# Disclosure---Northwestern---Round 5

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#### The United States federal government should

#### ---increase antitrust prohibitions on standard essential patent holders that engage in anticompetitive licensing practices.

#### ---increase enforcement of antitrust prohibitions on SEP holders that engage in anticompetitive practices.

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#### Interpretation---prohibit means to forbid a given practice---that’s distinct from restriction.

Kennard 93 – Judge, California Supreme Court

Joyce L. Kennard, THEODORE R. HOWARD et al., Plaintiffs and Appellants, v. GEORGE H. BABCOCK et al., Defendants and Respondents. No. S027061., Supreme Court of California, 1993, https://law.justia.com/cases/california/supreme-court/4th/6/409.html

As I pointed out earlier, the majority's conclusion is at odds with the great weight of authority. Also, in determining reasonableness based on the relationship between or among attorneys, the majority gives little regard to the relationship between the attorney and the client. Moreover, the majority fails to recognize that restrictive covenants are intended to and do restrict the practice of law. Rule 1-500 proscribes agreements that "restrict" the practice of law, not just those that prohibit "altogether" the practice of law. (Contra, Haight, Brown & Bonesteel v. Superior Court (1991) 234 Cal.App.3d 963, 969 [285 Cal.Rptr. 845] [rule 1-500 "simply provides that an attorney may not enter into an agreement to refrain altogether from the practice of law"].) To "restrict" means to restrain, to confine within bounds. (Webster's New Collegiate Dict. (9th ed. 1988) p. 1006.) To "prohibit" means to prevent, to [\*\*164] [\*\*\*94] forbid. (Id. at p. 940.) The terms are not synonymous.

#### Violation---exemptions based on the rule of reason means practices are not prohibited.

Skoczny 01 – Professor of law, Holder of the Jean Monnet Chair on European Economic Law at the Warsaw University Faculty of Management

Tadeusz Skoczny, “Polish Competition Law in the 1990s - on the Way to Higher Effectiveness and Deeper Conformity with EC Competition Rules,” European Business Organization Law Review, Vol. 2, Issue 3-4, September 2001, LexisNexis

Most importantly, the new Act departed from the relativity of the prohibition of dominant position abuses; as in Article 82 EC Treaty, it is now a general prohibition which does not allow for exemptions on the basis of a rule of reason. Also new is the prohibition of the abuse of dominant position by groups of undertakings, which will allow to effectively control the state and the development of competition on oligopolistic markets. The Act also eliminated the distinction between monopolistic and dominant position; in theory and in practice, it was difficult to justify the maintenance of this distinction. Therefore, the Act relates only to a dominant position, the definition of which however has been changed. According to the new Article 4 point 9, dominant position means a position "which allows [the undertaking] to prevent effective competition on the relevant market thus enabling [the undertaking] to act to a significant degree independently from its competitors, contracting parties and consumers". It is easy to notice that this definition is based on the United Brands and Hoffmann La-Roche standards. It must nevertheless be emphasised that such understanding of dominance was introduced by the AMC already in 1993; it considered dominance as the capacity to act "to a large extent independently of the competitors and clients, thus also the consumers". Thanks to the AMC's judgements also the relevant product and geographical markets are defined on the basis of the criteria of "close commodity substitutability" and "homogenous competition conditions".

#### That’s a voter for limits and ground---allowing exemptions on the rule of reason lets the aff straight turn core topic DAs and get advantages based off clarifying vague statutes.

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#### Text: The Federal Trade Commission should---

#### ---issue cease and desist letters to standard essential patent holders that engage in anticompetitive licensing practices.

#### ---determine that “unfair methods of competition” pursuant to Section 5 of the FTC Act prohibits anticompetitive licensing practices from standard essential patent holders.

#### Plank 1 solves---non-respondent liability deters anticompetitive action without modifying antitrust law.

Hoofnagle, Hartzog, and Solove 19 – Chris Jay Hoofnagle is an American professor at the University of California, Berkeley who teaches information privacy law, computer crime law, regulation of online privacy, internet law, and seminars on new technology. Woodrow Hartzog is Professor of Law and Computer Science at Northeastern University. Daniel J. Solove is a professor of law at the George Washington University Law School.

Chris Hoofnagle, Woodrow Hartzog and Daniel Solove, August 8 2019, “The FTC can rise to the privacy challenge, but not without help from Congress,” Brookings, https://www.brookings.edu/blog/techtank/2019/08/08/the-ftc-can-rise-to-the-privacy-challenge-but-not-without-help-from-congress/

The FTC also could achieve greater deterrence by leveraging an obscure power known as “non-respondent liability.” In cases where the FTC has a fully-adjudicated matter concerning some business practice, the agency can use that precedent to issue civil penalties to others engaging in the same activity. The power is limited to instances of actual knowledge of a closely-matching precedent by the new defendant, butthis can be established by sending that company notice of its wrongdoing and the relevant previous order. If we think about recent privacy wrongs—poor data security, selling data despite promising not to, and so on—many are widespread, recurring practices. If the FTC were willing to adjudicate just one case involving information “sale,” changing users’ settings, or even storing passwords in plain text, hundreds of companies could inherit exposure to civil penalty liability though this mechanism.

#### Plank 2 solves---Section 5 is comparatively more effective than Sherman at promoting standard setting

Dagen 10 – Special Counsel to the Director, Bureau of Competition, Federal Trade Commission.

Richard Dagen, August 2010, “RAMBUS, INNOVATION EFFICIENCY, AND SECTION 5 OF THE FTC ACT,” Boston University Law Review, http://www.bu.edu/law/journals-archive/bulr/documents/dagen.pdf

d. Efficiency Considerations Weigh in Favor of Use of Section 5 Enforcement, but Not Sherman Act

Critics might argue that Section 5 enforcement has resulted in at least one firm leaving a standard-setting organization. Rambus’s counsel advised Rambus of the risks of equitable estoppel well before the Dell decision, yet Rambus continued to participate in JEDEC.260 It was very soon after Dell that Rambus withdrew from JEDEC.261 Thus, if the FTC enforces equitable estoppel principles, a firm with an intent to engage in “bad” conduct may leave.262 But this is not an undesirable thing – particularly in the case of Rambus, which gained valuable information during SSO deliberations but provided none.

Section 5 enforcement might increase the likelihood that potential hold-up victims participate in standard setting. Enforcement would encourage “innocent” firms to participate because they would be less likely to suffer from opportunistic behavior. The net would be an increase in standard setting.

Conversely, finding the negligent IP holder liable for treble damages under Section 2 could significantly deter firms from participating in standard setting or cause overinvestment in patent tracking. Treble damages for negligence (over and above an injunction) will generally exceed any patent law remedy.

If treble damages were available, unintentional conduct could be penalized significantly more than under laches. Rather than risking treble damages in addition to the loss of IP, firms might choose not to participate in standard setting.

In summary, monopoly gained through conduct that is within the control of the monopolist and not on the merits resembles monopolization, as the term is used by courts and in common parlance, rather than historic accident or luck. Such conduct is proscribed by patent law defenses and other external norms. Where external norms already exist, the incentive to engage in that conduct is already affected. The existence of a patent law defense, in conjunction with relief that is similar in nature to the patent law defense, mitigates any risk of harm to incentives. Using these defenses as one potential limiting principle ensures that no skill, foresight, or business acumen is involved. The deadweight social welfare loss associated with monopoly can be eliminated with minimal concern for false positives. The use of Section 5 in this way is consistent with Supreme Court precedent.263

#### Gives the FTC an opportunity to assert broad Section 5 rulemaking authority---solves institutional expertise deficits in antitrust.

**Carlson 14** --- Vanderbilt University, J.D.; University of Oxford, M.Sc. (forthcoming); Colorado College, B.A.

Christian, 2014, “Antitrusting the Federal Trade Commission: Why Courts Should Defer to Federal Trade Commission Antitrust Decision Making”, Vanderbilt University Law.

As it turns out, the answers to these questions are not so simple. The FTC was founded to rein in judicial decision-making and place the expert decisions with the experts. However, the FTC does not serve the institutional role that Congress sought in 1914. One Senator sought "an administrative body of practical men thoroughly informed in regard to business, who will be able to apply the rule enacted by Congress to particular business situations, so as to eradicate evils with the least risk of interfering with legitimate business operations."' This Senator's charge, and the charge of his fellow Congressman, has not been heeded.

Courts have acted contrary to congressional desires and not deferred to the independent expert body tasked with preventing unfair competition, the FTC. This is particularly troubling today, as modern antitrust economics have made courts increasingly less able to make normatively appropriate decisions. 2 Courts themselves have recognized this, erecting procedural and substantive barriers to protect themselves from disturbing the market status quo.3 Yet, at the same time, they have chosen not to defer to the FTC, the expert body tasked with regulating the market.4 Courts have usurped agency decision-making power with occasionally questionable results.5 The FTC should assert, and courts should grant, Chevron deference when the FTC makes antitrust legal decisions in order to mitigate judicial error and protect FTC expert decisions from the generalist judiciary's institutional shortcomings.

#### Allows the FTC to crack down on pay-for-delay.

**Zeisler 14** --- J.D. Candidate 2014, Columbia Law School; B.S., B.A. 2012, University of British Columbia.

Royce, 2014, HEVRON DEFERENCE AND THE FTC: HOW AND WHY THE FTC SHOULD USE CHEVRON TO IMPROVE ANTITRUST ENFORCEMENT, Columbia Law Review.

As a final example, this Note examines pay-for-delay liability. 162 The history of this problem can be summarized briefly. For over a decade, the FTC has cracked down on pay-for-delay settlements. 163 During this time, appellate courts consistently rejected the FTC's theory of liability because of the statutory presumptions inherent to patent law and the Hatch-Waxman Act.164 Eventually, the FTC succeeded in creating a circuit split, giving rise to the Actavis decision, where the Court held that a settlement "can sometimes violate the antitrust laws."16 5 From the perspective of this Note, what makes pay-for-delay important is that it provides a retrospective lesson-the FTC could not have forced this change earlier by taking advantage of Chevron deference-as well as a prospective opportunity- the FTC has a unique occasion to promulgate notice-and-comment rules.

Turning first to the retrospective lesson, understanding the logic of these courts' holdings leads to the conclusion that the FTC could not have used notice-and-comment rulemaking or Chevron deference to hasten this change. The FTC's rulemaking grant does not permit direct regulation of patents, nor does it empower interpretations of the HatchWaxman Act. 167 Circuits that have ruled against pay-fordelay settlements would also find that the FTC lacked authority to promulgate such regulations. In a sense, there is an inverse Chenery principle at work. In Chenery, the Supreme Court explained that the SEC's mandate included the ability to proceed either through litigation or adjudication.168 In the pay-for-delay context, the FTC can proceed with neither rulemaking nor litigation. Once a court determines that a substantive legal issue falls outside of an agency's mandate through litigation, rulemaking is also likely to be found inappropriate. As a larger jurisprudential insight, this reveals a powerful method that courts can use to check the FTC. If a court can justify a presumption on broader regulatory grounds, and not merely antitrust law, then the FTC lacks authority to regulate this conduct.

Moving to the post-Actavis antitrust regime, the FTC is now in a different situation. In Actavis, the Court created a new sphere of antitrust liability and left "to the lower courts the structuring of the present rule-of-reason antitrust litigation. 1 69 Faced with this new precedent, the FTC has three reasons to begin exercising its rulemaking authority. First, the FTC correctly identified reverse settlements as potentially anti-competitive while lower courts remained skeptical. The FTC's characterization of this conduct will carry a certain rhetorical force that can be leveraged toward more assertive regulation. Second, and building on the first point, the FTC's institutional advantages and capabilities to form presumptions in this regulatory arena are at their height. Indeed, as Professor Hemphill argues, the FTC's ability to aggregate data gives it the unique ability to form the presumptions required for understanding the pay-for-delay regulatory structure. 170 Third, FTC regulation can provide crucial guidance to businesses. In creating, but not defining, the scope of liability, the Court has created considerable uncertainty around settlements. 171 Concededly, while FTC regulation cannot shield a corporation from liability under the Sherman Act, it can provide initial guidance for conduct likely to lead to liability in this unsettled area.

#### Limited patent protection is best for innovation---the CP maintains incentives while avoiding stagnation.

Kotlikoff 08 - Professor of Economics Boston University

Laurence J. Kotlikoff, “Stimulating Innovation in the Biologics Industry: A Balanced Approach to Marketing Exclusivity,” September 2008, http://people.bu.edu/kotlikof/New%20Kotlikoff%20Web%20Page/Kotlikoff\_Innovation\_in\_Biologics21.pdf

But my main focus will be to amplify the point raised immediately below, namely, that extended periods of exclusivity pose a threat to sustaining a rapid rate of innovation. This analysis forms the basis for my recommendation that when it comes to promoting biologic competition Congress should stick with what works, namely Hatch-Waxman, with its very limited exclusivity. Economic theory speaks clearly here. So does the evidence. There are, quite simply, no compelling differences between the chemical-based and protein-based medication industries to justify deviating from a policy that has succeeded for over a quarter of a century in both dramatically reducing drug prices and stimulating innovation. Indeed, to the extent there are differences, they generally favor less exclusivity. A key example here is the likelihood that obtaining FDA approval of generic biologics will take considerably longer than obtaining FDA approval of a chemical entity.9 If this proves true, it will automatically provide brand companies with an extended period of effective exclusivity even absent any legislated exclusivity.

Can Extended Periods of Exclusivity Threaten Innovation?

Raising this question may sound surprising given that some period of exclusive marketing rights is required to incentivize discovery. But starting a train is not the same as keeping it moving, let alone getting it to run at the proper speed. When it comes to innovation, each “discovery” builds on prior knowledge, with progress measured by the next innovation, not the last, and by how fast the next innovation gets to market.10 Policies that lengthen the time between innovations may do little to stimulate more innovation; instead, they may simply reduce the pace of innovation (the number of discoveries per unit of time) on which the economy’s growth so critically depends. The key problem with providing excessive monopoly protection is that once an invention has been made, the inventor faces different incentives. The main goal becomes marketing and protecting one’s intellectual property, not developing a dramatically different and better version of the product. Doing so would diminish, if not vitiate, the value of the initial invention, which may have been undertaken at considerable cost. Hence, at least within a given product line, yesterday’s inventors are much less likely to be either today’s innovators or tomorrow’s. This point comes across clearly in the economics literature starting with the seminal 1959 paper on intellectual property by Nobel laureate Kenneth Arrow.11 In the years since Arrow showed that “the incentive to invent is less under monopolistic than under competitive conditions,” numerous economists have developed alternative models of the innovation process, but they invariably reach the same conclusion — monopolists don’t innovate. The reason is simple: bringing new products to the market undercuts a monopolist’s revenues on his existing products.

#### Biologics innovation is key to US lead in mRNA development

Biopharma-Reporter 8/03 - News & analysis on the clinical development and manufacture of large molecule drugs

“mRNA and beyond: Opportunities for US biologics,” 03-Aug-2021, https://www.biopharma-reporter.com/Article/2021/08/03/Opportunities-for-US-manufacturing-in-biologics

The success of mRNA vaccine technology could be one of the new opportunities for US pharmaceutical manufacturing looking forward, with pandemic investments helping turbocharge the sector. Production of a number of drugs are likely to remain in lower cost production hubs, such as China and India. But biologics may tell a different story: with different dynamics for small volume, high margin treatments. There’s an opportunity for the US to lead in advanced biologicals; as well as manufacturing in viral vectors and cell and gene therapies, according to CPhI’s insight’s report ‘US Pharma Market 2022 and Beyond’, prepared for this year’s CPhI’s event. But first, the country must overcome current capacity restraints through increased efficiencies and investments.

A chunky boost of capital from Operation Warp Speed was designated to increasing development and manufacturing capacity in the US. “We expect to see the approval of mRNA-based cancer therapies in the next few years," notes Peter Shapiro, Senior Director of Drugs and Business Fundamentals at GlobalData, in the report. "Furthermore, these mRNA therapies will be able to use the same manufacturing equipment as mRNA vaccines now that the industry has shelled out the high CapEx cost for this equipment, and trained more staff in sophisticated pharma manufacturing.” Moderna, for example, has wasted no time in setting out a host of mRNA opportunities for the coming years. A mRNA quadrivalent flu vaccine has already started a Phase 1/2 clinical trial – dosing its first participants last month; with an HIV vaccine set to follow into the clinic later this year. Other programs include mRNA vaccines for CMV and RSV. A key advantage of the platform is not only its speed and flexibility in capacity for COVID-19 vaccine production: but also that the same tech could be applied to mRNA therapeutics.

