; 6/10/08; “Federalism, Substantive Preemption, and Limits on Antitrust: An Application to Patent Holdup”; <https://www.law.gmu.edu/assets/files/publications/working_papers/08-32%20Federalism,%20Substantive%20Preemption%20(2008-06-11).pdf>; George Mason University Law and Economics Research Paper Series; accessed 9/18/21; TV]

To be sure, application of contract law is sure to result in some errors in identifying holdup. However, the substantive superiority of contract law is clear. The most obvious advantage is that where antitrust law would find a violation in any modification of a FRAND commitment, with the remedial consequences in private and state follow‐on litigation of such a finding, contract law allows for the economic reality that long‐term relationships frequently involve modification over time. Further, the error rate under contract law is likely to be much lower than antitrust since substantive antitrust doctrine contains nothing that would allow it to engage in the flexible inquiry invited by contract law. In addition, cases like N‐Data suggest that antitrust enforcers have little interest immunizing good faith modifications of SSO commitments from antitrust liability.

Not only is the error rate likely to be significantly higher in antitrust law than under contract law, but the social welfare losses associated with errors are likely to be much larger when antitrust liability is involved. If this were not the case, one might argue that overlapping contract and antitrust liability are appropriate. However, the case for the comparative advantage of contract law is made stronger because antitrust liability threatens to produce social welfare losses in this setting. There are several reasons for this. First, the conventional argument that breach of contract does not have any efficiency justification and so amounts to “cheap exclusion” is incomplete. Modifications of long‐term agreements where asset specific investments have been made frequently require flexible ex post adjustments by the parties to maximize efficiency. Modification of SSO commitments can be efficient. Further, unlike socially wasteful conduct typically raised as examples of “cheap exclusion,” such as setting fire to a rival’s plant, breach of contract may be efficient in the sense that it results in greater social welfare.

Second, because modification of breach of FRAND commitments might increase social welfare in some circumstances, efficient conduct might be over‐ deterred as a result of antitrust liability. Whereas the conventional argument in favor of treble damages is that super‐compensatory damages are necessary to compensate for a low probability of detection of the violation, that argument does not make sense in the case of holdup. “Holdup,” as the definition suggests, requires the patent holder to announce to the SSO that it is violating the prior terms and “holding up” its members. The likelihood that this conduct would go unnoticed by the SSO members, whether the holdup is successful or otherwise, approximates zero. The case of treble damages for this sort of “open and notorious” conduct is weak. The concerns with over‐deterrence are even greater when one considers follow‐on private litigation and state remedies. To the contrary, the payment of expectation damages under contract law is not likely to generate these over‐deterrence concerns.

Third, to the extent that one accepts the arguments, based on the analysis in NYNEX and Rambus, that breach of a FRAND commitment made in good faith involves an attempt by a lawful monopolist to raise prices, the Supreme Court has consistently made clear that the Sherman Act does not condemn high prices alone. Rather, as the Supreme Court notes in Trinko, the returns to the lawful monopolist are related to the pro‐competitive incentive to innovate:

The opportunity to charge monopoly prices—at least for a short period— is what attracts “business acumen” in the first place; it induces risk taking that produces innovation and economic growth. To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct.

In sum, antitrust enforcement creates the potential for significant error costs, increased transactions costs, and reduced social welfare.

While substantive contract law and contact remedies are better suited to detect patent holdup and distinguish it from good faith modification or efficient breach, it would do little good if there were no appropriate parties to enforce FRAND commitments. Indeed, the debate in the antitrust community has largely ignored the superiority of substantive contract doctrine in favor of an analysis that narrowly focuses on whether a sufficient number of parties could enforce FRAND commitments in a breach of contract action. Commentators have pointed to the fact that standing would be limited to SSO members as a weakness of the contractual approach to regulating patent holdup because losses to non‐ members and, more importantly, consumers would not be actionable.124 We view this standing critique as incomplete and unpersuasive.

It is incomplete because the discussion largely ignores the question of how much enforcement would be optimal from a social welfare perspective. It is certainly correct as a matter of law that non‐SSO members lack standing to enforce the FRAND commitment. Commentators typically argue that contract enforcement is insufficient because injured consumers do not have standing, and thus antitrust enforcement is justified. These arguments typically assume both that: (1) all ex post modifications of FRAND commitments are inefficient; and (2) treble damages are required for optimal deterrence of patent holdup. As we’ve discussed above, both assumptions are likely incorrect. Some modifications or breaches of FRAND commitments are efficient, and therefore a rule that deters such conduct is likely to result in social welfare losses. Further, because the probability of detecting patent holdup is nearly certain, the case of requiring treble damages and antitrust remedies is weak in this setting. Contract law damages are less likely to over‐deter efficient conduct.125 Finally, a number of alternative common law doctrines might allow some recovery for non‐SSO members. For example, third parties might be able to recover reliance interests under the doctrine of promissory estoppel where the third party knew of the patent holders promise to the SSO and the patent holder had reason to know that the third party would have expected to benefit from the promise.126 In addition, as discussed above, patent law might grant an “implied license” to third parties on the grounds that the third parties might reasonably assume that they are entitled to use the standard at the FRAND royalty rate.127

To be sure, judicial application of these alternative state and federal doctrines is fraught with opportunities for error in distinguish good faith renegotiation from bad faith hold up, interpreting SSO terms, and identifying breach of those terms where appropriate. Our claim is not that contract law handles these claims perfectly. Indeed, it is transacting parties’ ability to contract around most contract default rules that mitigates these error costs where they are significant. Rather, we note that the case for federal antitrust regulation depends on the notion that the welfare losses associated with patent holdup are sufficiently great after accounting for the mitigation of those harms through state law regimes. In our view, the substantive superiority of contract law undermines any potential justification for the application of the heavy and inflexible machinery of antitrust law in the patent holdup context.

The substantive superiority of contract law also provides the basis for rejecting the possibility that the Commission should incorporate the flexible standards of UCC 2‐209 into antitrust law, exclusively through the application of Section 5 of the FTC Act and without Section 2 of the Sherman Act, in order to improve its analysis of patent holdup to account for the possibility of good faith modification. While such a development would provide a marginal improvement over the status quo, largely because the threat of private follow‐on actions and treble damages would be minimized, any benefits from such a change would be superficial and would come at a significant cost. First, as discussed, it should be noted that N‐Data suggests that the Commission is not interested in distinguishing good faith modification from opportunism. Rather, N‐Data appears to adopt the view that any deviation from an ex ante FRAND commitment amounts to a violation of the antitrust laws. Second, N‐Data also suggests that the Commission might be more than willing to apply a monopolization theory under Section 2 in a case with similar facts to N‐Data, involving only the renegotiation of ex ante FRAND commitments made in good faith. The language in the N‐Data majority to this effect gives us reason to treat with skepticism the argument that the Commission is likely to limit itself to application of Section 5. Finally, and most importantly from our economics of federalism perspective, is such a policy change by the Commission would amount to federalizing contract law and would eliminate any benefits from jurisdictional competition between the states on substantive doctrine.

### 2NC – AT: Qualcomm

#### Antitrust is excessive and duplicative – companies currently can claim violations of patent law for failure to comply with FRAND license. Companies can protect themselves.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

What the district judge actually finds objectionable is that Appellant is asking from OEMs more money than she thinks appropriate as a royalty, basing such belief primarily on the self-serving complaints from the OEMs themselves. Even assuming that the district judge was factually correct in this belief, overcharging for a license is not a violation of antitrust law, nor is it a proper use of either regulatory or judicial power to interfere with contractual arrangements established by SDOs. The policies of the SDOs relevant to this appeal require a commitment from companies that participate in developing standards to license their SEPs on FRAND terms, but none of these SDOs wants to be involved in establishing the specific royalties or other terms that might limit the range of negotiations between patent owners and potential licenses. The question of what constitutes a FRAND license is left to individual negotiations.5 Nor do these SDOs provide mechanisms for resolving differences that inevitably emerge from time to time between participants. These too are left for the parties to resolve on their own.6 Our system of patent protection allows patent owners the benefit of a market-based determination of the value of what they have invented. There is no basis for judicially circumscribing that right based on complaints from companies that are more than capable of protecting their own interests.

## CP – Regulate

### 2NC – R&D

#### R&D is self-reinforcing and drives economic growth – every 1% increase more than doubles the return and encourages investment from other sources.

Mandt et al. ’20 [Rebecca, Kushal Seetharam, and Michael Cheng; August 20; Ph.D. Candidate in the Department of Immunology and Infectious Diseases at Harvard University; Ph.D. Candidate in the Department of Electrical Engineering and Computer Science at the Massachusetts Institute of Technology; M.S. from Harvard University; MIT Science Policy Review, “Federal R&D funding: the bedrock of national innovation,” <https://sciencepolicyreview.org/2020/08/federal-rd-funding-the-bedrock-of-national-innovation/>]

Virtuous Cycles of Federal Funding

In addition to directly supporting research related to public priorities, federal investment also produces a domino effect in resource commitment, inducing investment from non-federal sources such as the private and philanthropic sectors into R&D related to broad societal objectives [41]. A multitude of studies have found that government investment in R&D increases private investment and effort (see, for example, [42]). Analysis done by Lanahan et al. in 2016 estimated that every 1% increase in federal research funding leads to a 0.468% increase in industry research investment, a 0.411% increase in nonprofit research investment, and a 0.217% increase in state and local research funding, cumulatively more than doubling the initial federal investment [41]. This positive feedback effect generally holds true across different disciplines including life sciences, physical sciences, and engineering. We therefore see that federal funding has an effect of “crowding-in” R&D investment from non-federal sources rather than crowding them out, as is sometimes erroneously assumed. As federal R&D investments are typically made in line with the missions of federal agencies which are in line with public priorities, increasing federal funding would lead the entire national R&D infrastructure to move more in step with societal needs and public benefits rather than purely market considerations. Additionally, federally-supported research is much more likely to be publicly disclosed compared to private sector R&D, and is therefore more likely to catalyze other innovations [23]. For example, as previously discussed, advances in supercomputing, and even the invention of the web browser, were built upon research done on computationally modeling black hole collisions [43]. As another example, fundamental physics research studying the movement of atoms led to the invention of molecular resonance imaging (MRI), a medical technology that helps save countless lives today [44, 45].

Federal R&D expenditure is also responsible for both the education and training of scientists and engineers who move into the broader workforce as well as the physical infrastructure that often forms the kernel for regional hubs of technological innovation

[46]. A core part of the NSF’s mission, for example, is supporting science, technology, engineering, and mathematics (STEM) education and the broader development of the human capital pipeline for national R&D [23]. The agency is also tasked with maintenance of large-scale research infrastructure such as facilities for materials research and fabrication, high-performance computing facilities, and particle accelerators, out of which technologies underlying countless start-ups and private sector innovations have been born [47]. The work done by university research centers and national labs, both of which are primarily funded by the federal government, also end up attracting technology incubators, start-ups, and a larger industry presence [3]. Therefore, federal funding is often responsible for the key centers around which technology hubs form and lead to regional economic growth; examples include Silicon Valley in California; Boston, Massachusetts; the Research Triangle Park in North Carolina; the Boulder-Denver corridor in Colorado; and Madison, Wisconsin. In addition to its indirect role in forming such innovation hubs, the federal government often takes a direct role in creating infrastructure critical to future private sector R&D including advanced manufacturing, high-performance computing, and smart cities [48]. Federal funding, therefore, plays two major roles: it spurs the general pace of national innovation forward, and it guides the national innovation ecosystem towards societal priorities. Both of these tasks are accomplished by utilizing the “crowd-in” effect of federal R&D investments, the training of the STEM workforce, the tendency for technology hubs to form around academic and federal research centers, and the types of R&D infrastructure the government catalyzes.

## Innovation

### XT 1 – Innovation High

#### The industry is highly competitive – empirical indicators prove licenses have minimal effect on overall innovation.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

This distinction is particularly compelling in light of two incontrovertible facts. First, consumers all over the world have enjoyed intense and dynamic competition that is readily apparent to everyone. It is difficult to imagine a more competitive industry than this one over the last decade. If Appellant’s licensing practices had actually reduced competition, as the district court concluded, consumers would not have the available choices, the rapidly falling prices for legacy products, and the constant and accelerating improvements in the quality of new products and services that are available.

#### Long term trends prove intense competition in the telecom industry.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

We urge this Court to differentiate contract disputes from conduct that actually brings about a lessening of competition.2 Contrary to the conclusions of the district judge, the cellular communications industry is one of most intensely competitive and dynamically evolving industries in the world. One need only reflect for a moment on the ubiquitous smartphone with its built in sound system, video screen, computer, camera, worldwide connectivity to other devices and other features that did not exist just 10 or 15 years ago to understand that the forward progress of this industry is not being “monopolized” by Appellant or anyone else. Given the vibrant nature of this industry and the size and sophistication of its participants, one must surely question the need for regulatory or judicial interference in what is essentially a private matter, governed by contract law.

### XT 2/3 – Innovation Turn

#### 2. Link magnitude is significant – 1NC evidence cites billions of dollars in lost funding. Link threshold is low because of investor risk tolerance – investors and entrepreneurs will only risk developing new technology if the know they can capture the market.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

The decision below misinterprets both antitrust law and patent law in ways that, if allowed to stand, will diminish significantly the incentives of entrepreneurs, startups, inventors and their investors to pursue risky new ventures and unproven technologies. Many new technologies invented by entrepreneurs and small companies have value only if they can be licensed to sellers of larger products or systems. The district judge’s vehement and repetitious use of the term “anticompetitive” to describe the normal give and take that occurs in contract negotiations vilifies a patent owner’s insistence that infringers take licenses to the patents they want to use. This will inhibit the ability of many patent owners to negotiate patent licenses, particularly the smaller companies that do not have a great deal of bargaining power other than the potential enforcement of their patents. By vilifying patent owners that take a firm stand against infringement of their property rights, the decision lends credibility to the false but often used argument that patents are just a nuisance and interfere with real innovation. In fact, patents allow truly inventive companies to overcome the obstacles – economic and otherwise – that large incumbent companies are able to employ to protect their markets. Smaller companies already have a difficult time trying to benefit from their inventive efforts; the instant decision will add to the difficulty.

#### 3. Our internal link is larger because it creates a 2:1 effect. For every dollar of investment, the US loses, China gains a dollar. The multiplying effect makes our internal link greater than the aff’s.

#### 4. Uniqueness means the plan can only decrease innovation. Further protecting implementers at the expense of standard-setters crushes incentives to invest in new technologies.

Teece ’17 [David J; Thomas Tusher Professor of Global Business, Haas School of Business, University of California at Berkeley, and Chairman, Berkeley Research Group; 2017; “THE “TRAGEDY OF THE ANTICOMMONS” FALLACY: A LAW AND ECONOMICS ANALYSIS OF PATENT THICKETS AND FRAND LICENSING”; <https://btlj.org/data/articles2017/vol32/32_4/Teece_web.pdf>; Berkeley Technology Law Journal, Vol. 32; accessed 10/26/21; TV]

In this Part, the various threads discussed above are pulled together to deliver a major indictment of the anticommons thesis on “underuse”; it all but turns the Heller and Eisenberg thesis on its head and argues that patent holders are systematically undercompensated for their innovations.

The analysis above summarizes theory and evidence surrounding Heller and Eisenberg’s tacit (but false) conclusion that, without judicial or policy interventions, there is inefficient underuse of patented technology. Their paradigm is wrong with respect not only to biotech (as Eisenberg now seems to recognize), but also to standards essential patents where patent owners make FRAND commitments. Their tacit assumption was that, without agreement in advance, risk–averse potential implementers will err on the side of caution and avoid using technology claimed by others without first coming to an agreement. That assumption is often not true in the context of patented technology.