Viral vectors – already in short supply pre-pandemic for gene therapies and gene-modified therapies – are now also required for viral vector vaccines (namely AstraZeneca and J&J). As of May, there were 14 therapies/vaccines that use a viral vector marketed in the EU, Japan, US and UK, according to GlobalData – who predicts this number will soar over the next six years to more than 100 (and with more than 3,000 in the longer term development pipeline). Meanwhile, there are only 87 viral vector contract manufacturing facilities available worldwide. “Adding to the shortage of supply is the current inefficiency in manufacturing – including low titres and complexity – with both biopharma innovators and contract manufacturers working on both upstream and downstream process innovations," notes the CPhI report. "One suggestion from our experts is for [regulatory] agencies to approve standardized viral platforms that could be used interchangeably by therapy developers, potentially speeding up cell and gene therapies’ development, approval, and technology transfer to CMOs.” With pressure on viral vector manufacturing coming from both COVID-19 vaccines and the increased number of gene therapies, manufacturing in this sector will have to increase through scaling up facilities, developing more efficient processes both upstream and downstream, and more investment from contract manufacturing organisations.

Biologics and cell and gene manufacturing are ‘potentially entering a hugely profitable period’, notes the report. But for this to be realised, greater capacity is needed. "In fact, the pandemic has further aggravated capacity constraints as priority is given to COVID vaccines. Anyone with available capacity in the US is likely to be booked up well in advance and able to charge a premium. For the CDMO space, this presents huge opportunities with a large number of acquisitions in the last year as well as increased capital coming in from VCs," notes the CPhI report.

And technological advances will have a particularly important role to play. “Our experts predict that the US is going to play a key role in the development of advanced manufacturing technologies improving the technology base in general and potentially lowering costs. While the country cannot compete on labour costs, it has the scope to bring new efficiencies to advanced biologics manufacturing,” notes the report. Cell and gene therapy, API manufacturing and injectable dose manufacturing are the best immediate opportunities for reshoring in the US, notes the report. “There are opportunities for the US to lead in particular for advanced biologicals. But there are also medium and long-term opportunities for manufacturers capable of manufacturing mRNA-based vaccines and therapies and vector manufacturing for recombinant vector vaccines, gene therapy and gene modified cell therapy." Peter Shapiro, Senior Director of Drugs and Business Fundamentals at GlobalData.

Across the biologics space, the industry is continually looking for new innovations in upstream and downstream processing, with organisations like the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIMBL) pushing continuous bioprocessing. This is potentially an even bigger breakthrough than in the small molecule space as production costs are significantly higher and any innovation that lowers this will potentially make US manufacturers more competitive domestically and internationally. “Innovation in manufacturing will be required for the production volumes necessary for the widespread use of advanced biologics, as well as the reduction in price of these therapies; just as innovation was previously involved in the popularization of monoclonal antibodies. There are already large market-based incentives for success in increasing the efficiency and volumes of advanced biologic production,” commented Shapiro.

#### Solves inevitable extinction—New scalable tech breakthroughs are key

Millett 17

Piers Millett, Global Fellow in biosecurity at the Wilson Center, former Acting Head of the Biological Weapons Convention Implementation Support Unit of the UN, researcher and expert on the prevention of bioweaponization with a range of international organizations, and Andrew Snyder-Beattie, Director of Research at the Future of Humanity Institute, Existential Risk and Cost-Effective Biosecurity, *Health Security* Volume 15, Number 4, 14 August 2017, DOI: 10.1089/hs.2017.0028, http://online.liebertpub.com/doi/pdfplus/10.1089/hs.2017.0028

In the decades to come, advanced bioweapons could threaten human existence. Although the probability of human extinction from bioweapons may be low, the expected value of reducing the risk could still be large, since such risks jeopardize the existence of all future generations. We provide an overview of biotechnological extinction risk, make some rough initial estimates for how severe the risks might be, and compare the cost-effectiveness of reducing these extinction-level risks with existing biosecurity work. We find that reducing human extinction risk can be more cost-effective than reducing smaller-scale risks, even when using conservative estimates. This suggests that the risks are not low enough to ignore and that more ought to be done to prevent the worst-case scenarios. How worthwhile is it spending resources to study and mitigate the chance of human extinction from biological risks? The risks of such a catastrophe are presumably low, so a skeptic might argue that addressing such risks would be a waste of scarce resources. In this article, we investigate this position using a cost-effectiveness approach and ultimately conclude that the expected value of reducing these risks is large, especially since such risks jeopardize the existence of all future human lives. Historically, disease events have been responsible for the greatest death tolls on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world’s population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization. A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to remote populations, overcome rare genetic resistances, and evade detection, cures, and countermeasures. Even evolution itself may work in humanity’s favor: Virulence and transmission is often a trade-off, and so evolutionary pressures could push against maximally lethal wild-type pathogens.5,6 While these arguments point to a very small risk of human extinction, they do not rule the possibility out entirely. Although rare, there are recorded instances of species going extinct due to disease—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also historical examples of large human populations being almost entirely wiped out by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include native American tribes exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and the Western Abenaki (which suffered a staggering 98% loss of population).9 In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But many diseases are proof of principle that each worst-case attribute can be realized independently. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, natural evolution would be an unlikely source for pathogens with the highest possible levels of transmissibility, virulence, and global reach. But advances in biotechnology might allow the creation of diseases that combine such traits. Recent controversy has already emerged over a number of scientific experiments that resulted in viruses with enhanced transmissibility, lethality, and/or the ability to overcome therapeutics.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-21 Although these experiments had scientific merit and were not conducted with malicious intent, their implications are still worrying. This is especially true given that there is also a long historical track record of state-run bioweapon research applying cutting-edge science and technology to design agents not previously seen in nature. The Soviet bioweapons program developed agents with traits such as enhanced virulence, resistance to therapies, greater environmental resilience, increased difficulty to diagnose or treat, and which caused unexpected disease presentations and outcomes.22 Delivery capabilities have also been subject to the cutting edge of technical development, with Canadian, US, and UK bioweapon efforts playing a critical role in developing the discipline of aerobiology.23,24 While there is no evidence of staterun bioweapons programs directly attempting to develop or deploy bioweapons that would pose an existential risk, the logic of deterrence and mutually assured destruction could create such incentives in more unstable political environments or following a breakdown of the Biological Weapons Convention.25 The possibility of a war between great powers could also increase the pressure to use such weapons—during the World Wars, bioweapons were used across multiple continents, with Germany targeting animals in WWI,26 and Japan using plague to cause an epidemic in China during WWII.27 Non-state actors may also pose a risk, especially those with explicitly omnicidal aims. While rare, there are examples. The Aum Shinrikyo cult in Japan sought biological weapons for the express purpose of causing extinction.28 Environmental groups, such as the Gaia Liberation Front, have argued that ‘‘we can ensure Gaia’s survival only through the extinction of the Humans as a species . we now have the specific technology for doing the job . several different [genetically engineered] viruses could be released’’(quoted in ref. 29). Groups such as R.I.S.E. also sought to protect nature by destroying most of humanity with bioweapons.30 Fortunately, to date, non-state actors have lacked the capabilities needed to pose a catastrophic bioweapons threat, but this could change in future decades as biotechnology becomes more accessible and the pool of experienced users grows.31,32 What is the appropriate response to these speculative extinction threats? A balanced biosecurity portfolio might include investments that reduce a mix of proven and speculative risks, but striking this balance is still difficult given the massive uncertainties around the low-probability, high-consequence risks. In this article, we examine the traditional spectrum of biosecurity risks (ie, biocrimes, bioterrorism, and biowarfare) to categorize biothreats by likelihood and impact, expanding the historical analysis to consider even lower-probability, higherconsequence events (catastrophic risks and existential risks). In order to produce reasoned estimates of the likelihood of different categories of biothreats, we bring together relevant data and theory and produce some first-guess estimates of the likelihood of different categories of biothreat, and we use these initial estimates to compare the cost-effectiveness of reducing existential risks with more traditional biosecurity measures.We emphasize that these models are highly uncertain, and their utility lies more in enabling order-of-magnitude comparisons rather than as a precise measure of the true risk. However, even with the most conservative models, we find that reduction of low-probability, high-consequence risks can be more cost-effective, as measured by quality-adjusted life year per dollar, especially when we account for the lives of future generations. This suggests that despite the low probability of such events, society still ought to invest more in preventing the most extreme possible biosecurity catastrophes.

The Impact Spectrum of Various Biothreats Here, we use historical data to analyze the probability and severity of biothreats. We place biothreats in 6 loose categories: incidents, events, disasters, crises, global catastrophic risk, and existential risk. Together they form an overlapping spectrum of increasing impact and decreasing likelihood (Figure 1).\* The historical use of bioweapons provides useful examples of some categories of biothreats. Biocrimes and bioterrorism provide examples of incidents.{Biological warfare provides examples \*While noting that the use of bioweapons can have a wide range of other impacts, including sociopolitical and economic, here we consider their impact purely in terms of fatalities. { There is considerable uncertainty involved with the dataset on the historical use of biological weapons, including considerable variation in key terms and assumptions, likely knowledge gaps, and motivations for both claiming natural events as unnatural, and vice versa. The numbers used here are intended as indicative and are used to place boundaries on the likelihood and impact of different types of biothreat. As noted elsewhere in this article, the conclusions drawn are considered by orders of magnitude, which helps to address these uncertainties. RISKS AND COST-EFFECTIVENESS OF BIOSECURITY 374 Health Security of events and disasters. These historical examples provide indicative data on likelihood andimpact thatwe can thenfeedinto a cost-effectiveness analysis. We should note that these data are both sparse and sometimes controversial. Where possible, we usemultiple datasets to corroborate our numbers, but ultimately the ‘‘true rate’’ of bioweapon attacks is highly uncertain. Biocrimes and Bioterrorism Historically, risks of biocrime{ and bioterrorismx have been limited. A 2015 Risk and Benefit Analysis for Gain of Function Research detailed 24 biocrimes between 1990 and 2015 (0.96 per year) and an additional 42 bioterrorism incidents between 1972 and 2014 (1 per year).36 This is consistent with other estimates of biocrimes and bioterrorism frequency, which range from 0.35 to 3.5 per year (see supplementary material, part 1, at http://online.liebertpub. com/doi/suppl/10.1089/hs.2017.0028). Most attacks typically result in no more than a handful of casualties (and many of these events include hoaxes, threats, and attacks that had no casualties at all). For example, the anthrax letter attacks in the United States in 2001, perhaps the most high-profile case in recent years, resulted in only 17 infections with 5 fatalities.37 The 2015 Risk and Benefit Analysis for Gain of Function Research detailed only a single death from the recorded biocrimes.\*\* Only 1 of the bioterrorism incidents in the report had associated deaths (the 2001 anthrax letter attacks).36 Based on this data, for the purposes of this article, we assume that we could expect 1 incident per year resulting in up to tens of deaths. Biological Warfare Academic overviews of biological warfare{{ detail 7 programs prior to 1945.38 A further 9 programs are recorded between 1945 and 1994.39 For most of the last century, at least 1 program was active in any given year (Table 1). The actual use of bioweapons by states is less common: Over the 85 years covered by these histories (1915 to 2000), 18 cases of use (or possible use) were recorded, including outbreaks connected to biological warfare (see supplementary material, part 2, at http://online.liebertpub.com/ doi/suppl/10.1089/hs.2017.0028). Extrapolating this out (dividing 18 by 85), we would have about a 20% chance per year of biowarfare. It is worth noting the limitations of these data. Most of these events occurred before the introduction of the Biological Weapons Convention and were conducted by countries that no longer have biological weapons programs. Since many of these incidents occurred during infrequent great power wars, we revise our best guess to around 10% chance per year of biowarfare. We use 2 sets of data to estimate the magnitude of such events. The first dataset was Japanese biological warfare in China,40 where records indicate a series of attacks on towns resulted in a mean of 330 casualties per event and 1 case in which an attack resulted in a regional outbreak causing an estimated 30,000 deaths (see supplementary material, part 3, at http://online.liebertpub.com/doi/suppl/10.1089/hs.2017. 0028). The second data set came from disease events that were Figure 1. A spectrum of differing impacts and likelihoods from biothreats. Below each category of risk is the number of human fatalities. We loosely define global catastrophic risk as being 100 million fatalities, and existential risk as being the total extinction of humanity. Alternative definitions can be found in previous reports,33 as well as within this journal issue.34 { Biocrimes can be considered to be ‘‘the use of a biological agent to kill or make ill a single individual or small group of individuals, motivated by revenge or the desire for monetary gain by extortion, rather than by political, ideological, religious or other beliefs.’’35 x Bioterrorism can be considered to be ‘‘the deliberate release of viruses, bacteria or other agents used to cause illness or death in people, but also in animals or plants. It is aimed at creating casualties, terror, societal disruption, or economic loss, inspired by ideological, religious or political beliefs.’’35 \*\*A number of other biocrimes involved deliberately infecting another individual with HIV, the results of which were not evident and have not been included in this analysis. {{Biological warfare can be considered to be the ‘‘ability to use biological agents in warfare.’’35 MILLETT AND SNYDER-BEATTIE Volume 15, Number 4, 2017 375 alleged to have an unnatural origin.41 In one case study, a point source release of anthrax resulted in at least 66 deaths. In a second case study, a regional epidemic of the same disease resulted in more than 17,000 human cases. While these events were not confirmed as having been caused by biological warfare, contemporary or subsequent analysis has suggested that such an origin was at least feasible. Combined, these figures provide an estimated impact of between 66 to 330 and 17,000 to 30,000. For the purposes of this analysis, we are assuming the lower boundary figures from biological warfare are indicative of events, with a likelihood of 10% per year and an impact ranging between tens and thousands of fatalities. The upper boundary figures from biological warfare are indicative of disasters, with a likelihood of 1% per year and an impact range of thousands to tens of thousands of fatalities.{{ Global Catastrophic and Existential Risk Unlike standard biothreats, there is no historical record on which to draw when considering global catastrophic or existential risks. Alternative approaches are required to estimate the likelihood of such an event. Given the high degree of uncertainty, we adopt 3 different approaches to approximate the risk of extinction from bioweapons: utilizing surveys of experts, previous major risk assessments, and simple toy models. These should be taken as initial guesses or rough order-of-magnitude approximations, and not a reliable or precise measure. Model 1: Survey of 2008 Global Catastrophic Risk Conference An informal survey at the 2008 Oxford Global Catastrophic Risk Conference asked participants to estimate the chance that disasters of different types would occur before 2100. Participants had a median risk estimate of 0.05% that a natural pandemic would lead to human extinction by 2100, and a median risk estimate of 2% that an ‘‘engineered’’ pandemic would lead to extinction by 2100.42 The advantage of the survey is that it directly measures the quantity that we are interested in: probability of extinction from bioweapons. The disadvantage is that the estimates were likely highly subjective and unreliable, especially as the survey did not account for response bias, and the respondents were not calibrated beforehand. We therefore also turn to other models that, while indirect, provide more objective measures of risk.xx Table 1. The duration of state-run offensive biological weapons programs detailed in key historical reviews up to 1945 and from 1945 to 2000.5,6 State Duration (Review up to 1945) Duration (Review from 1945-2000) Canada 1925-1945 1945-1969 France 1921-1926 and 1935-1940 1947-1972 Germany 1915-1918 — Hungary — 1938-1944 Iraq — 1974-1990 Japan 1931-1945 — Poland — 1945-1960? South Africa — 1981-1994 Soviet Union 1920-1945 1945-1992 United Kingdom 1925-1945 1945-1957 United States 1942-1945 1945-1969 {{Whilst there are no documented examples, it is possible that if an attack similar to the one that caused the plague epidemic in China were to be carried out in a modern mega-city, even relatively low infectivity and case fatality rates could result in disasters or even crises. For example, the population of Dhaka, Bangladesh, is approaching 20 million. A disaster would require around 0.5% of its population to die, and a crisis would equate to 5% of the city’s population. xxA more rigorous survey examined the probability of a bioweapons attack in a 10-year timeframe with more than 100 illnesses43 and found that opinions varied widely between 1% and 100%, with a mean of 57.5%. While this survey had a superior methodology to the one we cite in model 1, it did not focus on attacks that could result in global catastrophic risk. RISKS AND COST-EFFECTIVENESS OF BIOSECURITY 376 Health Security Model 2: Potentially Pandemic Pathogens Recent controversial experiments on H5N1 influenza prompted discussions as to the risks of deliberately creating potentially pandemic pathogens. These agents are those that are highly transmissible, capable of uncontrollable spread in human populations, highly virulent, and also possibly able to overcome medical countermeasures.44 Previous work in a comprehensive report done by Gryphon Scientific, Risk and Benefit Analysis of Gain of Function Research,36 has laid out very detailed risk assessments of potentially pandemic pathogen research, suggesting that the annual probability of a global pandemic resulting from an accident with this type of research in the United States is 0.002% to 0.1%. The report also concluded that risks of deliberate misuse were about as serious as the risks of an accidental outbreak, suggesting a 2-fold increase in risk. Assuming that 25% of relevant research is done in the United States as opposed to elsewhere in the world, this gives us a further 4-fold increase in risk. In total, this 8-fold increase in risk gives us a 0.016% to 0.8% chance of a pandemic in the future each year (see supplementary material, part 4, at http://online.liebertpub .com/doi/suppl/10.1089/hs.2017.0028). The analysis in Risk and Benefit Analysis of Gain of Function Research suggested that lab outbreaks from wildtype influenza viruses could result in between 4 million and 80 million deaths,36 but others have suggested that if some of the modified pathogens were to escape from a laboratory, they could cause up to 1 billion fatalities.45 For the purposes of this model, we assume that for any global pandemic arising from this kind of research, each has only a 1 in 10,000\*\*\* chance of causing an existential risk. This figure is somewhat arbitrary but serves as an excessively conservative guess that would include worst-case situations in which scientists intentionally cause harm, where civilization permanently collapses following a particularly bad outbreak, or other worst-case scenarios that would result in existential risk. Multiplying the probability of an outbreak with the probability of an existential risk gives us an annual risk probability between 1.6 · 10–8 and 8 · 10–7. {{{ Model 3: Naive Power Law Extrapolation Previous literature has found that casualty numbers from terrorism and warfare follow a power law distribution, including terrorism from WMDs.46 Power laws have the property of being scale invariant, meaning that the ratio in likelihood between events that cause the deaths of 10 people and 10,000 people will be the same as that between 10,000 people and 10,000,000 people.{{{ This property results in a distribution with an exceptionally heavy tail, so that the vast majority of events will have very low casualty rates, with a couple of extreme outliers. Past studies have estimated this ratio for terrorism using biological and chemical weapons to be about 0.5 for 1 order of magnitude,47 meaning that an attack that kills 10x people is about 3 times less likely (100.5) than an attack that kills 10x–1 people (a concrete example is that attacks with more than 1,000 casualties, such as the Aum Shinrikyo attacks, will be about 30 times less probable than an attack that kills a single individual). Extrapolating the power law out, we find that the probability that an attack kills more than 5 billion will be (5 billion)–0.5 or 0.000014. Assuming 1 attack per year (extrapolated on the current rate of bioattacks) and assuming that only 10% of such attacks that kill more than 5 billion eventually lead to extinction (due to the breakdown of society, or other knock-on effects), we get an annual existential risk of 0.0000014 (or 1.4 · 10–6). We can also use similar reasoning for warfare, where we have more reliable data (97 wars between 1820 and 1997, although the data are less specific to biological warfare). The parameter for warfare is 0.41,47 suggesting that wars that result in more than 5 billion casualties will comprise (5 billion)–0.41 = 0.0001 of all wars. Our estimate assumes that wars will occur with the same frequency as in 1820 to 1997, with 1 new war arising roughly every 2 years. It also assumes that in these extreme outlier scenarios, nuclear or contagious biological weapons would be the cause of such high casualty numbers, and that bioweapons specifically would be responsible for these enormous casualties about 10% of the time (historically bioweapons were deployed in WWI, WWII, and developed but not deployed in the Cold War— constituting a bioweapons threat in every great power war since 1900). Assuming that 10% of biowarfare escalations resulting in more than 5 billion deaths eventually lead to extinction, we get an annual existential risk from biowarfare of 0.0000005 (or 5 · 10–7).

Perhaps the most interesting implication of the fatalities following a power law with a small exponent is that the majority of the expected casualties come from rare, catastrophic events. The data also bear this out for warfare and terrorism. The vast majority of US terrorism deaths occurred during 9/11, and the vast majority of terrorism injuries in Japan over the past decades came from a single Aum Shinrikyo attack. Warfare casualties are dominated by the great power wars. This suggests that a typical individual is far more likely to die from a rare, catastrophic attack as opposed to a smaller scale and more common one. If our goal is to reduce the greatest expected number of fatalities, we may be better off devoting resources to preventing the worst possible attacks. Why Uncertainty Is Not Cause for Reassurance Each of our estimates rely to some extent on guesswork and remain highly uncertain. Technological breakthroughs in areas such as diagnostics, vaccines, and therapeutics, as well as vastly improved surveillance, or even eventual space colonization, could reduce the chance of disease-related extinction by many orders of magnitude. Other breakthroughs such as highly distributed DNA synthesis or improved understanding of how to construct and modify diseases could increase or decrease the risks. Destabilizing political forces, the breakdown of the Biological Weapons Convention, or warfare between major world powers could vastly increase the amount of investment in bioweapons and create the incentives to actively use knowledge and biotechnology in destructive ways. Each of these factors suggests that our wide estimates could still be many orders of magnitude off from the true risk in this century. But uncertainty is not cause for reassurance. In instances where the probability of a catastrophe is thought to be extremely low (eg, human extinction from bioweapons), greater uncertainty around the estimates will typically imply greater risk of the catastrophe, as we have reduced confidence that the risk is actually at a low level.48 [Footnote] For example, let’s say our best guess for a risk is 0.01%, and that we are highly uncertain about this. Even just a 10% chance of underestimating the risk by an order of magnitude will double the risk—with a revised best guess of around 0.02%—while it would take a full 90% chance of overestimating the risk by an order of magnitude to cut the risk in half to around 0.005%. Model uncertainty with respect to low-probability, high-consequence risks is therefore typically additional cause for concern. See Ord et al48 for a more in-depth analysis of this problem. [End footnote] Given that our conservative models are based on historical data, they fail to account for the primary source of future risk: technological development that could radically democratize the ability to build advanced bioweapons. If the cost and required expertise of developing bioweapons falls far enough, the world might enter a phase where offensive capabilities dominate defensive ones. Some scholars, such as Martin Rees, think that humanity has about a 50% chance of going extinct due in large part to such technologies.49 However, incorporating these intuitions and technological conjectures would mean relying on qualitative arguments that would be far more contentious than our conservative estimates. We therefore proceed to assess the cost-effectiveness on the basis of our conservative models, until superior models of the risk emerge. How Bad Would Human Extinction Be? Human extinction would not only end the 7 billion lives in our current generation, but also cause the loss of all future generations to come. To calculate the humanitarian cost associated with such a catastrophe, one must therefore include the welfare of these future generations. While some have argued that future generations ought to be excluded or discounted when considering ethical actions,50 most of the in-depth philosophical work around the topic has concluded that future generations should not be given less inherent value.51-55 Therefore, for our calculations, we include future lives in our cost-effectiveness estimate.\*\*\*\* The large number of future generations at stake mean that reducing existential risk even by a small amount may have very large expected value. The Earth is thought to be habitable for roughly another billion years;56 our closest relative, homo erectus, lasted over 1.6 million years,57 and the typical mammalian species also lasts on the order of 1 to 2 million years.58 Following Matheny,29 if we were to assume that humanity would otherwise maintain a global population of 10 billion for the next 1.6 million years, human extinction would jeopardize on the order of 1.6 · 10^16 life years. Cost-Effective Biosecurity How should we balance speculative risks of human extinction in a biosecurity portfolio? Here we turn to costeffectiveness analysis, which is one method of prioritizing public projects.29 Cost-effectiveness analysis is helpful if our goal is to maximize the effect of our resources to achieve a measurable aim (such as life-years saved or cases of disease averted). Here we compare the cost-effectiveness of reducing risks in the categories of incidents, events, disasters, and existential risks. Calculating Costs The US federal government was projected to spend almost $13 billion on health security–related programs in 2017.59 To our knowledge, there has not been a quantitative assessment of how this spending has reduced the chances of bioterrorism, biowarfare, or even naturally occurring pandemics. However, the World Bank estimates that it would cost $1.9 billion to $3.4 billion per year over 5 years to bring all human and animal health systems up to minimal international standards, and it suggests that these measures would prevent at least 20% of pandemics.60{{{{ Many countries do not currently have healthcare systems that meet international standards—for example, in 2014 only 33% of countries reported their national arrangements met those required under the International Health Regulations.61 These mitigation measures would be adopted to be effective regardless of whether a disease outbreak originates naturally, accidentally, or deliberately.{{{{ The ability to rapidly detect and characterize the agent involved helps fast-track public health and R&D responses. Acting promptly enables basic public health measures that might decrease the likelihood of spread (such as social distancing) and track its emerging epidemiology (providing critical input for tailoring the responses). Even if we lack existing or candidate vaccines or therapeutics, having the capacity to treat symptoms can have a dramatic impact on case fatality rates.xxxx We therefore assume that strengthening healthcare systems to meet international standards would have an impact on mitigating all types of disease risk, ranging from incidents and events to existential risks.\*\*\*\*\* [Footnote] \*Given the zoonotic nature of many emerging diseases and the recognized importance of adopting a One Health approach when addressing epidemic and pandemic risk, it will be important that both public health and animal health systems are strengthened to meet international standards. [End footnote] We extend the World Bank’s assumptions to include bioterrorism and biowarfare—that is, we assume that the healthcare infrastructure would reduce bioterrorism and biowarfare fatalities by 20%. We conservatively assume that existential risks will be reduced by only 1%, since any potential existential risk would likely be deliberately designed to overcome medical countermeasures. We calculate that purchasing 1 century’s worth of global protection in this form would cost on the order of $250 billion, assuming that subsequent maintenance costs are lower but that the entire system needs intermittent upgrading.{{{{{ To calculate the cost per life-year saved, we use the equation C/(N · L · R), where C is the cost of reducing risk, N is the number of biothreats we expect to occur in 1 century, L is the number of life-years lost in such an event, and R is the reduction in risk achieved by spending a given amount (specified by C). For nonextinction risks, we increase L 50 times over to denote 50 lifeyears saved per life. The denominator N · L · R denotes the total number of life-years saved. [Footnote] We evaluate the first order effects of these interventions and ignore second order spillover effects (such as any economic benefits of innovation that could come with the biosecurity spending). This could be an important oversight, as even short-term and small-scale biosecurity spending could have ramifications for humanity’s long-term future (eg, preventing a moderate bioterrorist attack could in turn prevent large wars that escalate or the erosion of norms in civil society, which in turn could evolve into existential risks). [End footnote] In a subsequent model we also apply a discount rate to represent policymakers concerned only about lives in the short term. Results Including future generations into our cost-effectiveness calculations demonstrates that reducing existential risks, even if they are improbable, can be incredibly cost-effective in expectation (Table 2). Depending on the model used, we estimate that we can purchase 1 quality adjusted life-year in expectation for 10s of dollars (with outliers suggested around 12 cents to $1,600). Even with the most conservative estimates of existential risk, reducing the risk of human extinction is at least 100 times more cost-effective than standard biosecurity interventions, and possibly up to 1 million times more cost-effective. It is important to note that this result does not depend on the $250 billion figure—if we found a cheaper intervention that reduced all risks by a similar amount, cost-effectiveness of all the interventions would increase, but the relative merits of reducing existential risk would remain the same.xxxxx There are certainly cheaper ways to reduce the low-level risks of biocrime and bioterrorism, and so our estimates of cost-effectiveness could be far too pessimistic. Examples of cheaper interventions might include dramatically increasing resources for specialized law enforcement prevention and interdiction, or increased surveillance on potential perpetrators. However, there are likely also far cheaper ways of reducing the more extreme risks that threaten extinction, and there is no reason to think similar efficiency gains could not be made in this area as well. Despite the vast resources spent on counterterrorism, governments may have neglected low-probability, high-impact risks.65,66 This therefore constitutes a critically underdeveloped area of research, for which there is likely low-hanging fruit. Even if the humanitarian case for reducing existential risk is clear, most policymakers will be responsible primarily for the interests of a more limited constituency comprising only the current generation and near future.\*\*\*\*\*\* It is therefore instructive to evaluate how well these cost-effectiveness results hold up when we largely ignore the benefits to future generations. We therefore repeat the cost-effectiveness estimates with a discount rate imposed on the benefits and costs borne in future years, and we find that the merits of reducing existential risk still hold. If we ignore distant future generations by discounting, the benefits of reducing existential risk fall by between 3 and 5 orders of magnitude (with a 1% to 5% discount rate), which is still far more cost-effective than measures to reduce small-scale casualty events. Under our survey model (Model 1), the cost per life-year varies between $1,300 and $52,000 for a 5% discount rate and between $770 and $30,000 for a 1% discount rate. These costs are even competitive with first-world healthcare spending, where typically anything less than $100,000 per quality adjusted life-year is considered a reasonable purchase.29 This suggests that even if we are concerned about welfare only in the near term, reducing existential risks from biotechnology is still a cost-effective means of saving expected life if the future chance of an existential risk is anything above 0.0001 per year. Our conservative models (with much lower risk) suggest that existential risk prevention is not cost-effective when compared to basic healthcare spending: Model 2 results in a cost per life-year between $330,000 and $16 million for a 5% discount rate and $190,000 and $9.7 million for a 1% discount rate, while Model 3 results in a cost per life-year of between $190,000 and $500,000 for a 5% discount rate and between $110,000 and $310,000 for a 1% discount rate. These conservative numbers would suggest that healthcare spending is a better purchase than marginal biosecurity funding, but even these numbers still support the notion that we are better off focusing on low-probability, high-impact risks rather than low-casualty biosecurity risks. For a biosecurity portfolio, even policy with limited time horizons is likely better off investing in measures that prevent the worst-case scenarios. Conclusions Although the probability of human extinction from bioweapons may be extremely low, the expected value of reducing the risk (even by a small amount) is still very large, since such risks jeopardize the existence of all future human lives. An initial attempt to estimate the cost-effectiveness of reducing these risks finds that it takes likely between 10 cents and 10s of dollars to save 1 life-year, assuming we value future human lives. Although this result is striking, it is not unprecedented. Similar analysis done by Matheny found that spending $1 billion on an asteroid deflection system would have a similar cost-effectiveness, at about $2.50 per life-year.29 Although preventing existential risks might be a far more cost-effective way to save lives than many existing biosecurity measures, this does not imply that we ought to devote all of our resources to protecting against existential risks. Many actions that fall under the rubric of standard health spending also likely reduce existential risk, and many of the resources spent reducing existential risk would in turn help address less extreme risks. Moreover, occasionally there are other opportunities that might be particularly cost-effective—for example, smallpox eradication cost less than $300 million (roughly $1.5 billion in 2017 dollars) and likely saved millions of lives.68 The conclusion is thus not that we should abandon all other health interventions for the sake of saving future lives, but rather that on balance we should increase investments that reduce these lowprobability, high-stakes risks. We propose several steps forward. Given the high uncertainty around our estimates, we can expect a high value of information for additional research, implying that resources should be allocated to further assessment of these risks before large sums are directly allocated on the basis of unreliable evidence. Areas for basic research could include examining existential risk using the tools of technological horizon scanning, red-teaming, ecosystem and epidemic modeling, analyzing historical epidemic death tolls, and examining past species that have gone extinct due to disease, among others. And if existential risk could be as important as we claim, more work should be done to assess possible existential risks and countermeasures. Many actions that would reduce existential risk are already being pursued by those in biosecurity and public health. But there are also measures that would be particularly important in the context of existential risk—including measures that may be unduly neglected without a special focus on existential risk. One particularly inexpensive measure would be to invest in contingency plans for worst-case scenarios. Countering a pandemic does not typically require a large fraction of worldwide economic output, so there is not a clear path forward for rapidly pivoting to a total war footing in which a large percentage of worldwide GDP is spent on countermeasures. Running small experiments with easily scalable interventions could be a cheap way to explore avenues for rapidly turning resources into protection (examples of such experiments might include paying bounties to individuals or companies to avoid flu infection for a year while conducting essential services, such as power and sanitation).{{{{{{ Countering existential risks could also result in reprioritizing current approaches—for example, favoring broadspectrum diagnostics and countermeasures, as opposed to those tailored to a single pathogen. The worst possible attacks could come from built-up arsenals of multiple pathogens, possibly designed with long incubation periods and traits to overcome vaccination or medical treatment. Platform technologies that allow customizable countermeasures (eg, phages for bacteria, generalized vaccine templates) or pathogen-blind diagnostics (eg, distributed sequencing and improved software to interpret novel pathogens before symptoms occur) will stand a better chance against such threats. An existential risk focus also would place extraordinary weight on avoiding arms races or the widespread weaponization of biotechnology. The near collapse of the 8th Review Conference of the Biological Weapons Convention in December 2016 demonstrates how fragile this regime is and how far current instruments are from the ideal. Strengthening the global norm against biological weapons might go a long way toward reducing the risks associated with state actors. The current 3-person Implementation Support Unit costs less than $1 million per year to support.71 In comparison, the 2017 budget for the work of the Organization for the Prohibition of Chemical Weapons is around $77 million (and provides for more than 450 fixed-term posts).72 Increasing the human capacity currently focusing on biological weapons risks by several orders of magnitude would be notably cheaper than the costs associated with building core capacities in public and animal health. More generally, any action that reduces the chance of arms races or great power conflict could substantially reduce the probability of existential risk from biotechnology in the century to come.