Unlike suppliers of tangible goods who will refuse to deliver unless they are assured they will get paid, patent holders cannot physically withhold their technology from others. Instead, they must resort to costly and risky legal proceedings to enforce their rights. Put another way, patent rights are not self–enforcing; patent holders cannot resort to the sorts of “self–help” mechanisms available to suppliers of tangible goods (like withholding delivery). Firms can (and routinely do) use patented technology whose ownership is claimed (rightly or wrongly) by others without paying for it. Many firms routinely ignore (and are often entirely unaware of the existence of) relevant patents.93

In my view, the real “tragedy” to be concerned about is not that business enterprises are being deterred from using patented technology, but that innovators are not getting paid sufficiently because of unlicensed use. This is troubling from a public policy and social welfare perspective. There are many contexts (e.g., mobile phones) where some firms use intellectual property owned by others without paying for it (indeed, in some contexts widespread infringement routinely occurs). Even Eisenberg subsequently recognized this in the biotechnology field but did not see this as a problem, let alone a “tragedy.”94 The knock–on consequence is that firms will underinvest in inventive activities because of underpayment that occurs.95 This denies society access to new technology that would result from higher levels of investment in creative activities. It is certainly true that risk–averse firms can be deterred from using technology (research tool or otherwise) claimed by others because of the fear of being falsely accused of infringement when there is no actual infringement. But if the implementer goes ahead and uses it without paying (the more common circumstance), then it is not so much that society’s problem is not so underused as it is uncompensated overuse. In short, there is usually underpayment, not overpayment; uncompensated overuse, not underuse.

As noted, Heller and Eisenberg’s fear of economic inefficiency arising from underuse does not appear to be significant either in biotech or in mobile phones. I am not aware of any evidence of “holdup.”96 This should not be surprising when one realizes patent owners cannot unilaterally deny others access to its technology; only a court can do that.

In the telecommunications field, firms often make and sell standards– compliant products without taking licenses under all of the claimed SEPs and without paying royalties (at least immediately) to many, and perhaps most, patent holders. Thus, contrary to the Heller and Eisenberg “underuse” theory, what one frequently sees is a situation of contemporaneously uncompensated use, often amounting to a situation of widespread infringement, implying that patent holders whose patented technology is being used are being currently undercompensated. The fact that firms are using others’ patented technology without (currently) paying for it suggests that, if anything, there is overuse, not the underuse predicted by the proponents of anticommons theory.

The above reasoning is correct as far as it goes. But it disregards the fact that the infringer may be ordered to pay damages for its unlicensed use at some point in the future, should the patent holder prevail on the issues of liability and damages. If the court sets the damages level correctly and also requires infringers to pay prejudgment interest at the economically appropriate rate (a dubious assumption, to be discussed further below), the result is that compensation will not be eliminated entirely, but only delayed during the pendency of the litigation. Of course, should the patent holder not prevail on both validity and infringement, the court will award nothing in the way of damages. Whether the overall level will be over– or underuse, and whether patent holders are over– or undercompensated for others’ use of their patented technologies, depends on the expected level of damages and prejudgment interest the infringer expects to ultimately be required to pay. There is simply no reason to expect that Heller and Eisenberg’s conclusion that the mere existence of fragmented patent rights, the existence of an anticommons, will result in “underuse” holds once these factors are considered.

Whether undercompensation will persist in the face of finding an infringement depends on how the court sets damages following a verdict of validity and infringement. If the infringer is only ordered to pay the same level of royalties that it could have negotiated ex ante, prior to a finding of validity and infringement, then the infringer gets to play a “heads I win, tails I break even” game, which encourages infringement and results in overuse and undercompensation. If, however, following a verdict in the patent holder’s favor, the infringer is required to pay a royalty rate appropriate for a proven–valid–and–infringed patent, rather than the (discounted) rate that it could have negotiated ex ante for what might be termed an “untested” patent—one for which the issues of validity and infringement have not been litigated, and which may be seriously disputed—then appropriate compensation is at most delayed, rather than being eliminated entirely.

A simple numerical example might help to illustrate the point. Suppose that everyone agreed that the rate for a patent, should it be shown valid and infringed, would be 10%. Suppose further that the patent holder and the potential licensee agree that there is only a 50% chance that the patent, if litigated, would be found valid and infringed. Faced with that uncertainty, a rational licensee would not be willing to pay the full 10% royalty appropriate for a valid–and–infringed patent for a license ex ante, before the patent is litigated. The parties might agree to a license calling for the licensee to pay royalties of 5%, the 10% rate for a proven–valid–and– infringed patent times the 50% probability that the patent, if litigated, would be found valid and infringed. The patent holder may well enter into a significant number of such ex ante licenses for an untested patent with numerous potential licensees. Indeed, the negotiated rate of 5% may come to be an “established” royalty.

If the patent holder is forced to litigate its patent, and it prevails, then it should be awarded the 10% royalty rate, which (by our assumption) is appropriate for a proven–valid–and–infringed patent, not the lower “established” rate of 5% negotiated for the “untested” patent. If the court were to mistakenly award damages at the discounted 5% established rate instead of the economically appropriate 10% rate as damages following a verdict in the patent holder’s favor, then the infringer would have little or no economic incentive (other than avoiding litigation costs) by taking a license; litigating is a “heads I win, tails I break even” strategy. Unfortunately, in our experience some courts argue that the accused infringer should be entitled to test the patent holder’s claims of validity and infringement without suffering a “penalty” for unsuccessfully doing so. Other courts take existing licenses of 5% as evidence that court– awarded damages should likewise be 5%, because of the claim that the existence of numerous licenses demonstrates an “established royalty” that purportedly serves as a cap on damages.

#### 5. Their evidence also doesn’t assume global spillover effects. The perception of the plan alone over deters foreign investment into the US.

MAKAN DELRAHIM, Assistant Attorney General, Antitrust Division, ’20, Case 3:19-cv-02933-M Document 278 Filed 02/27/20 Page 12 of 37 PageID 7223 https://www.justice.gov/atr/case-document/file/1253361/download

Contract and patent remedies are available to Continental if Defendants have, in fact, breached their FRAND commitments, deceived the SSOs about their licensing intentions, erroneously asserted their patents, or otherwise acted in bad faith. See, e.g., Microsoft Corp. v. Motorola, Inc., 795 F.3d 1024 (9th Cir. 2015). Indeed, an implementer does not need to rely on antitrust law and the threat of treble damages to enforce a FRAND promise when it can also seek declaratory relief and a FRAND determination. Similarly, for alleged abuses of patent rights, including bad-faith assertion, implementers have adequate recourse within patent law. Where contract and patent remedies are available to deter breach and to facilitate transparent dealing, an additional remedy—treble damages under the antitrust laws—would threaten to chill lawful, procompetitive licensing conduct. See Trinko, 540 U.S. at 414 (“Mistaken inferences and the resulting false condemnations ‘are especially costly, because they chill the very conduct the antitrust laws are designed to protect.’” (quoting Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 594 (1986)));23 see also NYNEX, 525 U.S. at 136-37 (cautioning against “transform[ing] cases involving business behavior that is improper for various reasons . . into treble-damages antitrust cases”). Moreover, improperly extending the scope of liability to include antitrust treble damages in the U.S. could have a cascade effect in foreign jurisdictions— either as a consequence of misunderstanding, misinterpretation or even misuse by foreign governments or parties—further amplifying the risk of harm to innovators and undermining dynamic competition in the US economy for no appreciable efficiency gains in licensing conduct.24 Antitrust remedies are too blunt an instrument to address conduct that violates the expectations of contracting parties but does not harm the competitive process. If a party can threaten its counter-party with treble damages under Section 4 of the Clayton Act by alleging violations of a contractual commitment, then it may be able to extract more than the benefit of its bargain. This risk could deter parties from entering into efficient contracts in the first place, resulting in deadweight economic losses.25 Indeed, many scholars have expressed concern that the use of antitrust remedies to address the breach of FRAND commitments will have the consequence of deterring procompetitive participation in standard setting organizations—which would, ironically, undermine the fundamental goal of both antitrust and IP laws, which is to promote innovation and dynamic competition.26 If patent holders with valuable technology must risk antitrust liability whenever they negotiate in an effort to obtain rates that reflect the true value of their inventions, they will be less likely to contribute their technology to a standard that requires a FRAND commitment. This could lead to lower-quality standards, competing standards that fragment the market, or an unwillingness to enter FRAND commitments in the first place.

### XT 5 – No Patent Holdup

#### 2. Patent holdup is purely theoretical and not borne out by empirics. A consensus of data agrees.

Barnett ’17 [Jonathan M; Professor, University of Southern California, Gould School of Law; 2017; “HAS THE ACADEMY LED PATENT LAW ASTRAY?”; <https://btlj.org/data/articles2017/vol32/32_4/Barnett_web.pdf>; Berkeley Technology Law Journal, Vol. 32; accessed 10/23/21; TV]

Multiple studies have used survey and other methods to identify patent thicket or “anticommons” effects in the biomedical research community. This research segment is important because it is the field with respect to which the “anticommons thesis” was originally asserted, at the time reflecting concerns that increased patenting in the biomedical research field116 would generate transactional thickets that would impede research. The survey studies are remarkably consistent in finding little to no evidence that these concerns have ever materialized.117 Interviewees widely reported the use of workarounds to potential patent thickets, including nonenforcement by the patentholder,118 nominal fees being assessed by the patent holder,119 design arounds,120 licenses or informal industry understandings.121 This literature can be summarized by the conclusion of a leading study: “[L]egal excludability due to patents does not appear in practice to impose an important impediment to academic research in biomedicine . . . .”122

2. Evidence for Market Self–Correction: Collective Rights Organizations and Patent Pools

A related line of scholarly inquiry has considered whether markets have capacities to anticipate patent roadblocks and to take steps to prevent it. This has important implications for the thicket thesis: if markets have robust self– correction capacities, then it would be unlikely that thickets would ever arise or persist in practice.123 In an early contribution that predates the “anticommons” literature, Professor Robert Merges had argued that firms use contractual arrangements to preempt or resolve IP roadblocks through pooling and cross–licensing mechanisms.124 As a principal example, Merges showed how the market for performance rights in musical compositions had avoided transactional blockage by developing collective rights societies for efficiently administering copyrights held by large numbers of dispersed holders.125 Building on this line of inquiry in subsequent research, I identified over one hundred documented IP (mostly patent) pooling arrangements from 1900 through 2014, finding that content and technology markets have regularly formed IP pools, except during a roughly three–decade period following World War II during which antitrust policy effectively prohibited them.126 In other work, I documented intricate contractual and organizational solutions to potential patent thickets that have been devised by external pooling entities, as well as industry consortia, in the ICT markets starting in the late 1990s.127 These transactional innovations support the deployment of data compression, data transmission and other technologies that lie behind everyday fixtures of the digital economy, including Blu-Ray players, Firewire and Bluetooth systems, MP3 players, LAN systems, cable television set–top boxes, and online streaming of audio and visual content.128 Contrary to the thicket thesis, widely dispersed ownership of large numbers of patents relating to critical technologies has not impeded rapid dissemination of these technologies to the end–user market.

3. Historical Research: Revisiting the “Clear Cases” of Patent Thickets

Ron Katznelson, John Howells, and I have revisited classic patent litigations that are widely cited to illustrate how strong patents can pose transactional obstacles that slow down technological progress. Some of these classic litigations include the litigation over the Wright patent in the early aircraft industry,129 litigation over the “De Forest” and other patents in the early radio communications industry,130 and litigation over the “Selden” patent in the early automotive industry.131 The Howells and Katznelson studies find that intensive patent litigation in the early aircraft and radio communications industries had little effect on entry opportunities or market growth, in large part because the principal stakeholders took steps to reach a mutually agreeable settlement through cross–licensing and other arrangements.132 I confirmed those findings through a review of the authors’ primary sources (as well as additional sources) and, consistent with the market self–correction thesis, described how the early petroleum refining and automotive industries had similarly addressed potential thickets through pooling and cross–licensing arrangements. Contrary to widespread assumptions, the extended patent infringement litigation between Ford Motor Co. and the holder of the Selden patent, which claimed the internal combustion engine, had no apparent effect on the expansion of the U.S. motor vehicle market or the economic performance of Ford, which thrived throughout this period and regularly released product and process innovations into the market.133 In the petroleum refining industry, intensive patent litigation involved even more entities and extended over a substantially longer period. Again contrary to the thicket thesis, this economically critical industry showed the signs of a healthy innovation market throughout this period: accelerating R&D expenditures, robust competition for market share, and declining royalty rates.134 These historical studies all converge toward a common interpretation: markets are adept at anticipating transactional blockage and taking steps to preempt it, so that intensive patent acquisition and enforcement have little persistent adverse effect on innovation, even without taking into account positive effects on innovation incentives and transactional opportunities.

4. Reevaluation: Why Evidence for Patent Thickets Is So Weak

In hindsight, it is perhaps unsurprising to learn that markets are so adept at identifying and preempting potential patent thickets. This result derives from pure self–interest: a thicket prevents patent holders from earning a return on their R&D investment, giving them a powerful incentive to avoid litigation and, following Coasean logic,135 reach a mutually agreeable allocation of property rights and split of the surplus value that is unlocked as a result. So long as antitrust or other regulatory interventions do not impede contract enforcement, stakeholders tend to exhibit robust capacities to resolve potentially conflicting patent claims for mutual advantage. Relatedly, given the rapid product life cycle of technology–intensive markets and actual or potential competition from alternative technologies, patent holders incur a large opportunity cost by failing to reach an agreement that enables the market to deploy and commercialize the relevant technology.

Of course, markets’ self–correction capacities in any particular case are sensitive to transaction costs. Hence, it would be expected that Coasean bargaining would perform well, and thickets would be unlikely to persist, in low transaction–cost settings involving small numbers of repeat–play patent holders with approximately homogenous IP portfolios. These holders can more easily enter into patent cross–licensing arrangements or industry understandings that avoid the complexities of formal enforcement, side payments, and ongoing royalty payments. Contrary to expectations, however, the thicket thesis does not even seem to hold true in high transaction–cost settings involving large numbers of holders with heterogeneous IP portfolios. Even in those settings, profit–motivated transactional entrepreneurs devise pooling and licensing solutions that can suppress actual or potential thickets among multiple patent holders.136 Since the effective lifting of the de facto prohibition on patent pools following release of the 1995 revised antitrust guidelines on IP licensing137 and a business review letter issued by the DOJ in 1997 (in connection with a proposed patent pool),138 this externally administered structure has become the most prevalent pooling structure in ICT markets.139 This type of transactional engineering may explain why contemporary ICT markets have enjoyed rapid and widespread deployment of new technologies concurrent with the intensive acquisition and enforcement of patents.