### OFF

#### The fifty states and all relevant United States territories should increase antitrust prohibitions on standard essential patent holders that engage in anticompetitive licensing practices

#### States have the right to enforce federal antitrust law and enact and enforce their own antitrust laws---those state-level laws are not inherently Congressionally preempted.

HLR 20 – Harvard Law Review

“Note: Antitrust Federalism, Preemption, and Judge-Made Law,” Harvard Law Review, Vol. 133, June 2020, LexisNexis

I. THE ANTITRUST FEDERALISM LANDSCAPE

Antitrust federalism, meaning the space carved out for the states in the more generally federal antitrust arena, can be thought of as made up of two "swords" -- the first the states' ability to bring suit under federal antitrust law and the second their ability to enact and enforce their own state antitrust laws -- and one "shield" -- immunity from federal antitrust law for state actions. The swords allow states to attack antitrust offenders, while the shield allows states to defend against federal antitrust action.

All three elements of antitrust federalism find their roots in congressional action or the courts' interpretation of congressional inaction. The power to enforce federal antitrust law as parens patriae for full treble damages -- the first sword -- was granted to the states by Congress in Hart-Scott-Rodino. On the judicial front, the Supreme Court acknowledged state immunity from federal antitrust actions -- the shield -- in Parker v. Brown, noting that the Sherman Act did not explicitly mention its application to state action. Finally, when the Court confirmed that states' ability to make their own antitrust laws -- the second sword and the one discussed in this Note -- was not preempted in California v. ARC America Corp., it considered the same Sherman Act silence.

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#### The 1AC’s antitrust paradigm is underpinned by assumptions imported from neoclassical economics that naturalize corporate domination. Recognizing the political nature of antitrust and working to define its content is key to counter corporate power.

Vaheesan 18 – Policy Counsel at the Open Markets Institute. Former regulations counsel at the Consumer Financial Protections Bureau

Sandeep Vaheesan, “The Twilight of the Technocrats’ Monopoly on Antitrust?,” The Yale Law Journal Forum, 6/4/18, <https://www.yalelawjournal.org/pdf/Vaheesan_ir9dchg8.pdf>.

ii. antitrust law is not and cannot be “apolitical”

Antitrust law is unavoidably political. Of course, the enforcement of antitrust law should not be political in the popular sense: the President and the heads of the Department of Justice Antitrust Division and Federal Trade Commission should not employ the antitrust laws to reward their friends and punish their enemies.22 Rather, antitrust is political in its content. In designing a body of law, Congress, federal agencies, and the courts must answer the basic questions of whom the law benefits and to what end. Answering these questions inherently requires moral and political judgments. These fundamental questions do not have a single “correct” answer and cannot be resolved through “neutral” methods or decided with an “apolitical” answer.23

Antitrust regulates state-enabled markets, which cannot be separated from politics. The history of antitrust law shows competing visions of both the law’s aims and its methods, suggesting there is no “apolitical,” universal concept of antitrust. Rather than aspire for an impossible utopia of “apolitical” antitrust, we must decide who should determine the political content of the field—democratically-elected representatives or unelected executive branch officials and judges.

A. Markets Cannot Be Divorced from Politics

A market economy is the product of extensive state action and so is inevitably political. The conception of the market as a “spontaneous order” is a useful construct for defenders of the status quo because it lends legitimacy to the current order and suggests that intervention is futile.24 This model, however, is a myth and bears no correspondence to actual markets. Most fundamentally, state action supports a market economy through the creation and protection of property rights25 and the enforcement of contracts.26 As sociologist Greta Krippner writes, “there can be no such excavation of politics from the economy, as this is the sub- stratum on which all market activity—even ‘free’ markets—rests.”27 In addition to property and contract law, examples of state action necessary for the contemporary U.S. economy to function include corporate and tort law (typically established and enforced by state governments), intellectual property, protection of interstate commerce, banking regulation, and monetary policy (generally con- ducted at the federal level).

Antitrust law, therefore, is a governmental action that shapes the power of state-chartered corporations and the scope of their state-enforced property and contractual rights. This regulation of state-enabled markets makes antitrust inherently political. Moreover, in formulating antitrust rules, lawmakers must determine whom the law seeks to protect. Antitrust law could conceivably protect consumers, small businesses, retailers, producers, citizens, or large businesses. But even identifying the protected group or groups does not fully resolve the question. For instance, if consumers are antitrust law’s sole protected group, how should the law protect consumers? Antitrust could protect consumers’ short- term interest in low prices or their long-term interests in product innovation or product variety, just to name a few possibilities.28

Given the foundational role of state action—and therefore politics—in a market economy, the choice of objective in antitrust law is not between intervention and nonintervention. Rather, antitrust law must choose between different configurations of state action and different sets of beneficiaries.29 More concretely, we must decide, openly or otherwise, whose interests antitrust law should protect.

B. The History of Antitrust Law Reveals the Unavoidability of Politics

The history of antitrust law further demonstrates the political nature of the field. Although Congress has not modified the antitrust statutes significantly since 1950,30 the content of antitrust has changed dramatically since then. Even the consumer welfare model has not banished political values from the field. While the range of debate within the community of antitrust specialists is narrow, the continuing disagreement over the interpretation of consumer welfare reveals the inescapability of political judgment.

Antitrust law today is qualitatively different from antitrust law fifty years ago. In the 1950s and 1960s, the courts and agencies interpreted antitrust law to advance a variety of objectives. The Supreme Court held that the antitrust laws promoted consumers’ interest in competitively-priced goods,31 freedom for small proprietors,32 and dispersal of private power.33 The Court held that business conduct injurious to competitors could give rise to antitrust violations, irrespective of the effects on consumers.34 It also interpreted congressional intent to be that a decentralized industrial structure should override possible economies of scale gained from greater consolidation of economic power.35 Recognizing this goal of decentralization, the federal judiciary adopted strict limits on business conduct with anticompetitive potential, including mergers36 and exclusionary practices.37

Since the late 1970s, however, the Supreme Court, along with the Department of Justice and Federal Trade Commission, has reduced the scope of the antitrust laws. With a rightward shift in the composition of the Supreme Court under the Nixon Administration and in the leadership at the federal antitrust agencies under the Reagan Administration,38 these institutions curtailed the reach of antitrust law, scaling back its objectives39 and rewriting legal doctrine to preserve the autonomy of powerful businesses—all in the name of protecting consumers.40

Even the adoption of the consumer welfare model has not somehow banished politics from antitrust. Instead, it has underscored the unavoidability of politics in the field. Despite being the prevailing goal of antitrust for nearly four decades now, the meaning of consumer welfare is still not settled. The two primary schools of thought on consumer welfare disagree on a fundamental question—who are the beneficiaries of antitrust law? One holds that actual consumers, as understood in the popular sense, should be the principal beneficiaries of antitrust law.41 The rival camp holds that both consumers and businesses should be the beneficiaries of antitrust law, and that whether a dollar of economic sur- plus goes to a consumer or a monopolistic business should be of no concern to the federal antitrust agencies and courts.42 C. Who Should Decide the Political Content of Antitrust?

Because the objective of antitrust law is thus bound up with political judgments and values, seeking an “apolitical” antitrust jurisprudence is futile at best and a cynical effort to conceal political choices at worst. The choice is not be- tween “apolitical” antitrust and “political” antitrust; rather, lawmakers must decide between different political objectives. Once the inevitably political valence of antitrust law has been acknowledged, we can turn to the key question of whether unelected officials at the antitrust agencies and federal judges (collectively “the technocrats”) or democratically-elected members of Congress should decide this political content.43

Over the past forty years, technocrats have dominated antitrust law.44 Leadership at the Department of Justice and Federal Trade Commission as well as Supreme Court Justices have rewritten much of antitrust law.45 They have ignored or distorted the legislative histories of the antitrust laws and have even overridden Congress’s legislative judgments.46 By restricting private antitrust enforcement, the Supreme Court has also limited the ability of ordinary Ameri- cans to influence the content of antitrust law.47

While the antitrust technocrats have been on the march, Congress has been dormant. Its antitrust activities have been confined to secondary issues.48 This combination of technocratic hyperactivism and legislative lethargy has created, in the words of Harry First and Spencer Waller, “an antitrust system captured by lawyers and economists advancing their own self-referential goals, free of political control and economic accountability.”49 Although proponents of technocratic antitrust may characterize it as “pure” or “scientific,” the reality is quite different as big business interests and their representatives dominate debate within this cloistered enterprise.50

This congressional indifference to antitrust is not inevitable. Despite pro- longed quietude, Congress could become an active player in antitrust again. Some members of Congress are showing a renewed awareness of the field and an interest in reasserting control over the content of the antitrust statutes.51 The most democratically accountable branch of the federal government may be poised to take the lead on antitrust in the coming years, reclaiming authority over a technocracy that has not answered to the public in decades.

iii. the consumer welfare model is not anchored in congressional intent and reflects a narrow conception of monopoly and oligopoly

Given that consumer welfare antitrust is a political choice, this model can be evaluated against alternatives on a level playing field. Consumer welfare is not “above politics.” It is a political construct that features at least two serious deficiencies. First, the consumer welfare model contradicts the legislative histories of the principal antitrust statutes; the courts and federal antitrust agencies have instead substituted their own political judgments for those of Congress. Second, the consumer welfare model represents an impoverished understanding of corporate power. It focuses principally on one aspect of business power—power over consumers—and ignores other critical manifestations.

Congress’s original vision for the antitrust laws, one that recognizes both the economic and the political impacts of monopoly, is a superior alternative to the consumer welfare philosophy. As the enforcers and interpreters of statutory law in a democratic polity, federal antitrust officials and judges should follow the congressional intent underlying the antitrust laws. Furthermore, commentators, legislators, and policymakers should recognize that controlling the power of large businesses over not only consumers but also competitors, workers, producers, and citizens is essential for preserving at least a modicum of economic and political equality in a democratic society.

A. In Passing the Antitrust Laws, Congress Expressed Aims Much Broader than Consumer Welfare

The consumer welfare model of antitrust is not true to the intent of Congress. An extensive body of careful research has shown that Congress had several objectives when it passed the Sherman, Clayton, and Federal Trade Commission Acts.52 The Congresses that passed these landmark statutes recognized that eco- nomics and politics are inseparable. Congress originally sought to structure markets to advance the interests of ordinary Americans in multiple capacities, not just as consumers. Consumer welfare antitrust reflects, at best, a selective reading of this legislative history and, at worst, an intentional distortion of this historical record. Contrary to Robert Bork’s historical analysis, the legislative histories show no congressional awareness, let alone support, for interpreting consumer welfare as the economic efficiency model of antitrust, one nominally indifferent toward distributional effects.53

In passing the antitrust statutes, Congress aimed to protect consumers and sellers from monopolies, oligopolies, and cartels, as well as defend businesses against the exclusionary practices of powerful rivals.54 Key members of the House and Senate condemned the prices that powerful corporations charged consumers as “robbery”55 and “extortion.”56 The debates reveal similar solicitude for farmers and other producers who received lower prices for their products thanks to powerful corporate buyers.57 In addition to consumers and producers, Congress aimed to protect another important group of market participants: competitors. In enacting the antitrust statutes, Congress sought to restrain large businesses from using their power to exclude rivals.58 Congress recognized the political power of large corporations and aimed to curtail it through strong federal restraints. Indeed, the political power of these corporations represents a running theme in the legislative histories of the anti- trust laws. A number of speakers in the course of the debates pointed to the power wielded by these big businesses over government at all levels.59 In the debate over the Clayton Act, one Congressman declared that the trusts were commandeering ostensibly democratic political institutions.60 Senator John Sherman warned his colleagues that “[i]f we will not endure a king as a political power[,] we should not endure a king over the production, transportation, and sale of any of the necessaries of life.”61

B. The Consumer Welfare Model Reflects an Impoverished Understanding of Corporate Power

Focusing solely on harms to consumers and sellers, the consumer welfare model embodies an emaciated conception of corporate power. With its foundation in neoclassical economics, the consumer welfare model privileges short-term consumer interests. The neoclassical representation of the market—commonly known through supply-and-demand diagrams—presents a static picture of a market and does not account for long-term dynamics. As the default analytical guide for consumer welfare antitrust, the neoclassical model, with its focus on quantification, prizes short-term price harms to consumers and sellers and discounts longer-term injuries.62

Furthermore, the consumer welfare model legitimizes the existing distribution of resources by focusing on change to the status quo. Current antitrust law measures consumer welfare by changes in prices paid; what a person can pay, though, depends on both her willingness-to-pay for goods and services and her existing wealth. By this definition, a rich person who pays more for a luxury good due to a cartel suffers an antitrust harm, but a poor person who has no income and is unable to afford necessities cannot suffer antitrust harm from a monopoly. A wealthy consumer commands power in the market; a poor consumer, in comparison, has little or no clout in the market.63

The consumer welfare model, moreover, affords little or no importance to corporations’ ability to dictate the development of entire markets. Antitrust practitioners and scholars are wont to remind each other and critics that the antitrust laws “protect[] competition, not competitors.”64 Although the expression is arguably empty,65 it is taken to mean that harm to actual and prospective competitors alone is of no import to the antitrust laws. This doctrinal cornerstone is a political choice,66 which gives monopolists and oligopolists the power to dictate who participates in a market and on what terms.67 Under consumer welfare antitrust, businesses can use their muscle to exclude rivals and strangle economic opportunity so long as this exclusion is not likely to injure consumers. In practical terms, consumer welfare antitrust grants big businesses broad latitude to engage in private industrial planning. 68

For the consumer welfare school, the hegemonic power of large corporations is also of no consequence. Monopolistic and oligopolistic businesses across the economy use their power to seek and win favorable political and regulatory de- cisions.69 The ongoing—and frenzied—contest between states and cities to at- tract Amazon’s second headquarters is indicative of a giant business’s weight. In recent years, the concentrated financial sector has offered a vivid example of corporate political power in action.71 Leading banks helped trigger a worldwide economic crisis through their fraud and reckless speculation, and yet they defeated subsequent political efforts to control their size and structure and man- aged to preserve their institutional power.72 An influential analysis of congressional decision making suggests that the United States today is closer to an oligarchy than a democracy—the wealthy and large businesses wield tremendous political clout, whereas most ordinary people have little or no influence.73 Large businesses also set the parameters of political debate through control of the me- dia,74 sponsorship of supportive figures and organizations,75 and marginalization of critical voices.76 Consumer welfare antitrust itself is, at least in part, a product of big business’s reaction against the relatively vigorous antitrust pro- gram of the postwar decades.77

With its narrow analytical frame, the consumer welfare model of antitrust accepts and legitimizes many forms of state-supported corporate power. Under consumer welfare antitrust, large corporations have the freedom to enhance their power through mergers and monopolisstic practices that hurt competitors and citizens. Viewed as part of the overall landscape of state-enabled markets, consumer welfare antitrust is not an apolitical choice, but a charter of liberty for dominant businesses.

#### Elite capture locks in civilizational collapse, but it’s not inevitable. Try-or-die for putting power in the hands of the citizenry and reorienting government decision-making toward the public good. The alt restores popular sovereignty that ensures agencies will carry out democratic lawmaking

MacKay 18 – Professor of Sociology, Mohawk College

Kevin MacKay, also a union activist & executive director of a sustainable community development cooperative, The Ecological Crisis is a Political Crisis, 2018, https://www.resilience.org/stories/2018-09-25/the-ecological-crisis-is-a-political-crisis/

With each passing day, reports on global climate change become increasingly bleak. Recent research has affirmed that the glaciers are melting faster than anticipated1, and that acidification, with its catastrophic effect on ocean ecosystems, is also proceeding faster than feared2. As the concentration of atmospheric carbon continues to rise, so does the likelihood we’ve passed the tipping point for irreversible climate change.3

When one looks at other critical earth ecosystems, the danger is equally apparent. Soil is being destroyed.4 Fresh water shortages are wracking several continents and leaving billions of people without reliable access to clean drinking water.5 Fish stocks are plummeting.6 Oceans are clogged with plastic garbage.7 Biodiversity is disappearing at an alarming rate.8 In the face of this full-spectrum ecological assault, a growing number of scientists have been saying that the collapse of civilization is now unavoidable.9

Stopping the destructive effects of industrial, capitalist civilization has now become the defining challenge of our age. If we don’t radically change our society’s course within the next 30 years, then a deep collapse and protracted Dark Age are all but assured. In order to confront this challenge, we need to understand what is causing civilization’s crisis, and most importantly, how the crisis can be resolved. At stake is nothing less than a viable future on this planet.

The Five Horsemen of the Modern Day Apocalypse

In my book, Radical Transformation: Oligarchy, Collapse, and the Crisis of Civilization, I argue that industrial civilization is being driven toward collapse by five key forces – related to terminal dysfunction within its ecological, economic, socio-cultural, and political sub-systems:

Dissociation: globalized production and distribution systems disrupt people’s ability to put their own actions, and the actions of elites, into a coherent causal and ethical framework. Actions by individuals, institutions, and systems of governance are therefore disconnected from their effect on the natural world and on other peoples. Without this critical feedback, even well-intentioned actors can’t make rational and ethical choices regarding their behaviour.

Complexity: the world-spanning nature of industrial capitalist civilization, and the massive number of interrelationships it represents, make predicting the effect of any given change on the system as a whole devilishly difficult. Disastrous tipping points loom in several of civilization’s systems – from the collapse of ocean ecology to the threat of nuclear war. In addition, because the crisis cannot be contained in one part of the globe, the dysfunctions can’t be dealt with in isolation.

Stratification: a profoundly unequal distribution of wealth – both globally and within nations – leads to mass human poverty, displacement, and to premature death through disease and continuous warfare. Stratification also leads to political instability, eroding a society’s social cohesion and undermining decision-making structures.

Overshoot: the economic practices of industrial capitalism are exceeding ecological limits. Our civilization is critically degrading the biosphere, burning through non-renewable energy sources, and shifting the entire climatic balance.

Oligarchy: in states worldwide, political decision-making is controlled by a numerically small, wealthy elite. This form of government serves to lock in patterns of conflict, oppression, and ecological destruction.

Societies as Decision-Making Systems

Each of the horsemen presents a significant threat to civilization’s viability. However, oligarchy is particularly important as it deals with a society’s decision-making systems. In his 2005 book Collapse: How Societies Choose to Fail or to Succeed, geographer Jared Diamond argued that many past civilizations have collapsed due to their inability to make correct decisions in the face of existential threats.10 Diamond drew on the work of archaeologist Joseph Tainter, who in his 1998 book The Collapse of Complex Societies, argued that civilizations fail due to a constellation of factors.11

To Tainter, the ultimate mistake failed civilizations made was to continually solve problems by adding social complexity, and as a result, increasing the society’s energy needs. Eventually, Tainter argued that civilizations encounter a “thermodynamic crisis” in which they are unable to sustain an energy-intensive level of complexity. The result is collapse – ecological devastation, political upheaval, and mass population die-off.

The tendency for societies to collapse under excessive energy demands is an important insight. However, what Tainter and Diamond failed to appreciate is how oligarchy is an even more fundamental cause of civilization collapse.

Oligarchic control compromises a society’s ability to make correct decisions in the face of existential threats. This explains a seeming paradox in which past civilizations have collapsed despite possessing the cultural and technological know-how needed to resolve their crises. The problem wasn’t that they didn’t understand the source of the threat or the way to avert it. The problem was that societal elites benefitted from the system’s dysfunctions and prevented available solutions.

Oligarchic Control in “Democratic” States

Citizens in countries such as Canada, the United States, Australia, or the Eurozone members, would generally consider themselves to be living in democratic societies. However, when the political systems of Western democracies are scrutinized, clear and pervasive signs of oligarchy emerge.

A 2014 study by American political scientists Martin Gilens and Benjamin Page revealed that the great majority of political decisions made in the United States reflect the interests of elites. After studying nearly 1,800 policy decisions passed between 1981 and 2002, the researchers argued that “both individual economic elites and organized interest groups (including corporations, largely owned and controlled by wealthy elites) play a substantial part in affecting public policy, but the general public has little or no independent influence.”12

Today, oligarchic control over decision-making, and its catastrophic ecological effects, have never been clearer. In the U.S., Donald Trump and his billionaire-dominated cabinet are seeking to dismantle the Environmental Protection Agency13, to question climate science14, and to pursue a policy of “American energy dominance” that will dramatically expand production of fossil fuels.15

U.S. energy companies are also having a profound impact on domestic energy policy by accelerating the development of hard-to-access fuel sources through hydraulic fracturing, deep-sea oil drilling, and mountain-top removal coal mining.16 At the same time, fossil fuel oligarchs are working overtime to dismantle green energy initiatives, such as the Koch brothers’ war on the solar industry in Florida, and in other cities across the continent.17

In Canada, often thought of as more progressive than its southern neighbor, the situation hasn’t been much different. Under prime minister Stephen Harper’s two terms, the Canadian state became an unapologetic cheerleader for extracting some of the world’s dirtiest oil –Tar Sands bitumen. Harper accelerated Tar Sands production, leading to the clear-cutting of thousands of acres of boreal forest, the diversion of millions of gallons of freshwater, and the creation of miles of toxic tailings ponds, filled with water contaminated by the bitumen extraction process.18

Like the Trump administration, the Harper government silenced federal climate scientists.19 The government also targeted environmental charities and non-profits, using funding cuts and the threat of audits to undermine climate advocacy.20 When a movement of national outrage swept Harper from power in 2015, Canadians were hopeful that climate change would once more be taken seriously. However, the new government of Justin Trudeau, while embracing the international discourse on global warming, has shown a continued allegiance to the fossil-fuel oligarchy by committing over $7 billion in federal funds to purchase the failing Kinder-Morgan Trans Mountain pipeline.21

What is To Be Done?

To create a sustainable future, we must first learn the lessons of the past, and what archaeological research shows is that throughout history, civilizations that have been captive to the interests of an oligarchic elite have all collapsed.22 Today’s industrial, capitalist civilization is trapped in this same deadly cycle.

As long as a self-interested elite controls decision-making in modern states, we will be far too late to avoid the effects of steadily contracting ecological limits. In addition, we will be unable to avert the downward spiral of economic crisis, conflict, and warfare that will result as oligarchs scramble to maintain their wealth and power in the face of dwindling resources and mounting crisis.23

Breaking free from this destructive pattern will require us to take political and economic power back from the 1% and return it to the hands of citizens. This means that advocates for ecological sustainability must move far beyond individual actions, lobbying, or reform of existing political and economic institutions. If we are to have a chance, we must ensure that governments make decisions based on the public good, not on private profit.

Radically transforming industrial, capitalist civilization won’t be easy. It will require movements for environmental sustainability, social justice, and economic fairness to come together, and to realize their common interest in dismantling the system of oligarchy and building a democratic, eco-socialist society.24 This “movement of movements” must put aside sectarian squabbles, and finally realize that the goals of economic justice, human rights, and ecological sustainability are all intrinsically linked.

Such changes may seem like a tall order, but hope can be found in the deepening struggle being waged to protect our fragile ecosystems. First Nations groups are leading this charge and beginning to win some important victories. The inspiring Water Protectors of Standing Rock were able to disrupt the Dakota Access Pipeline in the face of intense government oppression.25 In Canada, Several British Columbia First Nations recently won an impressive court victory in their opposition to the Trans Mountain pipeline.26

If successful grassroots struggles can be linked with equally hopeful movements for real political change, then there is hope for the future. However, if we continue on with “business as usual” – hoping that change will come from lifestyle choices and the interchangeable representatives of elite political parties, then the future looks grim indeed.

### OFF

#### M&A activity is high now because Biden’s executive order won’t be implemented for years.

David French and Sierra Jackson, Reuters, July 12, ‘21, Analysis: Dealmakers see M&A rush, then chills, in Biden's antitrust crackdown

Dealmakers expect a new wave of transformative U.S. mergers and acquisitions (M&A), as companies rush to complete deals before President Joe Biden's antitrust push takes shape, to be followed by a slowdown when regulators start cracking down.

Biden signed a sweeping executive order on Friday to bolster competition within the U.S. economy. This included a call for regulatory agencies to increase scrutiny of corporate tie-ups which have left major sectors such as technology and healthcare dominated by few players. read more

The order came amid an unprecedented M&A frenzy, as companies borrow cheaply and spend mountains of cash they have accumulated on transformative deals to reposition themselves for the post-pandemic world. Almost $700 billion worth of U.S. deals were announced in the second quarter, the highest on record.

The dealmaking bonanza is set to continue, as companies seek to take advantage of the time window during which regulators frame precise rules to implement Biden's order, advisers to the companies said. The M&A slowdown will come only when regulators implement the rule changes, possibly in two years or more, they added.

"The order itself will be less likely to have a chilling effect on strategic M&A than the potential chilling effect of a significant increase in the number of prolonged investigations and merger challenges brought by the agencies," said Michael Schaper, partner at law firm Debevoise & Plimpton.

Spokespeople for the White House and the two main antitrust regulators, the Federal Trade Commission (FTC) and the U.S. Department of Justice (DoJ), did not immediately respond to requests for comment.

Dealmakers were bracing for a tougher antitrust environment under Biden even before last week's executive order. Last month, the DoJ sued to stop insurance broker Aon's (AON.N) $30 billion acquisition of peer Willis Towers Watson (WTY.F). And Biden tapped Lina Khan, an antitrust researcher who has focused her work on Big Tech's immense market power, to chair the FTC.

#### Immediately expanding scope of antitrust liability brings that to a halt---undermines dynamism and global competitiveness.

Thierer 21– Adam Thierer is a senior research fellow with the Mercatus Center at George Mason University. Author of several books on antitrust law; former president of the Progress & Freedom Foundation, director of Telecommunications Studies at the Cato Institute, and a senior fellow at the Heritage Foundation.

(Adam Thierer, 2-25-2021, "Open-ended antitrust is an innovation killer," TheHill, https://thehill.com/opinion/technology/540391-open-ended-antitrust-is-an-innovation-killer)

Antitrust reform is a hot bipartisan item today, with Democrats and Republicans floating proposals to significantly expand federal control over the marketplace. Much of this activity is driven by growing concern about some of the nation’s largest digital technology companies, including Facebook, Google, Amazon and Apple.

Unfortunately, the calls for more bureaucracy and regulation emanating from all corners of the political world could have an unintended consequence: discouraging the sort of vibrant innovation and consumer choice that made America’s tech companies household names across the globe.

Sen. Amy Klobuchar (D-Minn.) is leading one charge. Klobuchar, who chairs the Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights, recently introduced the “Competition and Antitrust Law Enforcement Reform Act.” This sweeping measure seeks to expand the powers and budgets of antitrust regulators at the Federal Trade Commission and the Department of Justice. It also includes new filing requirements and potentially hefty civil fines.

The most important feature is the proposed change to the legal standard by which regulators approve business deals. It would allow the government to stop any deal that creates an “appreciable risk of materially lessening competition,” and it also defines exclusionary behavior as, “conduct that materially disadvantages one or more actual or potential competitors.”

These may sound like simple, semantic tweaks, but – much like some of the other policy ideas currently circulating – they would upend decades of settled law and create a sea change in U.S. antitrust enforcement. This change could undermine business dynamism, innovation and investment in ways that inhibit the global competitiveness of U.S. businesses.

Critics of merger and acquisition (M&A) activity by large tech firms include not only Sen. Klobuchar but also Republicans such as Sen. Josh Hawley (R-Mo.). Hawley recent offered an amendment to a budget bill that would preemptively prohibit mergers and acquisitions by dominant online firms. Klobuchar and Hawley believe that M&A skews the market in favor of today’s largest firms, entrenching their market power and discouraging innovation.

History teaches a different lesson. Consider DirecTV and Skype, both once considered innovative market leaders in their respective fields of satellite TV and internet telephony. Both firms stumbled, however, and they might not even be with us today without creative business deals. DirecTV has been partially or fully controlled by Hughes Electronics, News Corp., Liberty Media and now AT&T. Skype has swapped hands multiple times, moving from eBay, to a private investment firm and now to Microsoft.

These were complex deals, and some didn’t work, leading to divestitures. But each was a learning experience that illustrated how dynamic media and technology markets can be with firms constantly searching for value-added arrangements that serve their customers and shareholders. If we make this type of activity presumptively illegal, we’re imagining that government bureaucrats are better suited to make these calls than businesspeople and the consumers who choose whether or not to buy the product.

Worse yet, legal tests like those Klobuchar proposes – “conduct that materially disadvantages potential competitors” – are remarkably open-ended and could be easily abused. The system will be gamed by opponents of deals for business reasons. They will claim that their own failure to attract investors or customers must all be the fault of more creative rivals. That’s a recipe for cronyism and economic stagnation.

Those who worry about today’s largest tech giants becoming supposedly unassailable monopolies should consider how similar fears were expressed not so long ago about other tech titans, many of which we laugh about today. Just 14 years ago, headlines proclaimed that “MySpace Is a Natural Monopoly,” and asked, “Will MySpace Ever Lose Its Monopoly?” We all know how that “monopoly” ceased to exist.

At the same time, pundits insisted “Apple should pull the plug on the iPhone,” since “there is no likelihood that Apple can be successful in a business this competitive.” The smartphone market of that era was viewed as completely under the control of BlackBerry, Palm, Motorola and Nokia. A few years prior to that, critics lambasted the merger of AOL and TimeWarner as a new corporate “Big Brother” that would decimate digital diversity and online competition.

GOP divided over bills targeting tech giants

Today, we know these tales of the apocalypse ended up instead becoming case studies in the continuing power of “creative destruction.” New innovations and players emerged from many unexpected quarters, decimating whatever dreams of continued domination the old giants once had.

Today’s biggest players face similar pressures, and it’s better to let rivalry and innovation emerge organically, not through the wrecking ball of heavy-handed antitrust regulation.

#### Internal link goes one way---large-firm dynamism is the only way to maintain tech leadership vis-à-vis China---key to competitiveness and AI.

Lee, senior lecturer at the University of Hong Kong Faculty of Business and Economics, ‘19

(David S., “Antitrust action risks holding back US tech giants in competition with China,” <https://asia.nikkei.com/Opinion/Antitrust-action-risks-holding-back-US-tech-giants-in-competition-with-China>)

But the administration should not forget the law of unintended consequences -- effective antitrust measures could stifle the ability of American tech companies to compete with their Chinese challengers. Presumably, that is the last thing the America First president wants to see.

While antitrust has been used to regulate technology companies before, perhaps most notably Microsoft two decades ago, its application against Amazon.com, Facebook, and Google seems different.

For the last half-century or so, U.S. antitrust law has been underpinned by the concept of maximizing consumer welfare, frequently measured by price to consumers. In regulating big technology companies today, however, a new paradigm has emerged, dubbed "hipster antitrust."

Hipster antitrust looks beyond traditional economic harm and includes wider effects such as wage inequality, data privacy intrusions, and sheer size as grounds to invoke the law.

But the wider the antitrust authorities reach, the more likely they are to damage the tech giants' global competitiveness. This applies especially in the key field of artificial intelligence, where the U.S. and China are world leaders.

AI is the engine powering the Fourth Industrial Revolution and the fuel for that engine is data, lots of data. Such data can only be collected at scale, which conflicts with hipster antitrust notions of size. If American antitrust measures compel large technology companies to shrink or in the extreme, to break up, then the U.S. will find itself at a disadvantage to China.

The idea of size is one of many fundamental differences separating Chinese and American technology ecosystems. Chinese government leaders have clearly grasped that scale matters for the technologies they want to dominate, such as artificial intelligence, as well as for the type of digital governance Beijing is striving to implement.

In the U.S., however, the economic value attached to scale is offset by deep-rooted concerns about privacy, bullying behavior and unfair political and social influence. Senator Elizabeth Warren of Massachusetts, a popular Democratic Party candidate for the 2020 presidential election, wrote: "Today's big tech companies have too much power -- too much power over our economy, our society and our democracy."

But in China this is not a hot-button political issue. In a recent fintech course I helped lead comprised of students from different countries, mainland Chinese students considered privacy differently than peers elsewhere. Though aspects of privacy are important to Chinese users, many readily understand there are trade-offs in operating on technology platforms.

Chinese technology platforms such as Alibaba and Meituan have developed so-called "super apps" that serve the same functions that users in the West might find by going to different applications on their devices.

Super apps are designed to be convenient to users so they can handle everything from ride hailing, shopping, food purchases, and payment, all without leaving the digital confines of a single app. This has become the dominant way Chinese citizens consume online. With the most internet users in the world, approximately 750 million, super apps also provide Chinese technology companies an incredible amount of data.

In his book, "AI Superpowers: China, Silicon Valley, and the New World Order," technology executive and investor, Kai-Fu Lee outlined four factors necessary to win the AI race: talent, computing speed, data, and government policy. Though the U.S. has an advantage in many areas, that lead is shrinking, and if China does overtake the U.S. in artificial intelligence, it will likely be a result of advantages in data and government policy.