#### 3. Literally every study concludes no patent holdup exists in the technology sector.

Barnett ’17 [Jonathan M; Professor, University of Southern California, Gould School of Law; 2017; “HAS THE ACADEMY LED PATENT LAW ASTRAY?”; <https://btlj.org/data/articles2017/vol32/32_4/Barnett_web.pdf>; Berkeley Technology Law Journal, Vol. 32; accessed 10/23/21; TV]

2. Recent Evidence

Lemley and Shapiro arguably describe a theoretically plausible set of circumstances in which patent holdup and royalty stacking may arise.179 However, they did not provide persuasive empirical evidence that this is a frequently or even occasionally realized scenario. Of course, it may be the case that subsequent evidence has validated their argument. Based on available evidence, however, that possibility has not yet been realized, even though the number of SEPs and SEP holders has increased dramatically during the rollout of “3G” and “4G” wireless communications technologies during the past decade.180 While no study described below definitively resolves the empirical debate, it is striking that **every study**, as well as several industry reports described below, fails to find persuasive evidence of holdup and stacking effects in the smartphone and other patent–intensive IT markets in which those effects should, as a theoretical matter, be most salient.

a) Industry Reports: Royalty Rates in the “3G” Smartphone Market

Multiple industry reports provide reason to contemplate the possibility—more rigorously tested, as I describe subsequently,181 by empirical researchers—that the total royalty burden in the 3G smartphone market does not typically venture into the double–digit range commonly asserted in scholarly and policy discussions. First, that range is consistent with public statements by two leading handset makers at the time of the initial rollout of “3G” cellular devices: (i) in 2007, Ericsson’s chief technology officer stated that the total royalty rate burden for WCDMA technology is typically 4–5%;182 and (ii) in 2007, Nokia reported a total royalty rate burden for UMTS/WCDMA handsets of 3%.183 Second, reports in the business press noted in 2006, 2009, and 2015 that Qualcomm, the industry’s principal licensor of CDMA–based chipsets to handset manufacturers, typically licenses its CDMA patents at approximately 5% of the handset’s wholesale price.184 At a 2009 conference, Qualcomm’s Chief Operating Officer reportedly stated that Qualcomm assessed a royalty rate of 4–5% on its 3G CDMA licenses.185 While the credibility of these statements should be discounted to some extent given potential strategic considerations, a 5% figure (applied to a truncated royalty base, which reduces even further the effective royalty rate) was also reported in connection with Qualcomm’s settlement of a Chinese government “antimonopoly” investigation in 2015, 186 and rates of 5.25–5.75% have been reported in connection with Qualcomm licenses to Korean firms.187 While the Qualcomm figure cannot fully reflect the aggregate royalty burden in the “3G” market given required patented inputs held by other suppliers, there is reason to believe that royalties payable to those other suppliers may not be significant given Qualcomm’s nearly exclusive position as the supplier of CDMA chipsets used in “3G” smartphones.188 As discussed further below,189 these anecdotal reports of royalty rates in the smartphone market turn out to be largely consistent with recent empirical studies.

b) Price Data in SEP–Reliant Industries

Professors Galetovic, Haber, and Levine examine “SEP–reliant” industries for evidence that these industries suffer from slower declines in quality–adjusted prices compared to “non–SEP–reliant” industries.190 If the holdup and stacking hypotheses are correct, then the “excessive” royalties imposed by SEP–patent holders would raise prices for intermediate and end–users, slowing adoption and impeding entry. Yet the evidence shows **the opposite is true.**191 In this comparison, which mostly covers 1997–2013, SEP–reliant industries192 have **faster quality–adjusted price declines** relative to non–SEP–reliant industries.193 To address the possibility that those differentials might reflect underlying industry–specific differences in innovative capacity, the authors compare quality–adjusted price declines in SEP–reliant and non–SEP–reliant industries that are subject to Moore’s Law194 (used as a proxy for innovative intensity).195 The same result holds: SEP–reliant industries still experience faster quality–adjusted price declines than non–SEP–reliant industries.196 While not definitive, this evidence is inconsistent with the holdup and stacking hypotheses which anticipate that intensive and fragmented patenting would result in higher quality–adjusted prices. In SEP–intensive markets, the opposite has occurred.

c) Indirect Indicators of Holdup and Stacking

In a 2015 paper and a 2016 paper coauthored with Professor Galetovic, Dr. Kirti Gupta assessed indirect indicators of potential holdup and stacking effects in the “3G” and “4G” mobile wireless communications markets.197 Both papers are motivated by a simple question. If there were significant holdup and stacking effects, then we would expect to observe one or more of the following effects: (i) end–users experience increasing quality– adjusted prices (as a result of stacked royalties being passed on by handset manufacturers); (ii) handset manufacturers experience reduced profit margins (as a result of stacked royalties that cannot be passed on to consumers); or (iii) participants in standard–setting reduce R&D or reduce participation in SSOs.

None of these effects are observed. During 2004–2013, firms in the mobile wireless industry (and, in particular, manufacturers of standard– compliant products) exhibit **increasing R&D investment**,198 increasing participation in **standard–setting efforts**,199 and little change in gross profit margins.200 If we look for adverse effects at the consumer market level, there too the readings are negative: during 2000–2013, the flow of new wireless products increased (as measured by releases of new consumer devices in the 3G and 4G smartphone markets),201 the number of unique manufacturers of mobile wireless devices increased,202 and there was frequent turnover in market share among leading manufacturers.203 In a 2016 paper, Keith Mallinson similarly observed a continuous flow of new models and continuous entry of new manufacturers in the smartphone market, as well as a decline in smartphone prices coupled with an increase in functionality.204 These indicators are simply not symptomatic of an industry in which patent holdup and stacking are endemic and royalty burdens are “exorbitant,” which should raise prices, slow down innovation, and discourage entry.

#### 4. Every empirical survey concurs – current SEP practices do not deter innovation.

Teece ’17 [David J; Thomas Tusher Professor of Global Business, Haas School of Business, University of California at Berkeley, and Chairman, Berkeley Research Group; 2017; “THE “TRAGEDY OF THE ANTICOMMONS” FALLACY: A LAW AND ECONOMICS ANALYSIS OF PATENT THICKETS AND FRAND LICENSING”; <https://btlj.org/data/articles2017/vol32/32_4/Teece_web.pdf>; Berkeley Technology Law Journal, Vol. 32; accessed 10/26/21; TV]

As noted, Heller and Eisenberg applied the anticommons label to a quite different situation in which multiple patent holders each have separate patents on various complementary biotechnology research tools, a number of which need to be used together in order to develop new products legally.9 However, in such a situation, it is doubtful whether there is a single “scarce resource” over which “multiple owners” each have the right to exclude. Instead, there are multiple complementary patents; each patent holder has the right to exclude others from using its own patented technology (but not the others’ patents), and users need to use multiple complementary patented technologies in order to develop and legally market new products.10

In what follows, I will use the latter interpretation (i.e., that market activity is complicated by the challenges associated with what I call elsewhere the “multi–invention” situation).11 Given this interpretation, I believe that the presence of “patent thickets”—where multiple patents held by different firms are often required for completion of a single product— would be an example of the anticommons “problem,” as Heller and Eisenberg framed it in their discussion of the anticommons in biomedical research.12

Experience does not bear out Heller and Eisenberg’s anticommons thesis in the patent context. In many situations where multiple patents covering many products in many contexts, there are extraordinary rates of innovation despite the fact that barriers supposedly exist.13 This should give immediate pause to anyone trying to understand whether or not there is a policy issue of the kind Heller and Eisenberg suggest with respect to the so– called “anticommons.” As discussed below, one can seriously question whether the “anticommons tragedy” arises all that frequently. Every day, many firms face the challenge of assembling thousands of inputs to make complex systems. The existence of products that require licenses from multiple patent owners supposedly leading to what Heller and Eisenberg characterize as a “tragedy of the anticommons” does not, in practice, seem to lead to serious problems.

Empirical work appears to confirm this commonsense intuition. For example, one study by Walsh, Arora, and Cohen did not show support the anticommons tragedy thesis for biotech.14 Instead, they found that patents only posed a relatively small number of obstacles.15 Further, the “solutions” to these obstacles included licensing, doing the research beyond the reach of patents, and outright infringement.16 In addition to the Walsh et al. study, Fiona Murray and Scott Stern (2007) see little evidence of harmful effects created by patent thickets.17 Their test examines knowledge difference rates associated with the publication of a patent.18 Anticommons theory predicts a drop–off in citations to the research once patents are granted; they find at most only a modest drop off.19

There is a problem of a different kind lurking about that is highlighted in this Article. The systematic problem identified here is undercompensation, and possibly overuse, not underuse. The goal of this Article is to explore in more detail the reasons why underutilization of technology might arise in particular contexts. Indeed, as discussed below, even Eisenberg has subsequently conceded that important qualifications need to be made to the anticommons thesis, noting that unauthorized use likely mitigates the risk of anticommons problems.20 However, she still worries that in the case of “practically excludable” materials and data, high transaction costs makes technology use less likely.21

### XT 6 – No Impact to SEP FRAND Violations

#### 3. SEP FRAND violations don’t harm innovation, they just slightly reduce the margins of Original Equipment Manufacturers.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

A moment’s reflection reveals the flaw in the district judge’s analysis. If an OEM could not remain in business without infringing Appellant’s patents, it is not “coercion” for Appellant to refuse to facilitate infringing uses of such patents. The reality is that the FTC, with support from the court below, is attempting to create a new legal construct in which Appellant (and presumably other patent owners) will be forced to grant licenses at the component level, presumably so that OEMs could then assert that under the most recent exhaustion rulings of the Supreme Court, they no longer need the licenses that they have operated under since they first began to use Appellant’s patents. In this restructured world, innovators would be required to capture the full value of their relevant patents at the component level – which most likely would be challenged as not being a “fair” or “reasonable” royalty – or to forego a large portion of the actual value in their inventions. This amicus submits that it is improper for a Federal agency or a Federal judge to try and micromanage an entire industry in this fashion. It is particularly difficult to understand the rationale for allowing these OEMs, some of which are multiples the size of Appellant, to reap a staggering windfall at the expense of the innovators that actually invest large sums in R&D to create the new technologies required for improving existing standards.14

#### 4. Aff links are puny compared to the turn and supported by biased evidence. Their authors overstate the harms to improve tech giants already massive profits.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

Second is the identity of the companies on whose testimony the district judge relied to support her findings – Apple, Samsung, Intel, Huawei and others that stand to benefit most from the district court’s ill-conceived effort. As already noted, this group includes some of the largest and most powerful companies in the world. Of course, they would like to pay lower royalties, because it would add to their already generous profitability.8 The antitrust laws, however, are indifferent to the profits of these large companies. If any of them believes that Appellant’s royalty structure is not consistent with its FRAND commitments, that company is free to pursue a contract claim in a state or federal court, as both Apple and Samsung have done in the past.

#### 5. Not a single instance of lost sale has been proven because it has simply been moved downstream. Aff evidence is purely conjecture.

Robert P Taylor, Chair of Antitrust Section of ABA, Patent Law Reform Comission (Direct Appointment by Secretary of Commerce), member of USIJ (foundation representing 30+ startups), ’19, “BRIEF OF AMICUS CURIAE ALLIANCE OF U.S. STARTUPS & INVENTORS FOR JOBS (“USIJ”) IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED “ Case: 19-16122, 08/30/2019, ID: 11417644, DktEntry: 97 <https://www.qualcomm.com/media/documents/files/amicus-brief-filed-by-the-alliance-of-u-s-startups-investors-for-jobs-usij-in-support-of-qualcomm.pdf>

In an effort to bootstrap the antitrust analysis to fit some of the language in the Supreme Court’s decisions in Trinko and in Aspen Ski Company v. Aspen Highlands, 472 U.S. 585 (1985), the Opinion argues that Appellant’s refusal to grant licenses to chip makers parallels the conduct found unlawful in Aspen. See, e.g., Opp. 44. It does not. In Aspen, discontinuation of the previously existing joint venture between the parties left the plaintiff without the ability to provide multi-mountain lift tickets, even if the plaintiff paid full retail price for the ones its customers used at the defendant’s lifts.11 By contrast, the district judge here does not identify a single instance in which a competing maker of modem chips lost a sale to a licensed OEM because the chip maker did not have a chip level license from Appellant. Appellant’s license to an OEM allows the OEM to purchase components – modem chips and everything else – from whatever vendor(s) it chooses. Put succinctly, there is no need for a license to a competing chip maker because all licensing occurs at the OEM level.

### XT – AT: Cyber

#### Attribution solves resiliency.

Lynch ’19 [Justin; 2/8/19; Associate Editor at Fifth Domain, contributor to the New Yorker, Foreign Policy, the Atlantic; "The struggle behind predicting a cyberattack," https://www.fifthdomain.com/industry/2019/02/08/the-struggle-behind-predicting-a-cyberattack/]

The idea that public data can point to future cyberattacks has been embraced by several government agencies.

The intelligence community’s research arm, the Intelligence Advanced Research Projects Activity, is researching how data can help forecast a cyberattack by using sensors that predict when a target is vulnerable to hackers. BAE Systems, Charles River Analytics, Leidos, and the University of Southern California are the prime contractors on the project.

There is a “significant link between hackers use of social media platforms, especially Twitter and Facebook, and the volume of web defacement attack,” according to 2017 research backed by the Office of the Director of National Intelligence and IARPA.

But experts have had mixed results with predicting cyberattacks with machine learning and open data.

By analyzing conversations of known criminals on the dark web, researchers from the University of California also tried to create an early warning system for incoming cyberattacks in 2017. That approach was 84 percent effective at predicting current or imminent cyberattacks.

Also in 2017, three researchers used historical attack count data to predict future cyberattacks to some success. It was 14 percent more effective than other models.

However, others believe the future of predicting cyberattacks through artificial intelligence will combine both humans and computers.

Researchers from the Massachusetts Institute of Technology created a computer system in 2016 that continuously incorporated information from human experts with a success rate of 85 percent while also decreasing false positives by a significant factor.

“The more attacks the system detects, the more analyst feedback it receives, which, in turn, improves the accuracy of future predictions,” said Kalyan Veeramachaneni, a research scientist at MIT in a release. “That human-machine interaction creates a beautiful, cascading effect.”

#### No cyber impact.

Lewis ’20 [James Andrew; 8/17/20; senior vice president and director of the Strategic Technologies Program at the Center for Strategic and International Studies; "Dismissing Cyber Catastrophe," https://www.csis.org/analysis/dismissing-cyber-catastrophe]

More importantly, there are powerful strategic constraints on those who have the ability to launch catastrophe attacks. We have more than two decades of experience with the use of cyber techniques and operations for coercive and criminal purposes and have a clear understanding of motives, capabilities, and intentions. We can be guided by the methods of the Strategic Bombing Survey, which used interviews and observation (rather than hypotheses) to determine effect. These methods apply equally to cyberattacks. The conclusions we can draw from this are:

Nonstate actors and most states lack the capability to launch attacks that cause physical damage at any level, much less a catastrophe. There have been regular predictions every year for over a decade that nonstate actors will acquire these high-end cyber capabilities in two or three years in what has become a cycle of repetition. The monetary return is negligible, which dissuades the skilled cybercriminals (mostly Russian speaking) who might have the necessary skills. One mystery is why these groups have not been used as mercenaries, and this may reflect either a degree of control by the Russian state (if it has forbidden mercenary acts) or a degree of caution by criminals.

There is enough uncertainty among potential attackers about the United States’ ability to attribute that they are unwilling to risk massive retaliation in response to a catastrophic attack. (They are perfectly willing to take the risk of attribution for espionage and coercive cyber actions.)

No one has ever died from a cyberattack, and only a handful of these attacks have produced physical damage. A cyberattack is not a nuclear weapon, and it is intellectually lazy to equate them to nuclear weapons. Using a tactical nuclear weapon against an urban center would produce several hundred thousand casualties, while a strategic nuclear exchange would cause tens of millions of casualties and immense physical destruction. These are catastrophes that some hack cannot duplicate. The shadow of nuclear war distorts discussion of cyber warfare.

State use of cyber operations is consistent with their broad national strategies and interests. Their primary emphasis is on espionage and political coercion. The United States has opponents and is in conflict with them, but they have no interest in launching a catastrophic cyberattack since it would certainly produce an equally catastrophic retaliation. Their goal is to stay below the “use-of-force” threshold and undertake damaging cyber actions against the United States, not start a war.

This has implications for the discussion of inadvertent escalation, something that has also never occurred. The concern over escalation deserves a longer discussion, as there are both technological and strategic constraints that shape and limit risk in cyber operations, and the absence of inadvertent escalation suggests a high degree of control for cyber capabilities by advanced states. Attackers, particularly among the United States’ major opponents for whom cyber is just one of the tools for confrontation, seek to avoid actions that could trigger escalation.