This combination of data and government policy is perhaps best exemplified by SenseTime, widely considered the world's most valuable artificial intelligence startup. SenseTime boasts world leading facial recognition, which is enhanced because it reportedly has access to Chinese government databases, a rich source of data to further develop models.

Chinese companies like SenseTime have excelled in facial recognition, with some reports estimating that there are almost ten times as many Chinese facial recognition patents filed as American. Chinese surveillance technology is already used in the U.S., including New York City.

This widening gap will have broader implications beyond surveillance, security, and policing. Facial recognition technology will also serve as a biometric identifier for finance, retail, and health. With China moving forward aggressively both domestically and abroad in its use of such technologies, American competitors who are pursuing facial recognition, such as Amazon and Google, may not be able to close the growing competitive chasm.

So while American politicians may see antitrust investigations into large technology companies as necessary, there could be a significant impact on America's ability to compete with China.

Google's former CEO, Eric Schmidt forecast last year that China and the United States would lead the bifurcation of the internet into two spheres. Evidence of this splintering is already apparent. What remains undetermined, however, is which of those spheres will dominate.

Large Chinese technology companies, for example Alibaba Group Holding, are already setting-up far-flung outposts by partnering with and investing in local, non-Chinese technology companies around the world. This form of Chinese technological expansion allows Chinese big tech to shape user privacy norms, establish global networks, and attract more users into their ecosystems, all of which leads to increased user activity and ultimately more data.

While China aggressively expands its technological reach and hones its ability through mining evermore data, it is important that U.S. regulators understand that aggressive antitrust sanctions would risk inhibiting American companies from maintaining the scale necessary to compete with their Chinese rivals.

AI supremacy will be a defining feature of superpower status. And if future researchers one day examine how the U.S. lost the war for artificial intelligence, the hindsight of history may show that the current antitrust debate was the fatal turning point.

#### Tech innovation prevents nuclear conflict---U.S. leadership key.

Kroenig and Gopalaswamy 18 – Associate Professor of Government and Foreign Service at Georgetown University and Deputy Director for Strategy in the Scowcroft Center for Strategy and Security at the Atlantic Council; Director of the South Asia Center at the Atlantic Council

Matthew Kroenig and Bharath Gopalaswamy, "Will disruptive technology cause nuclear war?," Bulletin of the Atomic Scientists, 11-12-2018, <https://thebulletin.org/2018/11/will-disruptive-technology-cause-nuclear-war/>

Rather, we should think **more broadly** about how new technology might affect global politics, and, for this, it is helpful to turn to scholarly international relations theory. The dominant theory of the causes of war in the academy is the “bargaining model of war.” This theory identifies rapid shifts in the balance of power as a primary cause of conflict.

International politics often presents states with conflicts that they can settle through peaceful bargaining, but when bargaining breaks down, war results. Shifts in the balance of power are problematic because they undermine effective bargaining. After all, why agree to a deal today if your bargaining position will be stronger tomorrow? And, a clear understanding of the military balance of power can contribute to peace. (Why start a war you are likely to lose?) But shifts in the balance of power muddy understandings of which states have the advantage.

You may see where this is going. New technologies threaten to create potentially destabilizing shifts in the balance of power.

For decades, stability in Europe and Asia has been supported by US military power. In recent years, however, the balance of power in Asia has begun to shift, as China has increased its military capabilities. Already, Beijing has become more assertive in the region, claiming contested territory in the South China Sea. And the results of Russia’s military modernization have been on full displayin its ongoing intervention in Ukraine.

Moreover, China may have the lead over the United States in emerging technologies that could be decisive for the future of military acquisitions and warfare, including 3D printing, hypersonic missiles, quantum computing, 5G wireless connectivity, and artificial intelligence (AI). And Russian President Vladimir Putin is building new unmanned vehicles while ominously declaring, “Whoever leads in AI will rule the world.”

If China or Russia are able to incorporate new technologies into their militaries before the United States, then this could lead to the kind of rapid shift in the balance of power that often causes war.

If Beijing believes emerging technologies provide it with a newfound, local military advantage over the United States, for example, it may be more willing than previously to initiate conflict over Taiwan. And if Putin thinks new tech has strengthened his hand, he may be more tempted to launch a Ukraine-style invasion of a NATO member.

Either scenario could bring these nuclear powers into direct conflict with the United States, and once nuclear armed states are at war, there is an inherent risk of nuclear conflict through limited nuclear war strategies, nuclear brinkmanship, or simple accident or inadvertent escalation.

This framing of the problem leads to a different set of policy implications. The concern is not simply technologies that threaten to undermine nuclear second-strike capabilities directly, but, rather, any technologies that can result in a meaningful shift in the broader balance of power. And the solution is not to preserve second-strike capabilities, but to preserve prevailing power balances more broadly.

When it comes to new technology, this means that the United States should seek to maintain an innovation edge. Washington should also work with other states, including its nuclear-armed rivals, to develop a new set of arms control and nonproliferation agreements and export controls to deny these newer and potentially destabilizing technologies to potentially hostile states.

These are no easy tasks, but the consequences of Washington losing the race for technological superiority to its autocratic challengers just might mean nuclear Armageddon.

### OFF

#### The plan forces tradeoffs in FTC enforcement efforts---they’re in a merger tsunami and barely staying afloat, but the plan drowns them.

Rose ’19 - Department Head and Charles P. Kindleberger Professor of Applied Economics in the MIT Economics Department. She served as Deputy Assistant Attorney General for Economic Analysis in the Antitrust Division of the DOJ from 2014 to 2016, and was the director of the National Bureau of Economic Research Program in Industrial Organization from 1991 to 2014.

Nancy Rose, FTC Hearing #13: Merger Retrospectives, April 12, 2019, <https://www.ftc.gov/news-events/events-calendar/ftc-hearing-14-merger-retrospectives>

So I want to start with the last question that was on the set that Dan and Bruce circulated for this panel. Should the FTC devote more resources to retrospectives, even at the cost of current enforcement? And I was delighted to see Commissioner Slaughter be so passionate in her defense of the need for more resources. This goes to what I feel is the most significant, and yet still largely invisible message, in the ongoing debate over competition policy, which is that antitrust enforcement in the United States is chronically and substantially underfunded.

For years, the appropriation requests have been modest in their increases. Oversight hearings and interactions with the Hill have too often featured the mantra, “when business picks up, our talented and hardworking staff just do more with less.” I will say I think the career staff at both the FTC and the DOJ Antitrust Division are among the most dedicated, highly-skilled, and hardest-working professionals.

It was my great privilege to work with a number of them at DOJ, and I know that colleagues who have worked at the FTC feel the same way. They deserve our greatest appreciation and applause and not just from those of us who work in antitrust policy, but from the entire American public, on whose behalf they tirelessly work.

But there is a limit to the number of hours in a day and the number of days in a week and the well below market compensation for the lawyers and economists who work in the agencies, which is another significant problem, is insufficient to demand that staff give up all rights to leave their buildings, occasionally see their families, or catch up on sleep.

So I think it’s inevitable that if we’re asking agencies to reflect on the effectiveness of their decision-making through programs like retrospective programs, it is going to come out of someplace else. And I fear that given the ongoing intensity of the merger wave, that’s going to come out of enforcement.

We are amid an ongoing sustained, what’s been called by some, tsunami of mergers. Each year there are thousands of mergers noticed to the agencies and thousands more below the HSR thresholds, that work by Thomas Wollmann at the University of Chicago suggests, skate through to consummation with practically no probability of review or action, the occasional consummated merger enforcement action notwithstanding.

The dollar volume of mergers is at historic levels and that suggests that there are a lot of mega mergers competing for enforcement resources. In addition, litigation costs continue to climb, both for challenging mergers or bringing Section actions, especially as parties with especially deep pockets escalate litigation defenses, correctly calculating that even adding some tens of millions of dollars in antitrust litigation costs would be just rounding error in their merger financing.

And, finally, I would say it’s inconceivable to me that there are not at least some counsel that are advising parties that a good time to bring marginal mergers forward is when the agencies are stretched thin by major investigations or multiple litigations.

#### Despite short resources, FTC is effectively regulating hospital mergers---the plan halts that progress.

Muris ’20 – Professor of Law at George Mason, former Chairman of FTC, Senior Counsel at Sidney Austin LLP, JD from UCLA,

Timothy Muris, “Response to Subcommittee on Antitrust, Commercial, and Administrative Law Committee on The Judiciary U. S. House of Representatives” April 17, 2020, <https://judiciary.house.gov/uploadedfiles/submission_from_tim_muris.pdf>

Finally, the Committee asks about agency resources and performance. The last section below briefly addresses the continual need for the antitrust agencies to address business practices as they evolve, as well as their own performance record. Such evaluation is necessary: ever a UCLA Bruin, I remain devoted to legendary coach John Wooden‘s maxim that “when you are through learning, you are through.” The section thus offers multiple examples of successful and bipartisan FTC efforts to improve enforcement to the benefit of consumers. In the key healthcare sector, American consumers continue to benefit from the FTC’s hard work. After losing seven consecutive hospital merger challenges before I arrived, upon my direction the FTC worked to devise a new enforcement plan by incorporating fresh economic thinking and issuing retrospective case studies showing that several hospital mergers had indeed harmed consumers. This plan resulted in a successful challenge to a consummated hospital merger that served as a template for future enforcement, leading to Obama administration victories in three separate courts of appeal endorsing the FTC’s approach. Such success did not require abandonment of the consumer welfare standard, nor a dramatic increase in agency resources. Indeed, as discussed below, my predecessor as FTC chairman, Bob Pitofsky, did much more for American consumers using the consumer welfare standard with just 1,000 staff than did the agency in the 1970s when it had far greater resources (1,800 staff by the turn of the decade), but was motivated by an antitrust policy that was, instead, at war with itself.

#### Long term per-person healthcare costs will collapse the economy from a bubble burst or terminal budget overstretch---no alt causes---restoring competition in hospital markets is key to reduce costs.

Evan Horowitz, Fivethirtyeight, January 11, 2018, The GOP Plan To Overhaul Entitlements Misses The Real Problem, <https://fivethirtyeight.com/features/to-cut-the-debt-the-gop-should-focus-on-health-care-costs/>

There is no wide-reaching entitlement funding crisis, no deep-rooted connection between runaway debts and the broad suite of pension and social welfare programs that usually get called entitlements. The problem is linked to entitlements, but it’s much narrower: If the U.S. budget collapses after hemorrhaging too much red ink, the main culprit will be rising health care costs.

Aside from health care, entitlement spending actually looks relatively manageable. Social Security will get a little more expensive over the next 30 years; welfare and anti-poverty programs will get a little cheaper. But costs for programs like Medicare and Medicaid are expected to climb from the merely unaffordable to truly catastrophic.

Part of that has to do with our aging population, but age isn’t the biggest issue. In a hypothetical world where the population of seniors citizens didn’t increase, entitlement-related health spending would still soar to unprecedented heights — thanks to the relentlessly accelerating cost of medical treatments for people of all ages.1

What’s needed, then, is something far more focused than entitlement reform: an aggressive effort to slow the growth of per-person health care costs. Or — if that’s not possible — some way to ensure that the economy grows at least as fast as the cost of health care does.

Diagnosing the debt: It’s not about demographics

America’s long-term budget problem is very real. Already, the federal government has a pile of publicly held debts amounting to around $15 trillion, or about 75 percent of the country’s entire gross domestic product. That’s the highest level since the 1940s, yet the debt burden is expected to double by 2047 and reach 150 percent of the GDP, according to the Congressional Budget Office.2

It makes sense to list entitlement spending among the culprits for the growing national debt, given that these programs have grown from costing less than 10 percent of the GDP in 2000 to a projected 18 percent in 2047. Part of this is simple demographics: As America ages, more of us become eligible for Social Security and Medicare, thus driving up expenses.3

But there’s a crack in this demographic explanation: It only makes sense for the next 10 to 15 years. That’s the period of rapid transition when graying baby boomers will boost the population of seniors from around 50 million to more than 70 million. A change like that should indeed produce a surge in entitlement spending as those millions submit their enrollment forms.

By 2030, however, this wave will start to ebb, leaving the elderly share of the population at a roughly stable 20 to 21 percent all the way through 2060, based on the size of the population following the boomers and slower-moving forces like lengthening lifespans.

But think what this should mean for entitlement spending. As the population of seniors levels out in those later years, costs should naturally stabilize — at least, if demographics were really the driving factor.

This is exactly what you see for Social Security. The CBO expects total Social Security spending to leap up over the next decade but then settle at just over 6 percent of the GDP, at which point it will cease to be a major contributor to rising entitlement spending or growing debts. Social Security is thus a minor player in our long-term budget drama; if you cut the program to the bone, shrinking future payouts so that they won’t add a penny to the deficit, the federal debt would still reach 111 percent of the GDP in 2047.4

Likewise, cuts to welfare and poverty-related entitlements like food stamps and unemployment insurance are unlikely to improve the debt forecast. In fact, spending on these entitlements has been dropping since the high-need years around the Great Recession and is expected to shrink further in the decades ahead — partly because payouts aren’t adjusted to keep up with economic growth, and partly because the birth rate has been falling and several programs are geared to families with children.5

But the scale of the problem is totally different when you turn to health care. Spending on entitlement-related health programs — including Medicare, Medicaid and subsidies required by the Affordable Care Act — will never shrink or stabilize, according to projections. The CBO predicts these costs will grow over 65 percent between now and 2047 — and then go right on growing after that, heedless of the fact that the percentage of the population that’s over 65 should no longer be increasing.

Why is health care eating the budget? Per-person costs

Demographics aren’t responsible for the projected explosion in health care costs. More important than the growing number of elderly Americans is the growing cost per patient — the rising expense of treating each individual

The CBO found that the lion’s share — 60 percent — of the projected increase in health spending comes from costs that would continue to increase even if our population weren’t getting older.

The reasons for this are many, including the rising cost of prescription drugs and the fact that hospital mergers have reduced competition. But since 2000, per capita health costs in the U.S. have, on average, grown faster than the GDP. And while these costs rose more slowly after the Great Recession and the implementation of the Affordable Care Act, analysis from the Centers for Medicare and Medicaid Services suggests this slower growth rate won’t last.

Which is bad news for these programs, because if the problem were demographic, it’d be easier to solve. By mixing the kind of program cuts Republicans generally support with targeted tax increases favored by some Democrats, you could meet the short-term challenge posed by retiring baby boomers and raise enough money to cover the larger — but stabilizing — population of eligible seniors. But with ever-rising costs, there is no stable future to prepare for. To keep these programs funded, you’d need a wholly different approach — indeed a whole new perspective on mounting federal debt and the role of entitlements.

The future is a race between rising health care costs and economic growth, a race that the economy is losing. Each time health costs outpace the GDP, it creates what the CBO calls “excess cost growth,” which feeds the federal debt. If the government could close this gap, the long-term budget outlook would be a lot rosier.

There are two ways to solve this issue: Either contain health care costs — say through price regulation or more competitive markets — or boost economic growth enough to pay for this expensive health care. Success on either front would make health care spending look more manageable over future decades and lighten the debt load.

Entitlement reform needs health care reform to work

Few of the proposals that commonly fall under the heading of entitlement reform target the health care cost problem, which limits their ability to reduce the long-term debt.

Even when they do address health care, often the result is to shift — rather than solve — the problem. Say lawmakers decide to dramatically cut Medicare. That would indeed ease the government’s debt problem. But the underlying dynamic — the race between health costs and the GDP — wouldn’t really change. Seniors would still need health care, and per-person costs would likely still grow (maybe even faster, since Medicare is a relatively efficient program).

On top of all this, there’s also a deep-seated political barrier: It’s no good if one party picks its favored solution only to watch the other party dismantle it when they next take over. You need political consensus to make changes stick, and America is notably short on consensus right now.

In the end, though, it won’t do to just throw up our hands. Absent some workable solution, spending on health care will sink the federal budget, generating levels of debt that would hold back the economy and potentially spark a global crisis of confidence in the United States’ ability to borrow.

#### Healthcare driven budgetary overstretch causes global instability

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(Stuart S., “Global Power: Key Issues,” in *The Future of US Global Power: Delusions of Decline*, Palgrave, p. 57-58)

In the first instance, structural26 budget deficits are more likely to be symptoms of incipient overstretch then prima facie evidence of national decline. Overstretch suggests a need to realign commitments and resources, hence spending and revenues. In principle, persistently large deficits demand adjustments that need not materially impact the underlying drivers of longer-term prosperity. In contrast, if fiscal imbalances prove sufficiently chronic, they can eventually trigger growth-inhibiting alterations in microeconomic incentives. In such cases, incipient overstretch can mutate into a more primary threat to the system's underlying dynamism.