The United States has two opponents (China and Russia) who are capable of damaging cyberattacks. Russia has demonstrated its attack skills on the Ukrainian power grid, but neither Russia nor China would be well served by a similar attack on the United States. Iran is improving and may reach the point where it could use cyberattacks to cause major damage, but it would only do so when it has decided to engage in a major armed conflict with the United States. Iran might attack targets outside the United States and its allies with less risk and continues to experiment with cyberattacks against Israeli critical infrastructure. North Korea has not yet developed this kind of capability.

#### Won’t go nuclear.

Tucker ’18 [February 2, 2018 Patrick Tucker is technology editor for Defense One. He’s also the author of The Naked Future: What Happens in a World That Anticipates Your Every Move? (Current, 2014). Previously, Tucker was deputy editor for The Futurist for nine years. https://www.defenseone.com/technology/2018/02/no-us-wont-respond-cyber-attack-nukes/145700/]

The idea that the U.S. is building new low-yield nuclear weapons to respond to a cyber attack is “not true,” military leaders told reporters in the runup to the Friday release of the new Nuclear Posture Review.

“The people who say we lowered the threshold for the use of nuclear weapons are saying, ‘but we want these low-yield nuclear weapons so that we can answer a cyber attack because we’re so bad at cyber security.’ That’s just fundamentally not true,” Gen. Paul Selva, vice chairman of the Joints Chiefs of Staff, said Tuesday at a meeting with reporters.

It’s an idea that military leaders have been pushing back against since the New York Times ran a Jan. 16 story headlined, “Pentagon Suggests Countering Devastating Cyberattacks With Nuclear Arms.”

When would the U.S. launch a nuclear attack in response to a non-nuclear event? The Defense Department says the threshold hasn’t changed since the Obama administration’s own nuclear posture review in 2010, but a draft of the new review that leaked online caused a bit of drama in its attempts to dispel “ambiguity.”

The new review gives examples of “non-nuclear strategic attacks,” Robert Soofer, deputy assistant secretary for nuclear and missile defense policy, told reporters on Thursday. “It could be catastrophic attacks against civilian populations, against infrastructure. It could be an attack using a non-nuclear weapon against our nuclear command-and-control [or] early-warning satellites. But we don’t talk about cyber.”

In his own conversation with reporters, Selva broadened “early warning” systems to include ones that provide “indications of warning that are important to our detection of an attack.” He also emphasized, “We never said ‘cyber.’”

There’s a reason for that. While cyber attacks on physical infrastructure can be very dangerous, they are unlikely to kill enough people to provoke a U.S. nuclear response.

An National Academies of Science and Engineering analysis of the vulnerability of U.S. infrastructure makes that point. A major cyber attack could cut off electrical power, resulting in “people dying from heat or cold exposure, etc.,” said Granger Morgan, co-director of the Carnegie Mellon Electricity Industry Center and one of the chairs of the report.  “A large outage of long duration could cover many states and last for weeks or longer. Whether and how many casualties there could be would depend on things like what the weather was during the outage.”

It’s a huge problem but not an event resulting in tens of thousands of immediate deaths.

Contrast that with a nuclear attack on a city like Moscow, even one using a device of 6 kilotons, much smaller than the ones the United States used against Japanese targets in World War II. The immediate result: there would be 40,000 deaths, according to the online nuclear simulation tool NukeMap.

Russia has demonstrated a willingness to take down power services with cyber attacks, as they did in Ukraine on Christmas Eve 2015. But these attacks were brief and occured in the context of actual fighting.

In other words, the worst cyber physical attack that top experts believe credible likely does not meet the threshold that the Defense Department has set out for deploying a nuclear weapon.

## China

### XT 1NC 2: No China Tech Impact

#### China doesn’t hurt US tech leadership.

Economist ’18 [5-3-2018, “Fears that China has hurt innovation in the West are overblown,” https://www.economist.com/finance-and-economics/2018/05/03/fears-that-china-has-hurt-innovation-in-the-west-are-overblown]

POPULAR concern about free trade with China has focused on the loss of manufacturing jobs in America and Europe. Policymakers have an additional worry: that China’s rise is hurting innovation in the West. This fear is among the small set of issues that unites American Democrats and Republicans. In 2016 Barack Obama’s commerce secretary said that China’s state-driven economy would weaken the world’s innovation ecosystem. Donald Trump’s advisers allege that China makes it harder for foreign firms to invest in innovation by squeezing their returns. Mr Trump’s trade team was expected to raise this complaint, among others, with Chinese officials during talks in Beijing on May 3rd and 4th, as The Economist went to press. There is one problem. Data suggest that competition with China has coincided with more innovation in America, not less. The relationship between competition and innovation is complex, even before considering trade with China. Economists agree that the right competitive landscape fosters innovation. But they disagree about what exactly that landscape looks like. More competition might prod companies to try harder to develop new products in the hope of gaining market share. Alternatively, if competition is cut-throat, profits might evaporate to the point that companies have little incentive to take risks. The fear is that China generates the wrong kind of competition and stunts the good kind. Businesspeople elsewhere worry that when the Chinese government decides to fund this or that industry, investment soars and margins collapse. Overcapacity in steel was caused in part by Chinese investment in steel processing; semiconductor firms think their industry might be next. At the same time, argues Robert Lighthizer, the US Trade Representative, foreign companies that beat their Chinese competitors are not adequately rewarded because China presses them to transfer their intellectual property. The two main academic papers on this question looked at the years around China’s accession to the World Trade Organisation in 2001. Far from settling the matter, they were contradictory. Economists studying European companies found that competition from Chinese imports both caused firms to improve their technology and led to a shift in jobs to the most advanced firms. They concluded that 15% of the upgrading of technology in Europe between 2000 and 2007 could be attributed to the increase in imports from China. But economists examining the impact on America argued that, on the contrary, Chinese competition had led companies to spend less on research as profits fell. They calculated that imports from China explained 40% of a slowdown in American patenting between 1999 and 2007, compared with the preceding decade. The IMF has now weighed in with more recent figures. Its conclusion is rather more cheerful, at least for those who think a trade war with China is a rotten idea. In a report published in April the fund showed that, following an extended period of decline, high-quality patents granted to American companies had risen sharply between 2010 and 2014. It also pointed to a big increase in American spending on research and development during the same years—even as America’s trade deficit with China rocketed (see chart). The growth in patents was more sluggish in Europe and Japan. But both patents and research spending soared in South Korea, the country most directly exposed to manufacturing competition from China. A separate IMF working paper late last year unpicked some of what is happening in America. Competition from Chinese imports has caused research spending to be reallocated within certain industries, away from also-rans and towards the most productive and profitable firms. At the same time, many researchers left manufacturing industries and moved into service sectors such as data-processing and finance. Both results are consistent with an American economy that is playing to its strengths. The IMF’s analysts concluded that Chinese imports were not a threat to innovation in America, after all, and that policymakers could take a deep breath. No loud inhaling sounds have yet been reported from the White House.

#### Chinese tech isn’t special.

Jun ’18 [Zhang; dean of the School of Economics @ Fudan University and director of the China Center for Economic Studies, a Shanghai-based think tank., 8-3-2018, "The West exaggerates China's technological progress," Nikkei Asian Review, https://asia.nikkei.com/Opinion/The-West-exaggerates-China-s-technological-progress]

Over the past two decades, China has been achieving rapid technological progress, thanks in no small part to its massive investment in research and development, which totaled some 2.2% of its gross domestic product last year. Yet China is nowhere near the technological frontier. In fact, the distance separating it from that frontier is far greater than most people recognize. In the West, many economists and observers now portray China as a fierce competitor for global technological supremacy. They believe that the Chinese state's capacity is enabling the country, through top-down industrial policies, to stand virtually shoulder-to-shoulder with Europe and the U.S. Harvard economics professor and former U.S. Treasury Secretary Larry Summers, for example, declared last March at a Beijing conference that it is a "historical wonder" that China, where per capita income amounts to just 22% that of the United States, could have the world's cutting-edge technology and technological giants. The U.S. Trade Representative, in a March report, presented the "Made in China 2025" plan -- a 2015 blueprint for upgrading China's manufacturing capacity -- as proof that the country is seeking to displace the U.S. in high-tech industries that it considers strategic, such as robotics. Moreover, the USTR report asserts, China has happily played the game by its own rules, and has violated current global regulations to achieve its goals. Indeed, many Westerners warn that China is planning to use its technology-based power to impose an entirely new set of rules that is inconsistent with those long enforced by the West. This is a serious misrepresentation. While it is true that digital technologies are transforming China's economy, this reflects the implementation of mobile-Internet-enabled business models more than the development of cutting-edge technologies, and it affects consumption patterns more than, say, manufacturing. This kind of transformation is hardly unique to China, though it is occurring particularly rapidly here, thanks to a huge consumer market and weak financial regulation. Furthermore, it is not so obvious that these changes have anything to do with the government's industrial policies. On the contrary, the growth of China's internet economy has been driven largely by the entrepreneurship of privately owned companies like Alibaba and Tencent. In fact, Western observers -- not just the media, but also academics and government leaders, including U.S. President Donald Trump -- have fundamentally misunderstood the nature and exaggerated the role of China's policies

for developing strategic and high-tech industries. Contrary to popular belief, these policies do little more than help lower the entry cost for firms and enhance competition. In fact, such policies encourage excessive entry, and the resulting competition and lack of protection for existing firms have been constantly criticized in China. Therefore, to the extent that China relies on effective industrial policies, they do not create much unfairness in terms of global rules. Having said that, what are China's actual technological prospects? The Chinese are certainly fast learners. Over the last 30 years, Chinese manufacturers have proved adept at seizing opportunities to emulate, adapt and diffuse new technologies. But technological advances in the Chinese business sector occur at the middle of the smile curve (where gains are generally lower than at the innovative start of a new product or at the end, in marketing finished goods to consumers). Foreign core-technology owners extract most of the added value from Chinese manufacturing. For example, in Danyang, a county of Jiangsu Province that is a production hub of optical lenses for global markets, manufacturers can produce the most sophisticated models. Yet they lack the core software to produce, say, progressive lenses, so they must pay a fixed royalty to a U.S. company for each progressive lens they make. Likewise, China's automobile manufacturers still import their assembly lines from developed countries. Clearly, there is a big difference between applying digital technologies to consumer-oriented business models and becoming a world leader in developing and producing hard technology. The latter goal will demand sustained investment of time, human capital, and financial resources in sectors with long basic R&D cycles (such as pharmaceuticals). Given this, China probably remains 15-20 years away from matching the R&D input of, say, Japan or South Korea, and when it comes to output -- the more important factor -- it is much further behind. While China can accelerate progress by attracting creative talent and strengthening incentives for long-term research, there are no real shortcuts when it comes to achieving the gradual shift from learning to innovating.

# 1NR Round 5

## Biz Con

### 1NR – O/V

#### Turns case – it cascades across global systems.

Maavak 21 – Mathew Maavak, PhD in Risk Foresight from the Universiti Teknologi Malaysia, External Researcher (PLATBIDAFO) at the Kazimieras Simonavicius University, Expert and Regular Commentator on Risk-Related Geostrategic Issues at the Russian International Affairs Council, “Horizon 2030: Will Emerging Risks Unravel Our Global Systems?”, Salus Journal – The Australian Journal for Law Enforcement, Security and Intelligence Professionals, Volume 9, Number 1, p. 2-8

Various scholars and institutions regard global social instability as the greatest threat facing this decade. The catalyst has been postulated to be a Second Great Depression which, in turn, will have profound implications for global security and national integrity. This paper, written from a broad systems perspective, illustrates how emerging risks are getting more complex and intertwined; blurring boundaries between the economic, environmental, geopolitical, societal and technological taxonomy used by the World Economic Forum for its annual global risk forecasts. Tight couplings in our global systems have also enabled risks accrued in one area to snowball into a full-blown crisis elsewhere. The COVID-19 pandemic and its socioeconomic fallouts exemplify this systemic chain-reaction. Onceinexorable forces of globalization are rupturing as the current global system can no longer be sustained due to poor governance and runaway wealth fractionation. The coronavirus pandemic is also enabling Big Tech to expropriate the levers of governments and mass communications worldwide. This paper concludes by highlighting how this development poses a dilemma for security professionals.

Key Words: Global Systems, Emergence, VUCA, COVID-9, Social Instability, Big Tech, Great Reset

INTRODUCTION

The new decade is witnessing rising volatility across global systems. Pick any random “system” today and chart out its trajectory: Are our education systems becoming more robust and affordable? What about food security? Are our healthcare systems improving? Are our pension systems sound? Wherever one looks, there are dark clouds gathering on a global horizon marked by volatility, uncertainty, complexity and ambiguity (VUCA).

But what exactly is a global system? Our planet itself is an autonomous and selfsustaining mega-system, marked by periodic cycles and elemental vagaries. Human activities within however are not system isolates as our banking, utility, farming, healthcare and retail sectors etc. are increasingly entwined. Risks accrued in one system may cascade into an unforeseen crisis within and/or without (Choo, Smith & McCusker, 2007). Scholars call this phenomenon “emergence”; one where the behaviour of intersecting systems is determined by complex and largely invisible interactions at the substratum (Goldstein, 1999; Holland, 1998).

The ongoing COVID-19 pandemic is a case in point. While experts remain divided over the source and morphology of the virus, the contagion has ramified into a global health crisis and supply chain nightmare. It is also tilting the geopolitical balance. China is the largest exporter of intermediate products, and had generated nearly 20% of global imports in 2015 alone (Cousin, 2020). The pharmaceutical sector is particularly vulnerable. Nearly “85% of medicines in the U.S. strategic national stockpile” sources components from China (Owens, 2020).

An initial run on respiratory masks has now been eclipsed by rowdy queues at supermarkets and the bankruptcy of small businesses. The entire global population – save for major pockets such as Sweden, Belarus, Taiwan and Japan – have been subjected to cyclical lockdowns and quarantines. Never before in history have humans faced such a systemic, borderless calamity.

COVID-19 represents a classic emergent crisis that necessitates real-time response and adaptivity in a real-time world, particularly since the global Just-in-Time (JIT) production and delivery system serves as both an enabler and vector for transboundary risks. From a systems thinking perspective, emerging risk management should therefore address a whole spectrum of activity across the economic, environmental, geopolitical, societal and technological (EEGST) taxonomy. Every emerging threat can be slotted into this taxonomy – a reason why it is used by the World Economic Forum (WEF) for its annual global risk exercises (Maavak, 2019a). As traditional forces of globalization unravel, security professionals should take cognizance of emerging threats through a systems thinking approach.

METHODOLOGY

An EEGST sectional breakdown was adopted to illustrate a sampling of extreme risks facing the world for the 2020-2030 decade. The transcendental quality of emerging risks, as outlined on Figure 1, below, was primarily informed by the following pillars of systems thinking (Rickards, 2020):

• Diminishing diversity (or increasing homogeneity) of actors in the global system (Boli & Thomas, 1997; Meyer, 2000; Young et al, 2006);

• Interconnections in the global system (Homer-Dixon et al, 2015; Lee & Preston, 2012);

• Interactions of actors, events and components in the global system (Buldyrev et al, 2010; Bashan et al, 2013; Homer-Dixon et al, 2015); and

• Adaptive qualities in particular systems (Bodin & Norberg, 2005; Scheffer et al, 2012) Since scholastic material on this topic remains somewhat inchoate, this paper buttresses many of its contentions through secondary (i.e. news/institutional) sources.

ECONOMY

According to Professor Stanislaw Drozdz (2018) of the Polish Academy of Sciences, “a global financial crash of a previously unprecedented scale is highly probable” by the mid- 2020s. This will lead to a trickle-down meltdown, impacting all areas of human activity.