In its classical formulation, “imperial overstretch” refers to unrestrained and exorbitant foreign military campaigns. The latter can be said to redound to the detriment of great powers by crowding out more productive capital investments. Yet in contrast to widespread impression, the US fiscal challenge does not primarily reflect out-of-control defense spending and the burden of foreign entanglements. If this were the case, then the feasibility of financing an ever-expanding global power projection would be brought into question. This neither minimizes the sizable resources the US commits to military-related spending nor denies that cutbacks in such spending can help facilitate overall fiscal adjustment. Rather, the point is that an endemic failure to rein in explosive economy-wide health care costs with the latter's implications for public sector health insurance programs – the real fiscal challenge – will do more to endanger macroeconomic stability and eventually erode the material foundation of US power (see chapter 8).

By viewing (health-care driven) fiscal deficits as a necessary manifestation of overstretch is misguided for a more basic reason. The root of the US fiscal problem involves unsustainable commitments – particularly in the area of health expenditure – made by government to its citizens. It is decidedly not a question of any dearth of national resources to adequately meet the health needs of the population at large. As the richest country in the world, the US possesses more than enough resources to achieve this goal. The relevant political and social question is whether the population’s basic health requirements are best met via ever-expanding entitlements requiring increasingly higher levels of taxation.

### Adv 1

#### Antitrust is a terrible instrument for addressing hold-ups---wrong remedies and fails to deter future anticompetitive conduct.

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Jorge Contreras, “Equity, Antitrust, and the Reemergence of the Patent Unenforceability Remedy,” October 2011, The Antitrust Source, <https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1187&context=facsch_lawrev>

Agency Enforcement and the Failure of Antitrust Remedies to Address Standards Hold-Up

Public actions to enforce the antitrust laws may be brought by the Department of Justice, the FTC, and state attorneys general. Recently, the FTC has been the most active in seeking to curb deceptive conduct and standards hold-up by means of antitrust enforcement. In Dell Computer, the FTC alleged that Dell’s deception of the Video Electronics Standards Association (VESA) constituted unfair competition affecting commerce and thus violated Section 5 of the FTC Act. In the resulting Consent Agreement, Dell was prohibited from enforcing the asserted patents against any implementer of VESA’s VL-bus standard. The breadth of this remedy flows from the FTC’s broad authority to redress market harm under Section 5. 18

The Dell decision shaped the debate regarding standards hold-up for more than a decade and may have emboldened the agency to exercise its Section 5 authority to police the standard-setting world more broadly. It did so most notably to redress the now-notorious conduct of Rambus both during and after its participation in the Joint Electron Device Engineering Council (JEDEC). As has been discussed at length in numerous books and articles, Rambus allegedly deceived JEDEC participants regarding the patenting of standards on semiconductor DRAM technology. When Rambus began to seek patent royalties from implementers of these standards, the FTC brought an action charging Rambus with violation of Section 5(b) of the FTC Act and Section 2 of the Sherman Act. In 2006 the Commission ruled against Rambus under both theories of liability and ordered, among other things, that Rambus license its patents to all implementers of the standards at specified royalty rates. 19 In 2008, however, the D.C. Circuit reversed the Commission’s ruling, holding that it failed to establish that Rambus’s deceptive conduct harmed competition for purposes of the Sherman Act (i.e., that the relevant standards would not have been adopted but for Rambus’s conduct). The court also cast doubt on the Commission’s Section 5 theory, questioning its generous reading of the vague JEDEC intellectual property policy and its conclusions regarding common practices and expectations within the standard-setting community.

Though the validity of the D.C. Circuit’s reasoning in Rambus has been widely debated, 20 a number of commentators argue that antitrust law has proven to be a suboptimal theory for addressing issues of standards hold-up. 21 The weaknesses of antitrust law arise both when it is used as a theory of liability and also when it is used to fashion remedies (two distinct but inextricably related sides of the antitrust coin). Antitrust suffers as a theory of liability because, as the D.C. Circuit reasoned, a showing of antitrust harm is necessarily tied to market-wide effects on competition, rather than effects on individual competitors. Absent proof of market harm, antitrust injury cannot exist. Indeed, the dissent in Dell made this point in 1995, taking the view that the allegations of the Commission’s complaint failed to demonstrate that Dell obtained market power as a result of its alleged misstatements to the SDO.

Antitrust law also falls short in enabling appropriate remedies for standards hold-up. Thus, while the FTC in Dell fashioned a sweeping order under Section 5 that prohibited Dell from enforcing its patents against any implementer of the VL-bus standard, 22 the Commission’s order eleven years later in Rambus exhibits a significant retreat from this early expansive posture. Perhaps influenced by public commentary and the briefs of the parties or a more refined understanding and appreciation of the market harm arising from such conduct, the FTC in Rambus required that Rambus license its patents to any implementer of the JEDEC standard but also permitted Rambus to collect a specified royalty with respect to this license (a royalty that was lower, of course, than Rambus requested, but significant nonetheless). The rationale for this seeming generosity toward a company that the Commission found to have engaged in a “deliberate course of deceptive conduct”23 can be explained by the Commission’s need to fashion a remedy calculated to address perceived market harm. Indeed, the Commission noted that imposing a requirement of royalty-free licensing on Rambus would be justified only to the extent “necessary to restore the competitive conditions that would have prevailed absent Rambus’s misconduct.”24 Instead, the Commission proceeded to construct an elaborate “reasonable royalty” analysis based on a series of assumptions about how the potential DRAM market would have looked “but for” Rambus’s deceptive conduct, and to set royalty rates for Rambus patents accordingly. While the FTC’s remedy opinion was rendered moot by the D.C. Circuit’s reversal of its liability holding, the fact that the FTC’s analysis would have resulted in the award of ongoing royalties to Rambus despite its deceptive conduct suggests that antitrust remedies may not address all of the harms that are likely to arise in the context of standards hold-up and that perhaps other remedial regimes are more likely both to penalize those engaging in standards hold-up and to deter future instances of hold-up behavior. 25

#### Current cyber norms solve

**Valeriano 15** [Brandon, senior lecturer at the University of Glasgow, Ryan C. Maness, Visiting Fellow of Security and Resilience Studies, Northeastern University, "The Coming Cyberpeace: The Normative Argument Against Cyberwarfare", May 13 2015, Foreign Affairs, <https://www.foreignaffairs.com/articles/2015-05-13/coming-cyberpeace>]

The era of cyberconflict is upon us; at least, experts seem to accept that cyberattacks are the new normal. In fact, however, evidence suggests that cyberconflict is not as prevalent as many believe. Likewise, the severity of individual cyber events is not increasing, even if the frequency of overall attacks has risen. And an emerging norm against the use of severe state-based cybertactics contradicts fear-mongering news reports about a coming cyberapocalypse. The few isolated incidents of successful state-based cyberattacks do not a trend make. Rather, what we are seeing is cyberespionage and probes, not cyberwarfare. Meanwhile, the international consensus has stabilized around a number of limited acceptable uses of cybertechnology—one that prohibits any dangerous use of force. Despite fears of a boom in cyberwarfare, there have been no major or dangerous hacks between countries. The closest any states have come to such events occurred when Russia attacked Georgian news outlets and websites in 2008; when Russian forces shut down banking, government, and news websites in Estonia in 2007; when Iran attacked the Saudi Arabian oil firm Saudi Aramco with the Shamoon virus in 2012; and when the United States attempted to sabotage Iran’s nuclear power systems from 2007 to 2011 through the Stuxnet worm. The attack on Sony from North Korea is just the latest overhyped cyberattack to date, as the corporate giant has recovered its lost revenues from the attack and its networks are arguably more resilient as a result. Even these are more probes into vulnerabilities than full attacks. Russia’s aggressions show that Moscow is willing to use cyberwarfare for disruption and propaganda, but not to inflict injuries or lasting infrastructural damage. The Shamoon incident allowed Iran to punish Saudi Arabia for its alliance with the United States as Tehran faced increased sanctions; the attack destroyed files on Saudi Aramco’s computer network but failed to do any lasting damage. The Stuxnet incident also failed to create any lasting damage, as Tehran put more centrifuges online to compensate for virus-based losses and strengthened holes in their system. Further, these supposedly successful cases of cyberattacks are balanced by many more examples of unsuccessful ones. If the future of cyberconflict looks like today, the international community must reassess the severity of the threat.Cyberattacks have demonstrated themselves to be more smoke than fire. This is not to suggest that incidents are on the decline, however. Distributed denial-of-service attacks and infiltrations increase by the minute—every major organization is probed constantly, but only for weaknesses or new infiltration methods for potential use in the future. Probes and pokes do not destabilize states or change trends within international politics. Even common cyber actions have little effect on levels of cooperation and conflict between states. NORMCORE IS HERE TO STAY A protocol of restraint has emerged as the volume of cyberattacks has increased. State-based cyberattacks are expected, and in some cases tolerated, as long as they do not rise to the level of total offensive operations—direct and malicious incidents that could destroy infrastructure or critical facilities. These options are apparently off the table for states, since they would lead to physical confrontation, collateral damage, and economic retaliation. The reproducibility of cyberattacks has also led states to exercise restraint. Enemies can replicate successful cyberweapons easily if source code and programs find their way into the wild or are reverse-engineered. Cyberweapons are not simple to design, either, which makes their use limited: Stuxnet took years of work by U.S. intelligence (with help from Israel) and cost hundreds of millions of dollars—and it still failed. The risk of creating collateral damage is high, since cyberweaponry cannot provide surgical precision and can spread into other networks of possible allies of the attackers. For example, the Stuxnet worm, intended for Iran’s nuclear program’s network, showed up in Azerbaijan, India, Indonesia, and Pakistan, among other countries. As witnessed in the Russian attack on Georgia, the potential for conflict diffusion is high, as third-party allies can enter conflicts easily. Estonia sent its Computer Emergency Readiness Team experts to Georgia to keep the country’s crucial networks up and running. Poland freed up bandwidth for servers in its territory to keep Georgian government websites up and its people informed. Finally, the risk of retaliation is high, as it is in any war, especially as attribution of perpetrators is getting easier to trace with better forensic techniques. The only drawback is that exposing attribution capabilities often exposes ongoing infiltration methods. All of these considerations have meant that, so far, cyberconflict has adhered to existing international conflict norms. That there have been no major operations resulting in death or the destruction of physical equipment (outside of the Saudi Aramco incident and Stuxnet) suggests trends toward stability and safety. Cyberoperations are increasing, but only in terms of small-scale actions that have limited utility or damage potential. The truly dangerous cyberactions that many warn against have not occurred, even in situations where observers would think them most likely: within the Ukrainian conflict or during NATO’s 2011 operations in Libya. The only demonstrable cyberactivity in the Ukraine crisis has been espionage-level attacks. There is no propaganda, denial of service, or worm or virus activity, as there was in past conflicts involving Russia and post-Soviet states. The overall trend in cyberwarfare indicates that the international community is enjoying a period of stability. The chart below demonstrates that although cybertactics are increasingly popular, the severity of these attacks remains low. On a scale of one to five, where one is a nuisance attack (a website being defaced, for example) and five is a cyber-related death, few attacks register above a two.

#### Food shortages won’t cause war

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(Jeremy, “The sustainability and resilience of global water and food systems: Political analysis of the interplay between security, resource scarcity, political systems and global trade,” Food Policy, Vol. 36 Supplement 1, p. S3-S8, January)

The question of resource scarcity has led to many debates on whether scarcity (whether of food or water) will lead to conflict and war. The underlining reasoning behind most of these discourses over food and water wars comes from the Malthusian belief that there is an imbalance between the economic availability of natural resources and population growth since while food production grows linearly, population increases exponentially. Following this reasoning, neo-Malthusians claim that finite natural resources place a strict limit on the growth of human population and aggregate consumption; if these limits are exceeded, social breakdown, conflict and wars result. Nonetheless, it seems that most empirical studies do not support any of these neo-Malthusian arguments. Technological change and greater inputs of capital have dramatically increased labour productivity in agriculture. More generally, the neo-Malthusian view has suffered because during the last two centuries humankind has breached many resource barriers that seemed unchallengeable. Lessons from history: alarmist scenarios, resource wars and international relations In a so-called age of uncertainty, a number of alarmist scenarios have linked the increasing use of water resources and food insecurity with wars. The idea of water wars (perhaps more than food wars) is a dominant discourse in the media (see for example Smith, 2009), NGOs (International Alert, 2007) and within international organizations (UNEP, 2007). In 2007, UN Secretary General Ban Ki-moon declared that ‘water scarcity threatens economic and social gains and is a potent fuel for wars and conflict’ (Lewis, 2007). Of course, this type of discourse has an instrumental purpose; security and conflict are here used for raising water/food as key policy priorities at the international level. In the Middle East, presidents, prime ministers and foreign ministers have also used this bellicose rhetoric. Boutrous Boutros-Gali said; ‘the next war in the Middle East will be over water, not politics’ (Boutros Boutros-Gali in Butts, 1997, p. 65). The question is not whether the sharing of transboundary water sparks political tension and alarmist declaration, but rather to what extent water has been a principal factor in international conflicts. The evidence seems quite weak. Whether by president Sadat in Egypt or King Hussein in Jordan, none of these declarations have been followed up by military action. The governance of transboundary water has gained increased attention these last decades. This has a direct impact on the global food system as water allocation agreements determine the amount of water that can used for irrigated agriculture. The likelihood of conflicts over water is an important parameter to consider in assessing the stability, sustainability and resilience of global food systems. None of the various and extensive databases on the causes of war show water as a casus belli. Using the International Crisis Behavior (ICB) data set and supplementary data from the University of Alabama on water conflicts, Hewitt, Wolf and Hammer found only seven disputes where water seems to have been at least a partial cause for conflict (Wolf, 1998, p. 251). In fact, about 80% of the incidents relating to water were limited purely to governmental rhetoric intended for the electorate (Otchet, 2001, p. 18). As shown in The Basins At Risk (BAR) water event database, more than two-thirds of over 1800 water-related ‘events’ fall on the ‘cooperative’ scale (Yoffe et al., 2003). Indeed, if one takes into account a much longer period, the following figures clearly demonstrate this argument. According to studies by the United Nations Food and Agriculture Organization (FAO), organized political bodies signed between the year 805 and 1984 more than 3600 water-related treaties, and approximately 300 treaties dealing with water management or allocations in international basins have been negotiated since 1945 (FAO, 1978 and FAO, 1984). The fear around water wars have been driven by a Malthusian outlook which equates scarcity with violence, conflict and war. There is however no direct correlation between water scarcity and transboundary conflict. Most specialists now tend to agree that the major issue is not scarcity per se but rather the allocation of water resources between the different riparian states (see for example Allouche, 2005, Allouche, 2007 and [Rouyer, 2000] ). Water rich countries have been involved in a number of disputes with other relatively water rich countries (see for example India/Pakistan or Brazil/Argentina). The perception of each state’s estimated water needs really constitutes the core issue in transboundary water relations. Indeed, whether this scarcity exists or not in reality, perceptions of the amount of available water shapes people’s attitude towards the environment (Ohlsson, 1999). In fact, some water experts have argued that scarcity drives the process of co-operation among riparians (Dinar and Dinar, 2005 and Brochmann and Gleditsch, 2006). In terms of international relations, the threat of water wars due to increasing scarcity does not make much sense in the light of the recent historical record. Overall, the water war rationale expects conflict to occur over water, and appears to suggest that violence is a viable means of securing national water supplies, an argument which is highly contestable. The debates over the likely impacts of climate change have again popularised the idea of water wars. The argument runs that climate change will precipitate worsening ecological conditions contributing to resource scarcities, social breakdown, institutional failure, mass migrations and in turn cause greater political instability and conflict (Brauch, 2002 and Pervis and Busby, 2004). In a report for the US Department of Defense, Schwartz and Randall (2003) speculate about the consequences of a worst-case climate change scenario arguing that water shortages will lead to aggressive wars (Schwartz and Randall, 2003, p. 15). Despite growing concern that climate change will lead to instability and violent conflict, the evidence base to substantiate the connections is thin ( [Barnett and Adger, 2007] and Kevane and Gray, 2008). zero relationship and no escalation.