The economist John Mauldin (2018) similarly warns that the “2020s might be the worst decade in US history” and may lead to a Second Great Depression. Other forecasts are equally alarming. According to the International Institute of Finance, global debt may have surpassed $255 trillion by 2020 (IIF, 2019). Yet another study revealed that global debts and liabilities amounted to a staggering $2.5 quadrillion (Ausman, 2018). The reader should note that these figures were tabulated before the COVID-19 outbreak.

The IMF singles out widening income inequality as the trigger for the next Great Depression (Georgieva, 2020). The wealthiest 1% now own more than twice as much wealth as 6.9 billion people (Coffey et al, 2020) and this chasm is widening with each passing month. COVID-19 had, in fact, boosted global billionaire wealth to an unprecedented $10.2 trillion by July 2020 (UBS-PWC, 2020). Global GDP, worth $88 trillion in 2019, may have contracted by 5.2% in 2020 (World Bank, 2020).

As the Greek historian Plutarch warned in the 1st century AD: “An imbalance between rich and poor is the oldest and most fatal ailment of all republics” (Mauldin, 2014). The stability of a society, as Aristotle argued even earlier, depends on a robust middle element or middle class. At the rate the global middle class is facing catastrophic debt and unemployment levels, widespread social disaffection may morph into outright anarchy (Maavak, 2012; DCDC, 2007).

Economic stressors, in transcendent VUCA fashion, may also induce radical geopolitical realignments. Bullions now carry more weight than NATO’s security guarantees in Eastern Europe. After Poland repatriated 100 tons of gold from the Bank of England in 2019, Slovakia, Serbia and Hungary quickly followed suit.

According to former Slovak Premier Robert Fico, this erosion in regional trust was based on historical precedents – in particular the 1938 Munich Agreement which ceded Czechoslovakia’s Sudetenland to Nazi Germany. As Fico reiterated (Dudik & Tomek, 2019):

“You can hardly trust even the closest allies after the Munich Agreement… I guarantee that if something happens, we won’t see a single gram of this (offshore-held) gold. Let’s do it (repatriation) as quickly as possible.” (Parenthesis added by author).

President Aleksandar Vucic of Serbia (a non-NATO nation) justified his central bank’s gold-repatriation program by hinting at economic headwinds ahead: “We see in which direction the crisis in the world is moving” (Dudik & Tomek, 2019). Indeed, with two global Titanics – the United States and China – set on a collision course with a quadrillions-denominated iceberg in the middle, and a viral outbreak on its tip, the seismic ripples will be felt far, wide and for a considerable period.

A reality check is nonetheless needed here: Can additional bullions realistically circumvallate the economies of 80 million plus peoples in these Eastern European nations, worth a collective $1.8 trillion by purchasing power parity? Gold however is a potent psychological symbol as it represents national sovereignty and economic reassurance in a potentially hyperinflationary world. The portents are clear: The current global economic system will be weakened by rising nationalism and autarkic demands. Much uncertainty remains ahead. Mauldin (2018) proposes the introduction of Old Testament-style debt jubilees to facilitate gradual national recoveries. The World Economic Forum, on the other hand, has long proposed a “Great Reset” by 2030; a socialist utopia where “you’ll own nothing and you’ll be happy” (WEF, 2016).

In the final analysis, COVID-19 is not the root cause of the current global economic turmoil; it is merely an accelerant to a burning house of cards that was left smouldering since the 2008 Great Recession (Maavak, 2020a). We also see how the four main pillars of systems thinking (diversity, interconnectivity, interactivity and “adaptivity”) form the mise en scene in a VUCA decade.

ENVIRONMENTAL

What happens to the environment when our economies implode? Think of a debt-laden workforce at sensitive nuclear and chemical plants, along with a concomitant surge in industrial accidents? Economic stressors, workforce demoralization and rampant profiteering – rather than manmade climate change – arguably pose the biggest threats to the environment. In a WEF report, Buehler et al (2017) made the following pre-COVID-19 observation:

The ILO estimates that the annual cost to the global economy from accidents and work-related diseases alone is a staggering $3 trillion. Moreover, a recent report suggests the world’s 3.2 billion workers are increasingly unwell, with the vast majority facing significant economic insecurity: 77% work in part-time, temporary, “vulnerable” or unpaid jobs.

Shouldn’t this phenomenon be better categorized as a societal or economic risk rather than an environmental one? In line with the systems thinking approach, however, global risks can no longer be boxed into a taxonomical silo. Frazzled workforces may precipitate another Bhopal (1984), Chernobyl (1986), Deepwater Horizon (2010) or Flint water crisis (2014). These disasters were notably not the result of manmade climate change. Neither was the Fukushima nuclear disaster (2011) nor the Indian Ocean tsunami (2004). Indeed, the combustion of a long-overlooked cargo of 2,750 tonnes of ammonium nitrate had nearly levelled the city of Beirut, Lebanon, on Aug 4 2020. The explosion left 204 dead; 7,500 injured; US$15 billion in property damages; and an estimated 300,000 people homeless (Urbina, 2020). The environmental costs have yet to be adequately tabulated.

Environmental disasters are more attributable to Black Swan events, systems breakdowns and corporate greed rather than to mundane human activity.

Our JIT world aggravates the cascading potential of risks (Korowicz, 2012). Production and delivery delays, caused by the COVID-19 outbreak, will eventually require industrial overcompensation. This will further stress senior executives, workers, machines and a variety of computerized systems. The trickle-down effects will likely include substandard products, contaminated food and a general lowering in health and safety standards (Maavak, 2019a). Unpaid or demoralized sanitation workers may also resort to indiscriminate waste dumping. Many cities across the United States (and elsewhere in the world) are no longer recycling wastes due to prohibitive costs in the global corona-economy (Liacko, 2021).

Even in good times, strict protocols on waste disposals were routinely ignored. While Sweden championed the global climate change narrative, its clothing flagship H&M was busy covering up toxic effluences disgorged by vendors along the Citarum River in Java, Indonesia. As a result, countless children among 14 million Indonesians straddling the “world’s most polluted river” began to suffer from dermatitis, intestinal problems, developmental disorders, renal failure, chronic bronchitis and cancer (DW, 2020). It is also in cauldrons like the Citarum River where pathogens may mutate with emergent ramifications.

On an equally alarming note, depressed economic conditions have traditionally provided a waste disposal boon for organized crime elements. Throughout 1980s, the Calabriabased ‘Ndrangheta mafia – in collusion with governments in Europe and North America – began to dump radioactive wastes along the coast of Somalia. Reeling from pollution and revenue loss, Somali fisherman eventually resorted to mass piracy (Knaup, 2008).

The coast of Somalia is now a maritime hotspot, and exemplifies an entwined form of economic-environmental-geopolitical-societal emergence. In a VUCA world, indiscriminate waste dumping can unexpectedly morph into a Black Hawk Down incident. The laws of unintended consequences are governed by actors, interconnections, interactions and adaptations in a system under study – as outlined in the methodology section.

Environmentally-devastating industrial sabotages – whether by disgruntled workers, industrial competitors, ideological maniacs or terrorist groups – cannot be discounted in a VUCA world. Immiserated societies, in stark defiance of climate change diktats, may resort to dirty coal plants and wood stoves for survival. Interlinked ecosystems, particularly water resources, may be hijacked by nationalist sentiments. The environmental fallouts of critical infrastructure (CI) breakdowns loom like a Sword of Damocles over this decade.

GEOPOLITICAL

The primary catalyst behind WWII was the Great Depression. Since history often repeats itself, expect familiar bogeymen to reappear in societies roiling with impoverishment and ideological clefts. Anti-Semitism – a societal risk on its own – may reach alarming proportions in the West (Reuters, 2019), possibly forcing Israel to undertake reprisal operations inside allied nations. If that happens, how will affected nations react? Will security resources be reallocated to protect certain minorities (or the Top 1%) while larger segments of society are exposed to restive forces? Balloon effects like these present a classic VUCA problematic.

Contemporary geopolitical risks include a possible Iran-Israel war; US-China military confrontation over Taiwan or the South China Sea; North Korean proliferation of nuclear and missile technologies; an India-Pakistan nuclear war; an Iranian closure of the Straits of Hormuz; fundamentalist-driven implosion in the Islamic world; or a nuclear confrontation between NATO and Russia. Fears that the Jan 3 2020 assassination of Iranian Maj. Gen. Qasem Soleimani might lead to WWIII were grossly overblown. From a systems perspective, the killing of Soleimani did not fundamentally change the actor-interconnection-interaction adaptivity equation in the Middle East. Soleimani was simply a cog who got replaced.

#### Turns leadership – destroys alliances.

Ronald O'Rourke, Specialist in Naval Affairs, and Kathleen J. McInnis, Specialist in International Security, 12-30-20, “COVID-19: Potential Implications for International Security Environment— Overview of Issues and Further Reading for Congress” https://www.everycrsreport.com/files/2020-12-30\_R46336\_68ae591edfaede65543751d6a841cc97e9761ef8.pdf

World Economy, Globalization, and U.S. Trade Policy

Some observers have focused on the possibility that the COVID-19 pandemic could lead to significant and potentially long-lasting changes to the world economy that in turn could reshape the international security environment. Among other things, observers have focused on the possibility that the COVID-19 situation could be leading the world economy into a significant recession—an effect that could contribute to the societal tensions mentioned in the previous point. Noting that the COVID-19 pandemic has reduced world trade volumes and disrupted global supply chains, they have focused on the question of whether economic globalization will as a result be slowed, halted, or reversed. Observers are monitoring how such effects could influence or be influenced by U.S. trade policy.

Allied Defense Spending and U.S. Alliances

The so-called burden-sharing issue—that is, the question of whether U.S. allies are shouldering a sufficient share of the collective allied defense burden—has long been a point of contention between the United States and its allies around the globe, and it has been a matter of particular emphasis for the Trump Administration. Some observers have focused on the possibility that the costs that U.S. allies are incurring to support their economies during stay-at-home/lockdown periods will lead to offsetting reductions in their defense expenditures. Some observers argue that the NATO allies in Europe in particular may experience contractions in their defense budgets for this reason. More generally, some observers argue that if the COVID-19 pandemic causes a global recession, allied defense budgets could be further reduced—a potential impact that could affect not only NATO allies in Europe, but those in Asia as well.

### 1NR – AT: Thumpers

#### Court opposition and low resources prevent expanded antitrust enforcement now – the plan is the new bolt from the blue

Rivero 21 – Nicholas Rivero, tech reporter for Quartz, “Biden’s antitrust crusaders can’t crusade without Congress,” 3/11/21, https://qz.com/1982437/lina-khan-and-tim-wu-need-congress-to-push-their-antitrust-agenda/

US president Joe Biden is poised to promote two of the country’s most prominent anti-monopoly crusaders to top jobs in his administration. The moves signal that Biden is serious about cracking down on dominant companies that include Facebook, Google, Amazon, and Apple. But for the president’s trustbusting champions to make a real impact, they’ll need support from Congress.

Biden appointed Columbia law professor Tim Wu to the National Economic Council (NEC) as his top advisor on technology and competition on March 5. Politico reports that Biden will soon follow up by nominating Lina Khan, also a Columbia law professor, to the Federal Trade Commission (FTC). (Before she can take her seat as one of the antitrust agency’s five commissioners, Khan must be confirmed by the Senate.)

Khan and Wu are two of the leading voices in a new movement of legal thought that argues the US should fundamentally overhaul the way it approaches antitrust. The crux of their argument is that courts should broaden the values they consider when deciding whether to block a merger or break up a dominant company. Rather than focus narrowly on the impact a company has on consumer prices, they argue that judges should also think about a company’s impact on small businesses, labor rights, and the health of democracy.

Khan and Wu have already secured a win for their cause just by being appointed—essentially a White House stamp of approval on their viewpoints. But despite much handwringing from industry groups, neither appointee will be able to single-handedly remake American antitrust in their image.

How the FTC can tackle antitrust

To be sure, Wu can advocate loudly for his preferred policies from his perch at the NEC, which advises the president on economic policy. And if Khan makes it to the FTC, which is the top US antitrust enforcement agency, she’ll have direct influence over which investigations the agency prioritizes, which lawsuits it brings, and whether its prosecutors will ask judges to impose fines, break up dominant firms, or require them to change their business practices.

But there are clear limits to their power. The most the FTC can do is bring more antitrust cases that ask courts for more aggressive remedies, like breakups. That would allow the agency to make a point about what it considers acceptable business behavior. But many of those lawsuits would be bound to lose in front of judges who have grown far more skeptical of antitrust cases over the past four decades and far more conservative over the past four years.

A larger caseload would also require Congress to approve more funding for the cash-strapped agency, which is already struggling to pay for its current docket. “The agencies have been asked on many occasions to do a lot with relatively little…but it’s not for free,” says former FTC chair and George Washington University law professor Bill Kovacic. If the FTC wants to pursue more large cases without a bigger budget, “they’ll have to make choices, and those choices will involve backing off of other areas of enforcement.”

The FTC could also decide to dust off its rarely used rule-making power and declare certain anticompetitive business practices illegal. But any new rule would almost certainly trigger legal challenges, which would spark a long, expensive court battle in front of judges who aren’t likely to be sympathetic. Kovacic estimates the process could take four or five years—and in the end, judges might just strike the rule down.

How Congress can tackle antitrust

The best hope for stricter antitrust enforcement lies in Congress. Lawmakers could pass bills, like one recently proposed by Minnesota senator Amy Klobuchar, that would make it easier for enforcement agencies to challenge mergers and acquisitions. They could even go a step further and draft an updated set of antitrust laws, perhaps following the blueprint laid out in last year’s antitrust report from the House of Representatives (which was co-authored by Khan). Armed with new laws clearly banning specific behaviors, prosecutors at the Department of Justice and the FTC would stand a better chance winning cases against well-funded adversaries like Facebook and Google.

Those steps wouldn’t hinge on heroics from antitrust hardliners like Khan and Wu. Instead, their success would depend on the whims of Senate centrists like West Virginia’s Joe Manchin, who has lately been flexing his power to derail the chamber’s democratic majority in opposition to left-wing priorities like a $15 minimum wage.

#### That provides uniqueness for our business perception arguments – losses in court increase business confidence and make the FTC look weak

McLaughlin 21 – David McLaughlin, economics and antitrust reporter for Bloomberg, “Antitrust Crusader Lina Khan Faces a Big Obstacle: The Courts,” 6/23/21, https://www.bloomberg.com/news/articles/2021-06-23/tech-antitrust-lina-khan-faces-courts-as-challenge-to-ftc-s-progressive-agenda?sref=iKB6XOvf

Instead, hours after the Senate confirmed her, Biden put the 32-year-old Khan—one of the most prominent antagonists of big business—in charge of the agency, where she’ll be responsible for challenging mergers and taking on companies when they use their market muscle to snuff out competition.

Now comes the hard part: putting her agenda into action. The biggest hurdle, say antitrust experts, is a judiciary that has made it very difficult for competition watchdogs to win ambitious cases. And to make any change of consequence, whether breaking up a monopoly or stopping a takeover, enforcers must prevail in court.

“None of that is easy, and it’s particularly not easy when courts are very conservative, as they are today,” says Stephen Calkins, a law professor at Wayne State University and a former general counsel at the FTC. “She’s certainly talked about breaking up companies but, my golly, that’s incredibly hard to do.”

Khan made her mark in 2017, with a law review article she wrote while still a student at Yale Law School. Titled “Amazon’s Antitrust Paradox,” it traced how the online retailer came to control key infrastructure of the digital economy and how traditional antitrust analysis fails to consider the danger to competition the company poses. The paper was widely talked about in antitrust circles and was read by senior enforcement officials.

U.S. tech titans are at the center of the antitrust debate in Washington. They are ever more powerful, with Apple Inc., Amazon.com Inc., Alphabet Inc., and Facebook Inc. among the top 10 largest companies in the world, by market value. A House of Representatives investigation last year accused the companies of abusing their dominance to thwart competition, and lawmakers are considering a raft of bills to impose new rules on how the companies operate. Federal antitrust enforcers and state attorneys general have sued Google and Facebook for what authorities say are monopoly abuses.

Khan, who was counsel to the House antitrust committee during its probe, was one of the main authors of the House report. It recommended a series of reforms to antitrust laws that she and anti-monopoly activists have long championed, like restricting which markets the companies can operate in and requiring them to treat other businesses on their platforms fairly and without favoritism.

Khan’s work helped revolutionize competition-policy debates and shift support for a more forceful approach that abandoned the playbook inspired decades ago by Robert Bork, the conservative legal scholar and judge. That framework came to be known as the consumer welfare standard and relies on price effects as the measure of competitive harm. Khan argued in her paper for a new approach, focused on the competitive process and the structure of markets, that she said would more fully capture harms that the consumer welfare standard misses.

Once considered on the fringes of antitrust thinking, Khan and her acolytes—often dubbed the New Brandeis School, after Supreme Court Justice Louis Brandeis—are now firmly mainstream with Khan’s appointment as FTC chairwoman.

The FTC has suffered some stinging defeats recently. Last year, the agency lost a major monopoly case filed against chipmaker Qualcomm. In April, a unanimous Supreme Court eliminated a tool used by the FTC to recover money for defrauded consumers. Later this month, a federal judge in Washington is expected to rule on whether the agency’s monopoly lawsuit against Facebook can proceed.

Still, there’s widespread agreement that the status quo is no longer tenable. Over the last two decades, concentration has risen in industries across the economy. Some economists say dominant companies can use their market power to suppress wages, for example, exacerbating inequality. The worries are bipartisan. Republicans and Democrats alike are pushing for antitrust reforms to rein in the biggest tech platforms, and Khan was confirmed by the Senate with significant Republican support.

Big losses in the courts would eventually hurt Khan’s authority and demoralize her staff, says William Kovacic, a former FTC chairman who now teaches at George Washington University Law School. “You become like a sports team that is known to its opponents as unable to win,” he says. But defeats also could provide the foundation for the kind of sweeping antitrust legislation that Khan and her supporters want.

“If you want to change the world, at some point it goes to the courts or it goes to the legislature,” Kovacic says. “But you can’t do it by yourself.”

#### Limited FTC resources prevent large antitrust actions now

Chakravorti 21 – Bhaskar Chakravorti, dean of global business at Tufts University’s Fletcher School of Law and Diplomacy, “Lina Khan Has Her Own Antitrust Paradox,” 9/7/21, https://foreignpolicy.com/2021/07/07/ftc-lina-khan-regulate-tech-congress/

Since Khan has written forcefully about revisiting antitrust standards, it is natural to expect this case would be her chance to rewrite not only the charge against Facebook but to change those standards more broadly. There is little doubt this is where her mind is. The FTC under her leadership voted to revoke a 2015 policy statement that limited the agency’s reach, giving it room to frame cases beyond the two foundational boundaries of antitrust in the United States: the Sherman Antitrust Act and the Clayton Antitrust Act.

But the FTC’s levers are limited.

Although Khan can reframe the fundamentals of the antitrust complaint, without adequate regulatory infrastructure—something only Congress can provide—there are likely to be unsurmountable obstacles as the chess game between the law and Facebook unfolds. No matter how brilliantly Khan’s FTC rewrites the case against Facebook, the agency’s powers, budget, and resources are still limited. Ad hoc adjustments to the FTC’s budget, as envisioned in one of the bills in Congress, and stopgap measures to expand its powers do not get around the fundamental fact that the FTC was not set up to pursue the breadth of novel issues and policy trade-offs that digital industries create.

Antitrust in digital industries cannot be considered in isolation. It is also quite different from antitrust in other industries because there are issues unique to the industry. A holistic view of digital antitrust means tying antitrust concerns with numerous broader questions, such as securing users’ data rights, the responsibilities platforms ought to have for the content they host, and criteria that helps demarcate the benefits of network effects from the abuses of network power. The FTC is too much of a general purpose entity to dive into these complexities. As former Federal Communications Commission chair Tom Wheeler observed: “The vast scope of the FTC’s present responsibilities—as diverse as funeral director practices, robocalls, and labeling hockey pucks—means that the oversight of digital platform regulation must compete with the agency’s existing diverse responsibilities and limited resources.”

#### No major antitrust actions coming now – it’s all tinkering around the edges

Wright 21 – Joshua D. Wright, Executive Director of the Global Antitrust Institute at the Antonin Scalia Law School, former commissioner of the U.S. Federal Trade Commission from 2013 to 2015, interviewed by James Pethokoukis, senior fellow at AEI, “Will US antitrust law break up Big Tech? My long-read Q&A with Joshua D. Wright,” 2/9/21, <https://www.aei.org/economics/will-us-antitrust-law-break-up-big-tech-my-long-read-qa-with-joshua-d-wright/>

[Italics denote questions from Pethokoukis]

*Do you think that, if we have this conversation in four years, we will have seen any major action against any of the largest technology companies that involves them selling off a significant business?*

That’s a great question. I bet the under, and here’s why. The US antitrust doctrine is what it is right now, and we still have meaningful judicial review. And on the left and the right, you see all of the attention paid to legislative change — they’re not going to win in the court. The DOJ will bring its case against Google, the FTC has a Facebook case where they might be able to convince a court to spin off WhatsApp or Instagram. I’m skeptical that those are good cases, but neither of them are the big-breakup, affect-the-business-model case that proponents of a new antitrust are looking for. For what it’s worth, my money is that the government loses both of those cases, but those cases exist. But overall, I think that the hope for the antitrust reformers lies, not in the courts, but in Congress.

Maybe I’ve been in DC too long, but I always bet the under if someone tells me that the revolution is coming from Congress. I don’t think we’re going to see legislation that undoes the consumer welfare standard. I do think that you’ll see some antitrust legislation. You’ll get bigger budgets for the agencies, and maybe you’ll get tinkering around the margins with the presumption here or presumption there. But I don’t think that you’re going to see a regulatory antitrust revolution via Congress.

I think it’s going to have to be done through the courts, and I’m skeptical. My silver lining of hope when watching some of these discussions happen is that you’ve got to win in the Article III courts, and that means you’ve got to have proof, not just political grievances. I don’t think they’ve got that.

#### Any new antitrust will be tiny tweaks rather than the aff’s substantial change

Hirsh 21 – Michael Hirsh, senior correspondent at Foreign Policy, “Big Talk on Big Tech—but Little Action,” 4/6/21, https://foreignpolicy.com/2021/04/06/big-tech-regulation-facebook-google-amazon-us-eu/

Problem is, that’s just about where the consensus ends. And even if you add more lawyers, antitrust cases move glacially, and federal judges are extremely cautious about punishing behavior deemed anti-competitive, especially in an era when antitrust experts disagree vehemently about remedies. Plus, now every case faces the prospect of being squelched by a very conservative Supreme Court.

Despite the documented actions of Facebook and other companies in crushing would-be competitors, there is also good reason for judicial caution. Consider the irony that Microsoft—itself the target of a major antitrust action a quarter century ago—now considers itself the aggrieved party in the recent Department of Justice case against Google, since it is trying to raise the profile of its Bing search engine, which has a meager 2.5 percent of the market. Or that Facebook’s own dominance may someday fall victim—without any help from government at all—to new blockchain technology that could allow users to run their own web services and applications. (Ironically, among the key innovators pushing for that are Zuckerberg’s old antagonists from Harvard University, Tyler and Cameron Winklevoss, who famously claimed that he stole the social network idea from them.) Even today, many antitrust experts say it’s probably a judicial and legislative bridge too far for the government to try to proactively promote competition in the tech world; let the markets take care of that instead.

But so changed is the political environment that U.S. President Joe Biden and some of his top regulators, such as Lina Khan, a Yale Law School wunderkind who was recently nominated to the FTC, might seek to break up the big tech firms. Biden, on the campaign trail, said that breaking up tech quasi-monopolies such as Facebook is “something we should take a really hard look at.”

That is almost certainly not going to happen: The political will simply isn’t there, even among many Democratic legislators influenced by Khan and other progressive thinkers.

“I don’t think Biden has the stomach for that,” said Herbert Hovenkamp, an antitrust expert at the University of Pennsylvania. The reason is simple: Today’s monopolistic abuses are quite unlike the monopoly power of old, when big cartels like John D. Rockefeller’s Standard Oil inflicted predatory high prices on consumers and political will was high to “bust trusts.” On the contrary: Most consumers love the fact that they can buy all kinds of inexpensive stuff on Amazon and have it delivered the next day, and that Facebook doesn’t charge them a cent, even as it makes a mint selling their private information to advertisers and market manipulators.

“The Democrats need to be cautious here,” Hovenkamp said. “Consumers are their constituency. And these companies are among the biggest producers of growth in the U.S. Biden certainly doesn’t want to ruin that.” Instead, the administration may well decide to focus more on smaller fish in other industries, as the FTC did last week by challenging Illumina’s $7 billion purchase of cancer test developer Grail. In a sign of how aggressive the FTC might be under Biden, it was the first time in decades that the commission sought to block a so-called vertical merger, alleging that ownership of Grail would incentivize Illumina, a gene-sequencing company, to raise costs on Grail’s competitors.

Indeed, though the United States and the European Union agree that new solutions are needed to curtail the dominance of Big Tech, the approaches remain very different. For years, the EU has led the way in filing antitrust cases, but late last year it did an about-face—deciding on a regulatory rather than lawsuit-based approach. After Brussels released a draft of its Digital Markets Act, EU competition minister Margrethe Vestager tweeted that the new rules would establish “do’s & don’t to gatekeepers” of our digital world. If passed, the act could levy stiffer penalties than ever before, including a demand for a percentage of earnings.

On the other side of the Atlantic, the FTC is also mulling ways to amp up its regulatory power. Khan and other progressives advocate rules that prevent a tech platform from favoring its own products in search results or pressing its own technologies on users, as Google allegedly does with Android, a mobile operating system. Violation of such rules could subject companies to substantial fines. According to a report last fall by Democratic members of the House Subcommittee on Antitrust—and partially written by Khan—Google has used “a series of anti-competitive contracts” that pushed Google search for users of Android phones.

Yet in many areas huge disagreement remains about how to contain Big Tech. Republicans and Democrats both want to do so, for different reasons; the former believe that Silicon Valley is biased against the right politically, while the latter tend to worry about anti-competitive behavior. Klobuchar has sponsored a monster bill, the Competition and Antitrust Law Enforcement Reform Act, which is intended not only to give federal enforcers more resources but also to strengthen prohibitions on anti-competitive conduct and mergers, among other reforms. As yet, however, she has no Republican co-sponsors, and Democrats in the House are leery of going the same route with a sprawling omnibus bill, according to a legislative aide with knowledge of the process. “If you have a big bill it creates a honey pot” for opponents, he said, noting that Big Tech’s pockets are much deeper than those of their antitrust counterparts. House leaders will instead try to introduce a slew of specifically targeted separate bills.

#### Congress and the courts prevent Biden’s XO from accomplishing anything

McGinnis 21 – John O. McGinnis, George C. Dix Professor in Constitutional Law at Northwestern University, “Abandoning the Consumer Welfare Standard,” 8/26/21, https://lawliberty.org/abandoning-the-consumer-welfare-standard/

The Executive Order, however ill-conceived the specifics are, will do the most damage if it changes antitrust law fundamentally. And here the Biden administration happily faces problems. We have had forty years of bipartisan competition policy focused generally on consumer welfare. The President does not have a political eraser to wipe that away.

One possibility is for the Biden administration to persuade Congress to enact major changes in antitrust law. The House Judiciary Committee has passed a few bills that would make is harder for tech companies to merge with other companies. But these measures are not yet going anywhere on the House floor, and it will be difficult, if not impossible, to get any substantial changes in antitrust law through the evenly divided Senate.

Thus, the administration has pinned its strategy on transformation through administrative fiat. To that end, it appointed Lina Khan, a 32-year-old associate law professor to become Chairman of the FTC. Khan may be the single most radical appointment in the Biden administration. She opposed Amazon’s acquisition of Whole Foods, although Amazon and Whole Foods together constitute a very small part of the grocery market, and no other company in the history of the United States has been more innovative than Amazon.

Khan has begun by voting along with her Democratic colleagues on the commission to revoke a policy of the FTC supported by both Democratic and Republican administrations that essentially defined “unfair method of competition” by reference to methods that undermined consumer welfare. The idea no doubt is to write a regulation that would provide a more open-ended approach, perhaps taking into account other values like democracy and decentralization, even if these are at the expense of consumer welfare.

But it is not at all clear Khan can succeed. On such a central question as the definition of competition, courts may not give her agency much deference now that the Roberts Court appears to have stopped applying Chevron—the quintessential modern case for agency deference—to major questions raised by a statute. The meaning of competition is obviously the major question for competition law, and courts are likely to determine that for themselves, influenced by decades of their own consumer welfare jurisprudence.

Beyond that technical obstacle, Khan may be a poor choice for overhauling antitrust law because of her lack of practical experience in litigation or administration. She has already alienated her agency staff by refusing to let them speak at professional panels, as they have for years. That is a rookie mistake. Moreover, she has been so strident in her attacks as an activist against companies like Google and Amazon that the courts are likely to look at her enforcement actions with suspicion, even if the companies do not get her recused for her past opinions.

Even if the Biden administration is unlikely to succeed in the near term in transforming antitrust, it has put on the table a new vision, however amorphous, that may well influence the approach of Democratic administrations and legislators for years to come. We are moving from an era of bipartisan consensus around a constrained and economically focused antitrust law to an era of fundamental partisan disagreement. In that sense, antitrust law will become—like many other areas of our law—a reflection of polarization and a source of instability. But here the folly and instability will make us poorer.

### 1NR – AT: Biz Con Low Now

#### No supply chain shocks.

Barnes 9/29 – Mitchell Barnes, research analyst for the Hamilton Project, part of the Brookings Institution, “11 facts on the economic recovery from the COVID-19 pandemic,” 9/29/21, https://www.brookings.edu/research/11-facts-on-the-economic-recovery-from-the-covid-19-pandemic/

Overall, the pandemic continues to weigh on aggregate demand for goods and services. In addition, bottlenecks and supply shortages have created challenges for businesses to meet consumer demand for some products, particularly as consumer demand has shifted wildly. Also, the pace of hiring has not kept up with the pace of labor demand, as job matching has been held back by a number of factors described below.

Those developments have led to a notable increase in inflation. Because prices fell in 2020, one-year changes from August 2020 to August 2021 overstate the increase in inflation since the pandemic began. Instead, focusing on the annualized rate of inflation since February 2020 shows that inflation through August 2021 (as measured by the core consumer price index) was 3.1 percent, substantially lower than the one-year trend but still higher than any annual increase since the early 1990s.

There are two primary reasons why the rise in inflation is unlikely to persist. First, the significant shifts in demand and bottlenecks are a function of the recent, temporary pace of economic activity. For example, demand for automobiles recovered quickly during the pandemic to high levels even as production was curtailed, in part due to disruptions in the supply chain for critical semiconductors. The result has been a sharp increase in prices for new and used vehicles. Second, as production is increased (with normalization of global supply chains) and growth in demand abates, inflation should slow overall.

#### Growth is strong – most recent CBO projections

Barnes 9/29 – Mitchell Barnes, research analyst for the Hamilton Project, part of the Brookings Institution, “11 facts on the economic recovery from the COVID-19 pandemic,” 9/29/21, https://www.brookings.edu/research/11-facts-on-the-economic-recovery-from-the-covid-19-pandemic/

With the ongoing effects of fiscal support, pent-up demand from consumers for face-to-face services, and the strength in labor markets and asset prices, economic growth is poised to be strong for the remainder of 2021. Indeed, the Congressional Budget Office (CBO) projects that real GDP will grow 7.4 percent from the fourth quarter of 2020 to the fourth quarter of 2021 (CBO 2021c). Moreover, CBO predicts that, by the middle of 2022, real GDP will exceed its sustainable level by 2.5 percent. The sustainable level of GDP, also known as potential output, is not a ceiling. Instead, it is the estimated level of output, given current laws and underlying structural factors, that the economy can achieve without putting upward pressure on inflation. As the factors boosting growth in the short term begin to wane, real GDP growth is expected to slow significantly.

CBO’s projection is subject to a great deal of uncertainty. In particular, the resurgence in the pandemic stemming from the Delta variant, vaccine hesitancy, and the slowness in vaccinating children ages 12 and younger appear to have dampened the growth of consumer demand and employment. Recent data suggest that the latest COVID-19 wave might be waning. However, if the Delta variant—or others that take its place—continue to affect consumer behavior and supply chains, the economic recovery will be notably slower.

#### Economic growth is stable but new shocks could derail the recovery

Irwin 9/27 – Neil Irwin, economics correspondent for the New York Times, “The Economy Looks Solid. But These Are the Big Risks Ahead.” 9/27/21, https://www.nytimes.com/2021/09/27/upshot/economy-risk-analysis.html

The Organization for Economic Cooperation and Development last week projected that the world economy would grow 4.5 percent in 2022, downshifting from an expected 5.7 percent expansion in 2021. Its forecast for the United States shows an even steeper slowdown, from 6 percent growth this year to 3.9 percent next.

Of course, a year of 3.9 percent G.D.P. growth would be nothing to scoff at — that would be much faster growth than the United States has experienced for most of the 21st century. But it would represent a resetting of the economy.

“We’ve had liftoff, and now we’re at cruising altitude,” said Beth Ann Bovino, chief U.S. economist at S&P Global.

After the global financial crisis of 2008-9, the great challenge for the recovery was a shortfall of demand. Workers and productive capacity were abundant, but there was inadequate spending in the economy to put that capacity to work. The post-reopening stage of this recovery is the opposite image.

Now there is plenty of demand — thanks to pent-up savings, trillions of dollars in federal stimulus dollars, and rapidly rising wages — but companies report struggles to find enough workers and raw materials to meet that demand.

Dozens of container ships are backed up at Southern California ports, waiting their turn to unload products meant to fill American store shelves through the holiday season. Automakers have had to idle plants for want of semiconductors. Builders have had a hard time obtaining windows, appliances and other key products needed to complete new homes. And restaurants have cut back hours for lack of kitchen help.

These strains are, in effect, acting as a brake that slows the expansion. The question is how much, and for how long, that brake will be applied.

“The kinds of growth rates we are seeing were a bounce-back from a really severe recession, so it’s no surprise that won’t continue,” said Jennifer McKeown, head of the global economics service at Capital Economics. “The risk is that this becomes less about a natural cooling and more about the supply shortages that we’re seeing really starting to bite. That may mean that economic activity doesn’t continue to grow as we’re expecting it to, as instead there is a stalling of activity and price pressures starting to rise.”

The problem is that the supply shortages have many causes, and it is not obvious when they will all diminish. Spending worldwide, and especially in the United States, shifted toward physical goods over services during the pandemic, more quickly than productive capacity could adjust. The Delta variant and continued spread of Covid has caused restrictions on production in some countries. And the lagged effects of production shutdowns in 2020 are still being felt.

Then there are the risks that lurk in the background — the kinds of things that aren’t widely forecast to be a source of economic distress, but could unspool in unpredictable ways.

#### The economy is stable and growing, but Delta makes it fragile

Bachman 9/16 – Daniel Bachman, senior manager with Deloitte Services LP, in charge of US economic forecasting for Deloitte’s Eminence and Strategy functions, “United States Economic Forecast: 3rd Quarter 2021,” 9/16/21, https://www2.deloitte.com/us/en/insights/economy/us-economic-forecast/united-states-outlook-analysis.html

The SARS-COV-2 virus surprised us once again. The economic impact, however, is likely to be much less dramatic than the initial phase of the pandemic.

Vaccines work against the Delta variant, but with an asterisk. Breakthrough infections (affecting vaccinated people) are possible. And the half of the US population that was unvaccinated in the middle of the summer has proven to be extremely vulnerable to the more highly transmissible Delta variant. Masks are back, and with them is, once again, some reluctance to participate in activities that might be thought “risky.”

By early August, indicators in pandemic-sensitive sectors such as restaurant reservations and air travel were trending down. Spending on consumer services is decelerating, and spending on goods is unlikely to replace it. But the economy isn’t shutting down like it did in March 2020. Sporting events are still taking place, religious services are happening, and while the number of air travelers may be falling, people haven’t stopped flying. In short, the Delta variant is not going to derail the economic recovery. But Delta definitely clouds the near-term outlook and serves as a reminder that our low-growth scenarios are a real possibility.

Meanwhile, economic fundamentals remain strong. Household and business balance sheets are still in good shape, and consumers are sitting on piles of savings. GDP is now above the prepandemic level, even though employment is 4.4% below the fourth-quarter average. That’s not good for the people still not working—but the strong growth in productivity (output per worker) is a positive sign. And continued government action in the form of the bipartisan infrastructure agreement should support the economy in the short term and foster even greater productivity growth in the long run.

Deloitte’s five-year baseline remains, therefore, quite positive (although slightly less so in the very near term). We expect GDP to remain above the prepandemic baseline level for the entire forecast horizon. That’s a surprising prospect and doesn’t alter the damage that the pandemic has done. The US economy’s ability to bounce back from such a sudden, damaging shock, is amazing. But don’t forget that alternative scenarios are a key part of our forecast. We continue to place a relatively high probability on our “Side effects in post-op” scenario, and the Delta variant could—if things get worse—easily lead there.

#### Business investment rising – generates longer-term growth

Ro 21 – Sam Ro, Markets Correspondent for Axios, “The "remarkable" business investment recovery,” 7/28/21, <https://www.axios.com/business-investment-recovery-0f7e7080-269e-4838-976a-fc91debb8d4f.html>

[Capex = capital expenditure]

Businesses are investing in themselves.

Why it matters: Core capital goods orders, or those for durable goods that aren’t aircraft or defense-related, are a proxy for business investment.

These equipment orders will get fulfilled in the months ahead, so they reflect businesses’ expectations for the future.

Continued growth in this measure suggests the economic growth we’re experiencing today may not be the peak.

By the numbers: Core capital goods orders increased by 0.5% in June to $76.1 billion, up from an upwardly revised $75.7 billion in May. Year-over-year, this measure is up 16.7%.

What they’re saying: Pantheon Macroeconomics’ Ian Shepherdson says the elevated levels of these orders is “remarkable.”

“A combination of rebounding earnings and support from the federal government, coupled recently with clear evidence of acute labor shortages, is pushing companies into raising capex in order to expand capacity and remain competitive,” he writes.

“If you aren't spending but your competitors are, you'll lose market share," Shepherdson adds.

The big picture: “These data points provide insight into businesses’ plans for investment in the third quarter,” Grant Thornton chief economist Diane Swonk writes.

“Continued strength in computers and electronics offset a small drop in orders in the vehicle sector, which has suffered some of the biggest supply-chain problems due to a shortage of computer chips,” Swonk says.

What to watch: These mounting orders for new capital equipment should translate to higher growth expectations from businesses.

Meanwhile, the monthly durable goods reports bear watching to see if these core capital goods orders continue to rise.

“Companies in aggregate are cash-rich, but they remain asset-constrained after a decade of under-investment following the financial crisis,” Shepherdson said. “Accordingly, we expect capex to continue rising at a rapid pace for the foreseeable future.”

The bottom line: Orders for business equipment represent companies putting their money where their mouths are. Whether or not you believe economic activity has peaked, it is the case that businesses are positioning themselves for more growth.

#### The economy is growing and recovering now – that’s key to global growth

Lynch 21 – David J Lynch, global economics correspondent for the Washington Post, “With stimulus cash and jobs spike, U.S. emerges as main engine for global economic recovery,” 4/4/21, https://www.washingtonpost.com/business/2021/04/04/us-economy-global-recovery/

The robust U.S. economic recovery this year is expected to be good news for factory workers, freight handlers and farmers.

Factory workers in China. Freight handlers in the Netherlands. And farmers in Germany.

Amid steady progress with coronavirus vaccinations, the U.S. economy is gathering so much steam that its gains will not stay at home. Demand for goods and services this year is expected to spill well beyond U.S. borders, making the United States the largest single contributor to global growth for the first time since 2005, according to Oxford Economics.

The U.S. ascent ends — at least for now — China’s long reign as the principal engine powering the $90 trillion global economy.

Free spending by the Biden administration — coupled with the Federal Reserve’s ultralow interest rates — is driving the nascent U.S. boom and lifting other countries, where governments have not responded as aggressively to the pandemic. As Americans spent their $600 government stimulus checks in January on furniture, laptops and clothing, the U.S. imported a record $221 billion worth of goods. And that was before a round of $1,400 checks in March.

“We are ahead of the world,” said Kristin Forbes, who was one of President George W. Bush’s White House economic advisers. “And a meaningful share of the stimulus is likely to leak abroad.”

Fresh evidence of the U.S. outperformance appeared on Friday as the Labor Department reported that the economy had gained 916,000 new jobs in March and that the unemployment rate fell to a post-recession low of 6 percent. The Institute for Supply Management’s gauge of manufacturing activity released on Thursday hit its highest mark since December 1983.

These signs of U.S. strength came as Europe’s economic rebound stalled amid surging coronavirus case totals. France last week announced its third national lockdown; Germany and Italy have imposed partial restrictions on activities.

Accelerating progress in vaccinating people against the coronavirus, plus more generous government spending, explains the U.S. edge. As of the end of March, the United States had vaccinated more than twice as large a share of its population as had the European Union.

Most economists expect China this year to grow at a faster annual rate than the United States. But since the $21 trillion U.S. economy is still significantly larger than China’s, measured in dollars, the American contribution to global growth will be slightly larger, according to Oxford Economics.

To be sure, the U.S. outlook is far from worry-free. Some economists, such as Lawrence Summers, once President Barack Obama’s top economic adviser, say the administration has done too much to spur the economy and is inviting an inflationary price spiral.

The recovery from the pandemic shock also is incomplete: More than 8 million Americans who were working in early 2020 are unemployed and an additional 4 million have quit the labor market.

A strengthening U.S. economy, however, is welcome after a year of pandemic gloom. But as expectations of strong growth drive up long-term interest rates, investors are pulling money out of emerging markets to earn higher returns in the United States. More than $5 billion left developing countries in March, which some analysts worry could herald larger outflows to come and undermine recovery prospects in poor and middle-income nations.

“It’s a double-edged sword,” said Maurice Obstfeld, an economics professor at the University of California at Berkeley. “The effect of higher U.S. demand is spilling over to imports from other countries. But as U.S. growth leads to higher long-term interest rates, that’s a big negative for these countries.”

Kristalina Georgieva, managing director of the International Monetary Fund, warned in a speech last week that the U.S. and Chinese economies could leave behind poorer nations in a “multispeed recovery.” By next year, emerging markets are likely to have suffered a 20 percent loss in per-person income, almost twice the figure in the industrial world, according to IMF data.

“Prospects are diverging dangerously not only within nations but also across countries and regions,” she said.

On Monday, global finance officials and central bank chiefs are scheduled to kick off the annual spring meetings of the IMF and World Bank, where Georgieva plans to release a rosier 2021 forecast.

The U.S. role in leading the global economy this year contrasts with the aftermath of the 2008 financial crisis, when China unleashed a massive stimulus program that funded new railroads, airports, roads and public housing programs. The construction splurge rained money on commodity-producing countries, helping avert a more punishing global downturn.

In the United States, a fierce debate about the rising federal budget deficit short-circuited stimulus spending and left the U.S. share of global growth by 2010 at just half of this year’s forecast of 28 percent, according to Oxford Economics.

Congress in March approved the Biden administration’s $1.9 trillion American Rescue Plan. Together with a $900 billion bill in December, it will add almost 1.5 percent to the global economy’s growth rate this year, according to the Organization for Economic Cooperation and Development.

“This will not only benefit the U.S. economy, but it will fuel global growth,” Laurence Boone, the OECD’s chief economist, said last month.

The impact of the U.S. government rescue plan will be felt in India, Australia, South Korea, the United Kingdom, Canada and elsewhere, the OECD said.

### 1NR – AT: Link Turn?

#### The plan creates an abrupt shift and doctrinal instability in antitrust that spills over throughout the economy---it’s impossible to distinguish specific industries because, unlike regulation, it’s enforced in generalist common law

Rogerson 20 – William Rogerson, Charles E. and Emma H. Morrison Professor of Economics at Northwestern University, Ph.D. in Social Sciences from the California Institute of Technology, and Dr. Howard Shelanski, Ph.D. in Economics from University of California, Berkeley, Professor of Law at Georgetown University and Partner at Davis Polk & Wardwell LLP, JD from the UC Berkeley School of Law, BA from Haverford College, Former Clerk for Judge Stephen F. Williams of the U.S. Court of Appeals for the D.C. Circuit and Justice Antonin Scalia of the United States Supreme Court, Former Administrator of the White House Office of Information and Regulatory Affairs and Director of the Bureau of Economics at the Federal Trade Commission, Former Chief Economist of the Federal Communications Commission and Senior Economist for the President’s Council of Economic Advisers at the White House, “Antitrust Enforcement, Regulation, and Digital Platforms”, University of Pennsylvania Law Review, 168 U. Pa. L. Rev. 1911, June 2020, Lexis

I. GOING BEYOND ADJUDICATION FOR ANTITRUST ENFORCEMENT

Antitrust statutes are primarily enforced in court, usually through the adjudication of specific cases or settlement against the backdrop of court-made antitrust doctrine. Indeed, despite statutory authority for the FTC to issue competition rules, and despite the technical complexity of many antitrust cases, antitrust enforcement and policy in the United States has evolved primarily through precedent developed by generalist courts, not specialized agencies. 18To be sure, the Department of Justice and the FTC influence policy through the investigations they pursue and the consent decrees they reach with parties. The FTC itself adjudicates some cases, although it does so largely according to law developed in the federal courts, to which parties can appeal any FTC decision. 19Academics and other commentators have also affected the evolution of antitrust in the United States, from supporting an economic, notably price-focused framework for U.S. competition policy to sparking a rethinking of that framework in contemporary debates. As the courts have absorbed such learning, antitrust doctrine has evolved over the decades through the push and pull of precedent across the United States judicial circuits, with the Supreme Court periodically stepping in to correct, clarify, or resolve differences among the lower federal courts. Commentators often cite antitrust as a rare example of "federal common law" in the U.S. system. 20

The adjudicatory model for implementing antitrust enforcement has several key attributes, which in turn have both advantages and disadvantages. We put aside for now the question of who is adjudicating--whether it be an expert tribunal or a court of general jurisdiction, for example--and focus on three characteristics of antitrust adjudication itself.

A. Case-by-Case, Fact-Specific Approach

Complexity of underlying issues aside, adjudication is well suited to settings in which applicability of the law is contingent on case-specific facts. With the exception of the limited conduct that the antitrust laws prohibit per se, courts review most business activities through a rule of reason, under which some conduct that is illegal in one set of circumstances is allowable in [\*1918] another. 21The inquiry into liability goes beyond whether particular conduct in fact occurred (which is the extent of the inquiry into conduct that is illegal per se) and extends into a balancing of the conduct's likely effects on competition. 22The more that liability is contingent on such case-specific facts, the more difficult it is to determine liability in advance of the conduct's having taken place. Adjudication typically occurs when conduct either is imminent or has already occurred, at which point the relevant facts as to the effects of the conduct are, in principle, more readily measured. 23Such "ex post" mechanisms of enforcement can reduce the risk of over-enforcement when compared to alternative approaches, like some forms of regulation, that spell out more comprehensively in advance what conduct is illegal. 24Reducing false positives, however, may or may not be a virtue--that calculation depends on the extent to which particular adjudicative institutions and processes under-enforce by allowing harmful conduct or transactions to slip through the liability screen.

B. Slow, Usually Predictable Doctrinal Development

A second attribute of the American adjudicatory process for antitrust is stability. While antitrust doctrine has occasionally swerved abruptly over the past century, the common-law process through which antitrust law has developed usually provides clear notice that a change is coming. As a recent example, the Supreme Court's shift in *Leegin Creative Leather Products, Inc. v. PSKS. Inc*. 25from per se liability to a rule of reason for resale price maintenance likely caught few observers by surprise. 26

Antitrust adjudication's stability, like its suitability for fact-dependent situations, is potentially double-edged. Antitrust jurisprudence can be slow to adjust to changes in economic learning or changes in the underlying economy that alter the effects of a particular kind of business conduct. For [\*1919] example, nearly thirty years ago the Supreme Court in Brooke Group v. Brown & Williamson Tobacco Corp. 27required that plaintiffs claiming predatory pricing show not only prices below some measure of incremental cost, but also that the defendant could recoup its losses. 28No plaintiff has prevailed in a predatory pricing case in a U.S. federal court since. 29That outcome might not be of concern were it the case that the Supreme Court's test accurately captures the incidence of predatory pricing. 30Economic research demonstrates, however, that predatory conduct does occur and does not depend on either below-cost pricing or recoupment. 31Predation is just one area in which court-made doctrine appears out of step with relevant economic facts and knowledge. To be sure, other forces could accelerate the common-law process of doctrinal development. For example, Congress could legislate changes to the scope, presumptions, and other parameters of antitrust law in ways that would immediately alter precedent and bind the courts going forward. 32 In practice, however, such intervention is rare and unlikely, making significant lags in doctrine a reality of antitrust adjudication in the courts.

C. Market-Driven Case Selection

In the United States, most adjudicative bodies do not select the cases that come before them. To be sure, courts have jurisdictional limitations that prevent them from hearing certain kinds of cases, and doctrines exist that allow courts to reject weak or poorly conceived complaints. Beyond those mechanisms, however, independent parties decide when and whether to pursue litigation as method of relief. One potential virtue of this separation between decisionmaking and case selection is that the market can drive the focus of judicial attention. Assuming the most widespread and most troublesome anticompetitive conduct will receive the greatest investment of litigation resources, that conduct will in turn receive the most adjudication and doctrinal development.

[\*1920] Unfortunately, the separation between adjudication and case selection will not necessarily lead to an efficient match between judicial attention and the most pressing antitrust violations. In practice, even conduct that is clearly prohibited can persist when offenders think detection is difficult; one only has to look at the consistently high number of civil and criminal price fixing cases that wind up in court, even though that conduct has clearly been illegal per se for nearly a century. 33The most widespread anticompetitive conduct might not therefore be the conduct most in need of doctrinal development--it can be just the opposite, as the persistence of cartels demonstrates. 34Moreover, if the courts develop doctrine that needs revisiting, but that deters the government or private plaintiffs from filing cases, 35then the market for judicial attention to antitrust conduct will not work well dynamically; once doctrine is settled, there may be no mechanism outside of legislation or regulatory intervention to drive doctrinal change. We return to this issue below.

D. Generalists versus Industry Experts

Returning to an issue we put aside earlier, who is doing the adjudication can matter for substantive outcomes. In U.S. antitrust law, that adjudication has occurred, at least ultimately, in generalist federal courts. That institutional locus might well make sense given the wide variety of conduct, industries, and factual circumstances that antitrust cases present. However, as specific industries come to pose particular challenges for antitrust enforcement, the case for more specialized enforcement decisionmakers becomes stronger. Traditionally, where detailed, industry-specific knowledge is required to make sound competition policy decisions, Congress has assigned authority over those decisions, at least in part, to industry-specific regulatory agencies. Thus, the Securities and Exchange Commission has authority over competitive conduct in key financial sectors. 36The FCC has parallel authority with the Department of Justice (DOJ) over telecommunications mergers and sole authority to establish terms for competitive entry into various telecommunications markets. 37State [\*1921] regulators govern entry into hospital markets through Certifications of Public Need. 38The federal courts have increasingly safeguarded the domain of industry specific regulators over competition issues even when agency decisions might be in tension with antitrust law. 39

As antitrust enforcement focuses on distinct challenges posed by a particular industry, whether digital platforms, pharmaceuticals, or something else, expert and specialized knowledge becomes even more essential to making good enforcement decisions. Under current law and enforcement frameworks, there is no systematic way to bring such specialization into the ultimate adjudication of antitrust cases in industries not already covered by specific, competition-related, regulatory statutes. To be sure, the FTC and DOJ have divisions that specialize in various industrial sectors in which they have considerable expertise. Those divisions bring that expertise into their review of conduct and transactions, but neither the FTC nor DOJ has ultimate adjudicative authority over the cases they choose to litigate. The DOJ must go to federal court to seek enforcement. The FTC can opt for an administrative enforcement mechanism with the Commission itself sitting in appellate review of initial adjudication by an administrative law judge. The Commission's decision is, however, subject to review by federal appellate courts, which have not hesitated to reverse the agency's decisions. 40 The result is that, even when agencies have brought specific industry expertise into antitrust enforcement, doctrinal application and resolution still proceeds through the common-law process of adjudication by generalist judges.

E. Tradeoffs Inherent in the Adjudicatory Approach to Antitrust

As the foregoing discussion suggests, the ex post case-by-case approach, slow doctrinal evolution, and case selection mechanism of antitrust adjudication have potential advantages and disadvantages. The tradeoffs become particularly clear through the interaction of those three characteristics.

[\*1922] Adjudication may mitigate the rate of false positives or false negatives obtained through enforcement, as proceeding case-by-case is less likely to bring about those results than are general rules that impose limits on business conduct in advance, regardless of specific circumstances. Broad ex ante specifications could prohibit beneficial or harmless conduct, and narrow ex ante specifications could fail to prevent anticompetitive practices. As a decisionmaking process moves from strict ex ante prescription to pure case-by-case adjudication, particular facts and circumstances increasingly predominate over generic categorization of conduct. 41In principle, the movement along that spectrum enables the decisionmaker to avoid under-inclusiveness or over-inclusiveness of categorical rules. 42

The extent to which an adjudicator actually succeeds in reducing enforcement errors in either direction depends on the doctrine and precedent through which it evaluates the case-specific evidence. Doctrine and precedent will determine how a court allocates burdens, prioritizes facts, and weighs presumptions in evaluating the legality of conduct. If precedent provides mistaken guidance on those factors, case-specific adjudication might do no better a job than ex ante prohibitions in avoiding errors or bias toward either under or over-enforcement. For this reason, the evolutionary pace of doctrinal development through antitrust adjudication is very important. Where that evolution has been toward convergence with state-of-the-art analysis and evidence as to the effects of conduct, doctrinal stability is a virtue. Reasonable people disagree over the Supreme Court's movement from per se illegality to rule of reason treatment of vertical price restraints, as Justice Breyer's dissent in Leegin demonstrates. 43 The decision in that case nonetheless drew on a body of legal and economic analysis that, over decades, had continually narrowed the application of per se rules to vertical conduct and led logically (even if some might argue incorrectly) to the majority's conclusion. 44Many commentators might therefore say Leegin is a good example of where the evolution of doctrine through adjudication worked well: stakeholders had notice and the doctrine moved in an internally consistent direction. While it is debatable whether the per se rule against restraints on [\*1923] intra-brand competition has in recent years led to over-enforcement, there is a good case that it had done so in the past, 45so that the doctrine plausibly moved in an error-reducing direction.

However, where doctrine gets on the wrong track, the application of precedent will perpetuate rather than reduce enforcement errors. In the case of predation, for example, there is a good argument that, in the light of current economic knowledge, the Brooke Group decision has led to underenforcement. 46The potential case-by-case advantages of adjudication are lost where judicial precedent renders important facts and circumstances irrelevant. In such cases, the relatively slow process of doctrinal correction through common law evolution is harmful to sound antitrust enforcement.

The discussion above shows that the error-reducing potential of a case-by-case, adjudicatory approach to antitrust enforcement depends heavily on the actual doctrine courts apply and on the process by which that doctrine evolves. Similarly, whether case selection in an adjudicatory approach in fact directs judicial attention to the conduct that most warrants oversight depends on existing doctrine and precedent. It may well be that the conduct doing the most harm is also the conduct for which the courts impose the highest burdens of proof on plaintiffs. The deterrent effect of those burdens likely leads to fewer cases than the conduct's actual effects warrant. 47Similarly, doctrine that too readily imposes liability could have the opposite effect: lower barriers for plaintiffs would lead to too many cases and more devotion of judicial resources than the conduct deserves. 48Like error-reduction, the distribution of antitrust cases brought for adjudication depends heavily on the state of the doctrine and on the ability of the common law process to correct course where necessary.

The potential disadvantages of antitrust adjudication by generalist courts raise the question of whether a different approach might be preferable, specifically with regard to digital platforms. Digital platforms present relatively novel challenges. Considering the tenuous fit between some [\*1924] potential theories of harm and current antitrust doctrine, the complexity of the underlying technical issues in antitrust cases, and the interrelatedness of those issues and adjacent policy goals, a more informed, comprehensive approach coordinated by an expert regulatory agency might foster more advantages than does the exclusive resort to traditional antitrust adjudication. However, before we turn to the form such regulation might take, we briefly identify some general principles for such regulation.

#### The threat created by the plan will be perceived as encouraging over-caution in other industries

Crews 19 – Clyde Wayne Crews, VP for policy & director of technology studies at the Competitive Enterprise Institute, “The Case against Antitrust Law,” 4/16/19, https://cei.org/studies/the-case-against-antitrust-law/

The issue has taken on greater urgency, as populist politicians from both left and right push for more aggressive antitrust enforcement. Regulators in the United States and the European Union have expressed an interest in pursuing antitrust actions against tech giants known as the FAANG companies— Facebook, Apple, Amazon, Netflix, and Google. President Trump has specifically singled out Facebook, Google, and Amazon as antitrust targets. Entire business models, such as franchising, are at risk from potential antitrust regulation.

The mere threat of legal penalties—and the environment of over-caution it engenders—also has a chilling effect on entrepreneurs who want to try new business practices and innovate. Such opportunity costs are impossible to measure.

Few large antitrust cases have been brought in the United States recently, and overall enforcement activity has been slower than in previous eras, but there is a large pool of potential cases that populist politicians are interested in pursuing.

#### Err neg – enforcement actions have subtle over-deterrence effects and it’s better to err on the side of less regulation

Auer 18 – Dick Auer, Senior Fellow, International Center for Law & Economics, “Comments of the International Center for Law & Economics: Topic 4: Antitrust law and the consumer welfare standard,” FTC Hearings on Competition & Consumer Protection in the 21st Century, https://www.ftc.gov/system/files/documents/public\_comments/2018/10/ftc-2018-0074-d-0071-155999.pdf

One of the important lessons of economics in antitrust is that economic tools are uniquely capable (although still imperfectly so) of distinguishing competitive from anticompetitive conduct — the perennial challenge of (non-cartel) antitrust enforcement and adjudication. Non-economic evidence (so-called “hot docs,” for example) can be counter-productive and can obscure rather than illuminate the competitive significance of challenged conduct. A rigorous adherence to economic principles and economic reasoning is essential if antitrust enforcers are to ensure that their interventions actu-ally benefit consumers.

Thus, a necessary corollary to reliance on the consumer welfare standard in antitrust cases is that an evidence-based approach rooted in error-cost analysis is crucial. Particularly in innovative markets where unfamiliar business strategies are attempted, and the relative knowledge of regulators and enforcers is low, it is critical to hew to an evidence-led, error-cost approach to antitrust evaluation.57

The error-cost framework in antitrust originates with Easterbrook’s seminal analysis,58 itself built on twin premises: first, that false positives in enforcement are more costly than false negatives because self-correction mechanisms mitigate the latter but not the former; and second, that errors of both types are inevitable, because distinguishing procompetitive conduct from anticompetitive conduct is an inherently difficult task.59

A key virtue of employing the error-cost framework is that it helps to avoid the bias of economists, who frequently fail to conduct their analyses in a realistic institutional setting and avoid incorporating the social costs of erroneous enforcement decisions into their recommendations for legal rules.

Antitrust over-deterrence is not costless — the losses from erroneously deterred innovative business practices may be unseen, but they function as a drag on society nonetheless. The goal of the error-cost approach is optimal enforcement that errs on the side of permitting innovative practices that might otherwise be difficult to square under existing antitrust rules.

### 1NR – AT: Biz Con Not Key

#### Declining business confidence crushes the recovery – Delta puts it on the brink

Zandi 8/18 – Mark Zandi, writer for CNN Business Perspectives, “Here's what the Delta variant means for the economic recovery,” 8/18/21, https://www.cnn.com/2021/08/18/perspectives/economic-recovery-delta-variant/index.html

The US economy's immediate prospects appear inextricably tied to how the wave of infections and hospitalizations set off by the Delta variant of Covid-19 plays out. While it seems unlikely that the variant would become so disruptive that it undermines the recovery, there are mounting reasons to be worried that it may become a significant headwind to near-term economic growth.

Consumers are increasingly nervous about the variant, sparking concerns they will turn more skittish in their spending. Retail sales for July declined, while the University of Michigan's survey of consumer sentiment pulled back sharply in early August and is now lower than it was during the worst of the pandemic last spring. Spiking inflation isn't helping consumers' moods. The timing of the slump in sentiment and spending coincides with news stories of overwhelmed hospital systems in Florida and Texas, more serious illness among younger populations, and increasing breakthrough infections among those fully vaccinated.

Businesses have also suddenly become more nervous. According to Moody's Analytics weekly business confidence index, sentiment had significantly improved this spring when vaccinations ramped up and the pandemic was steadily winding down. But it has gone sideways since mid-June. Businesses' assessment of current conditions has turned particularly soft in the past few weeks, with more survey respondents saying conditions are weakening than those that say they are improving. This is the first time this has happened since the vaccines became widely available.

Businesses' expectations regarding the economy's prospects for the remainder of this year have also diminished significantly. The number of respondents that say the economy will continue to improve has declined from more than 60% to less than half, and those that say the economy will weaken has increased from near 30% to more than 40%. This hasn't impacted businesses' hiring and investment decisions yet, according to our survey, but it bears close watching, as the job market and broader economic recovery would be in jeopardy if businesses pull back on hiring and investments.

#### Key to jobs and recovery

Pawar 9/16 – Ameya Pawar, Fellow at Open Society Foundations, “The recovery will be weak if small businesses can’t get the credit they need and deserve,” 9/16/21, https://www.marketwatch.com/story/the-recovery-will-be-weak-if-small-businesses-cant-get-the-credit-they-need-and-deserve-11631722738

If small businesses do not recover from the coronavirus pandemic, the rest of the economy won’t either.

Across America, in big cities and small towns, the auto mechanic shops, restaurants, mom-and-pop retailers, and small industrial firms create two-thirds of all net new jobs. Moreover, the money that people spend in these businesses tends to stay local and accounts for 44% of all economic activity.