### Adv 2

#### No impact to leadership.

**Fettweis** **5-8-17**

(Christopher J.-assistant professor of political science at Tulane University. “Unipolarity, Hegemony, and the New Peace” Published in Security Studies Vol 26 No 3. <http://www.tandfonline.com/doi/abs/10.1080/09636412.2017.1306394?src=recsys&journalCode=fsst20>) mba-alb

Even the most ardent supporters of the hegemonic-stability explanation do not contend that US influence extends equally to all corners of the globe. The United States has concentrated its policing in what George Kennan used to call “strong points,” or the most important parts of the world: Western Europe, the Pacific Rim, and Persian Gulf.64 By doing so, Washington may well have contributed more to great power peace than the overall global decline in warfare. If the former phenomenon contributed to the latter, by essentially providing a behavioral model for weaker states to emulate, then perhaps this lends some support to the hegemonic-stability case.65 During the Cold War, the United States played referee to a few intra-West squabbles, especially between Greece and Turkey, and provided Hobbesian reassurance to Germany’s nervous neighbors. Other, equally plausible explanations exist for stability in the first world, including the presence of a common enemy, democracy, economic interdependence, general war aversion, etc. The looming presence of the leviathan is certainly among these plausible explanations, but only inside the US sphere of influence. Bipolarity was bad for the nonaligned world, where Soviet and Western intervention routinely exacerbated local conflicts. Unipolarity has generally been much better, but whether or not this was due to US action is again unclear. Overall US interest in the affairs of the Global South has dropped markedly since the end of the Cold War, as has the level of violence in almost all regions. There is less US intervention in the political and military affairs of Latin America compared to any time in the twentieth century, for instance, and also less conflict. Warfare in Africa is at an all-time low, as is relative US interest outside of counterterrorism and security assistance.66 **Regional peace and stability exist where there is US active intervention, as well as where there is not. No direct relationship seems to exist across regions**. If intervention can be considered a function of direct and indirect activity, of both political and military action, a regional picture might look like what is outlined in Table 1. These assessments of conflict are by necessity relative, because there has not been a “high” level of conflict in any region outside the Middle East during the period of the New Peace. Putting aside for the moment that important caveat, some points become clear. The great powers of the world are clustered in the upper right quadrant, where US intervention has been high, but conflict levels low. US intervention is imperfectly correlated with stability, however. Indeed, it is conceivable that the **relatively high level of US interest and activity has made the security situation in the Persian Gulf and broader Middle East worse**. In recent years, substantial hard power investments (Somalia, Afghanistan, Iraq), moderate intervention (Libya), and reliance on diplomacy (Syria) have been equally ineffective in stabilizing states torn by conflict. While it is possible that the region is essentially unpacifiable and no amount of police work would bring peace to its people, it remains hard to make the case that the US presence has improved matters. In this “strong point,” at least, US hegemony has failed to bring peace. In much of the rest of the world, the United States has not been especially eager to enforce any particular rules. Even rather incontrovertible evidence of genocide has not been enough to inspire action. Washington’s intervention choices have at best been erratic; Libya and Kosovo brought about action, but much more blood flowed uninterrupted in Rwanda, Darfur, Congo, Sri Lanka, and Syria. The US record of peacemaking is not exactly a long uninterrupted string of successes. During the turn-of-the-century conventional war between Ethiopia and Eritrea, a highlevel US delegation containing former and future National Security Advisors (Anthony Lake and Susan Rice) made a half-dozen trips to the region, but was unable to prevent either the outbreak or recurrence of the conflict. Lake and his team shuttled back and forth between the capitals with some frequency, and President Clinton made repeated phone calls to the leaders of the respective countries, offering to hold peace talks in the United States, all to no avail.67 The war ended in late 2000 when Ethiopia essentially won, and it controls the disputed territory to this day. The Horn of Africa is hardly the only region where states are free to fight one another today without fear of serious US involvement. Since they are choosing not to do so with increasing frequency, something else is probably affecting their calculations. Stability exists even in those places where the potential for intervention by the sheriff is minimal. Hegemonic stability can only take credit for influencing those decisions that would have ended in war without the presence, whether physical or psychological, of the United States. **It seems hard to make the case that the relative peace that has descended on so many regions is primarily due to the kind of heavy hand of the neoconservative leviathan,** or its lighter, more liberal cousin. Something else appears to be at work. Conflict and US Military Spending How does one measure polarity? Power is traditionally considered to be some combination of military and economic strength, but despite scores of efforts, no widely accepted formula exists. Perhaps overall military spending might be thought of as a proxy for hard power capabilities; perhaps too the amount of money the United States devotes to hard power is a reflection of the strength of the unipole. When compared to conflict levels, however, **there is no obvious correlation, and certainly not the kind of negative relationship between US spending and conflict that many hegemonic stability theorists would expect to see**. During the 1990s, the United States cut back on defense by about 25 percent, spending $100 billion less in real terms in 1998 that it did in 1990.68 To those believers in the neoconservative version of hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace,” argued Kristol and Kagan at the time.69 **The world grew dramatically more peaceful while the United States cut its forces**, however, and stayed just as peaceful while spending rebounded after the 9/11 terrorist attacks**. The incidence and magnitude of global conflict declined while the military budget was cut** under President Clinton, in other words, **and kept declining** (though more slowly, since levels were already low) as the Bush administration ramped it back up. Overall US military spending has varied during the period of the New Peace from a low in constant dollars of less than $400 billion to a high of more than $700 billion, but war does not seem to have noticed. The same nonrelationship exists between other potential proxy measurements for hegemony and conflict: **there does not seem to be much connection between warfare and fluctuations in US GDP, alliance commitments, and forward military presence**. There was very little fighting in Europe when there were 300,000 US troops stationed there, for example, and that has not changed as the number of Americans dwindled by 90 percent. Overall, **there does not seem to be much correlation between US actions and systemic stability**. Nothing the United States actually does seems to matter to the New Peace. It is possible that absolute military spending might not be as important to explain the phenomenon as relative. Although Washington cut back on spending during the 1990s, its relative advantage never wavered. The United States has accounted for between 35 and 41 percent of global military spending every year since the collapse of the Soviet Union.70 The perception of relative US power might be the decisive factor in decisions made in other capitals. One cannot rule out the possibility that it is the perception of US power—and its willingness to use it—that keeps the peace. In other words, perhaps it is the grand strategy of the United States, rather than its absolute capability, that is decisive in maintaining stability. It is that to which we now turn. Conflict and US Grand Strategy The perception of US power, and the strength of its hegemony, is to some degree a function of grand strategy. If indeed US strategic choices are responsible for the New Peace, then variation in those choices ought to have consequences for the level of international conflict. A restrained United States is much less likely to play the role of sheriff than one following a more activist approach. Were the unipole to follow such a path, hegemonic-stability theorists warn, disaster would follow. Former National Security Advisor Zbigniew Brzezinski spoke for many when he warned that “outright chaos” could be expected to follow a loss of hegemony, including a string of quite specific issues, including new or renewed attempts to build regional empires (by China, Turkey, Russia, and Brazil) and the collapse of the US relationship with Mexico, as emboldened nationalists south of the border reassert 150-year-old territorial claims. Overall, without US dominance, today’s relatively peaceful world would turn “violent and bloodthirsty.” 71 Niall Ferguson foresees a post-hegemonic “Dark Age” in which “plunderers and pirates” target the big coastal cities like New York and Rotterdam, terrorists attack cruise liners and aircraft carriers alike, and the “wretchedly poor citizens” of Latin America are unable to resist the Protestantism brought to them by US evangelicals. Following the multiple (regional, fortunately) nuclear wars and plagues, the few remaining airlines would be forced to suspend service to all but the very richest cities.72 These are somewhat extreme versions of a central assumption of all hegemonic-stability theorists: a restrained United States would be accompanied by utter disaster. The “present danger” of which Kristol, Kagan, and their fellow travelers warn is that the United States “will shrink its responsibilities and—in a fit of absentmindedness, or parsimony, or indifference— allow the international order that it created and sustains to collapse.” 73 Liberals fear restraint as well, and also warn that a militarized version of primacy would be counterproductive in the long run. Although they believe that the rule-based order established by United States is more durable than the relatively fragile order discussed by the neoconservatives, liberals argue that Washington can undermine its creation over time through thoughtless unilateral actions that violate those rules. Many predicted that the invasion of Iraq and its general contempt for international institutions and law would call the legitimacy of the order into question. G. John Ikenberry worried that Bush’s “geostrategic wrecking ball” would lead to a more hostile, divided, and dangerous world.74 Thus while all hegemonicstability theorists expect a rise of chaos during a restrained presidency, liberals also have grave concerns regarding primacy. Overall, if either version is correct and global stability is provided by US hegemony, then maintaining that stability through a grand strategy based on either primacy (to neoconservatives) or “deep engagement” (to liberals) is clearly a wise choice.75 If, however, US actions are only tangentially related to the outbreak of the New Peace, or if any of the other proposed explanations are decisive, then the United States can retrench without fear of negative consequences. The grand strategy of the United States is therefore crucial to beliefs in hegemonic stability Although few observers would agree on the details, most would probably acknowledge that post-Cold War grand strategies of American presidents have differed in some important ways. The four administrations are reasonable representations of the four ideal types outlined by Barry R. Posen and Andrew L. Ross in 1996.76 Under George H. W. Bush, the United States followed the path of “selective engagement,” which is sometimes referred to as “balance-of-power realism”; Bill Clinton’s grand strategy looks a great deal like what Posen and Ross call “cooperative security,” and others call “liberal internationalism”; George W. Bush, especially in his first term, forged a strategy that was as close to “primacy” as any president is likely to get; and Barack Obama, despite some early flirtation with liberalism, has followed a restrained realist path, which Posen and Ross label “neo-isolationism” but its proponents refer to as “strategic restraint.” 77 In no case did the various anticipated disorders materialize**.** As Table 2 demonstrates, **armed conflict levels fell steadily, irrespective of the grand strategic path Washington chose.** Neither the primacy of George W. Bush nor the restraint of Barack Obama had much effect on the level of global violence. Despite continued warnings (and the high-profile mess in Syria), the world has not experienced an increase in violence while the United States chose uninvolvement. If the grand strategy of the United States is responsible for the New Peace, it is leaving no trace in the evidence. Perhaps we should not expect a correlation to show up in this kind of analysis. While US behavior might have varied in the margins during this period, nether its relative advantage over its nearest rivals nor its commitments waivered in any important way. However, it is surely worth noting that if trends opposite to those discussed in the previous two sections had unfolded, if other states had reacted differently to fluctuations in either US military spending or grand strategy, then surely hegemonic stability theorists would argue that their expectations had been fulfilled. Many liberals were on the lookout for chaos while George W. Bush was in the White House, just as neoconservatives have been quick to identify apparent worldwide catastrophe under President Obama.78 If increases in violence would have been evidence for the wisdom of hegemonic strategies, then logical consistency demands that the lack thereof should at least pose a problem. As it stands, the only evidence we have regarding the relationship between US power and international stability suggests that the two are unrelated. The rest of the world appears quite capable and willing to operate effectively without the presence of a global policeman. Those who think otherwise have precious little empirical support upon which to build their case. Hegemonic stability is a belief, in other words, rather than an established fact, and as such deserves a different kind of examination. The Political Psychology of Unipolarity Evidence supporting the notion that US power is primarily responsible for the New Peace is slim, but belief in the connection is quite strong, especially in policy circles. The best arena to examine the proposition is therefore not the world of measurable rationality, but rather that of the human mind. **Political psychology can shed more light on unipolarity than can any collection of data or evidence**. Just because an outcome is primarily psychological does not mean that it is less real; perception quickly becomes reality for both the unipolar state and those in the periphery. If all actors believe that the United States provides security and stability for the system, then behavior can be affected. Beliefs have deep explanatory power in international politics whether they have a firm foundation in empirical reality or not. Like all beliefs, faith in the stability provided by hegemony is rarely subjected to much analysis.79 Although they almost always have some basis in reality, beliefs need not pass rigorous tests to prove that they match it. No amount of evidence has been able to convince some people that vaccines do not cause autism, for example, or that the world is more peaceful than at any time before, or that the climate is changing due to human activity. Ultimately, as Robert Jervis explains, “we often believe as much in the face of evidence as because of it.” 80 Facts may change, but beliefs remain the same. When leaders are motivated to act based on unjustified, inaccurate beliefs, folly often follows. The person who decides to take a big risk because of astrological advice in the morning’s horoscope can benefit from baseless superstition if the risk pays off. Probability and luck suggest that successful policy choices can sometimes flow from incorrect beliefs. Far more often, however, poor intellectual foundations lead to suboptimal or even disastrous outcomes. It is worthwhile to analyze the foundations of even our most deeply held beliefs to determine which ones are good candidates to inspire poor policy choices in those who hold them. People are wonderful rationalizers. There is much to be said for being the strongest country in the world; their status provides Americans both security and psychological rewards, as well as strong incentives to construct a rationale for preserving the unipolar moment that goes beyond mere selfishness. Since people enjoy being “number one,” they are susceptible to perceiving reality in ways that brings the data in line with their desires. It is no coincidence that most hegemonic stability theorists are American.81 Perhaps the satisfaction that comes with being the unipolar power has inspired Americans to misperceive the positive role that their status plays in the world. Three findings from political psychology can shed light on perceptions of hegemonic stability. They are mutually supportive, and, when taken together, suggest that it is likely that US policymakers overestimate the extent to which their actions are responsible for the choices of others. The belief in the major US contribution to world peace is probably unjustified. The Illusion of Control Could 5 percent of the world’s population hope to enforce rules upon the rest? Would even an internationally hegemonic United States be capable of producing the New Peace? Perhaps, but it also may be true that believers in hegemonic stability may be affected by the very common tendency of people to overestimate their ability to control events. A variety of evidence has accumulated over the past forty years to support Ellen J. Langer’s original observations about the “illusion of control” that routinely distorts perception.82 Even in situations where outcomes are clearly generated by pure chance, people tend to believe that they can exert control over events.83 There is little reason to believe that leaders are somehow less susceptible to such illusions than subjects in controlled experiments. The extensive research on the illusion of control has revealed two further findings that suggest US illusions might be even stronger than average. First, misperceptions of control appear to be correlated with power: individuals with higher socioeconomic status, as well as those who are members of dominant groups, are more likely to overestimate their ability to control events.84 Powerful people tend to be far more confident than others, often overly so, and that confidence leads them to inflate their own importance.85 Leaders of superpowers are thus particularly vulnerable to distorted perceptions regarding their ability to affect the course of events. **US observers had a greater structural predisposition** than others, for example, **to believe that they would have been able to control events** in the Persian Gulf following an injection of creative instability in 2003. The skepticism of less powerful allies was easily discounted. Second, there is reason to believe that culture matters as well as power. People from societies that value individualism are more likely to harbor illusions of control than those from collectivist societies, where assumptions of group agency are more common. When compared to people from other parts of the world, Westerners tend to view the world as “highly subject to personal control,” in the words of Richard Nisbett.86 North Americans appear particularly vulnerable in this regard.87 Those who come from relatively powerful countries with individualistic societies are therefore at high risk for misperceiving their ability to influence events. For the United States, the illusion of control extends beyond the water’s edge. An oft-discussed public good supposedly conferred by US hegemony is order in those parts of the world uncontrolled by sovereign states, or the “global commons.” 88 One such common area is the sea, where the United States maintains the only true blue-water navy in the world. That the United States has brought this peace to the high seas is a central belief of hegemonic-stability theorists, one rarely examined in any serious way. Indeed the maritime environment has been unusually peaceful for decades; the biggest naval battles since Okinawa took place during the Falklands conflict in 1982, and they were fairly minor.89 If hegemony is the key variable explaining stability at sea, maritime security would have to be far more chaotic without the US Navy. It is equally if not more plausible to suggest, however, that the reason other states are not building blue-water navies is not because the United States dissuades them from doing so but rather because none feels that trade is imperiled.90 In earlier times, and certainly during the age of mercantilism, zero-sum economics inspired efforts to cut off the trade of opponents on occasion, making control the sea extremely important. Today the free flow of goods is vital to all economies, and it would be in the interest of no state to interrupt it.91 Free trade at sea may no longer need protection, in other words, because it essentially has no enemies; the sheriff may be patrolling a crime-free neighborhood. The threat from the few remaining pirates hardly requires a robust naval presence, and is certainly not what hegemonic-stability advocates mean when they compare the role played by the US Navy in 2016 to that of the Royal Navy in 1816. It is at least possible that shared interest in open, free commons keeps the peace at sea rather than the United States. Oceans unpatrolled by the US Navy may be about as stable as they are with the presence of its carriers. The degree to which 273 active-duty ships exert control over vast common parts is not at all clear. People overestimate the degree to which they control events in their lives. Furthermore, if these observations from political psychology are right about the factors that influence the growth of illusions of power, then **US leaders and analysts are particularly susceptible to misperception**. They may well be overestimating the degree to which the United States can affect the behavior of others. The rest of the world may be able to get along just fine, on land and at sea, without US attempts to control it. Ego-Centric and Self-Serving Biases in Attribution It is natural for people, whether presidents or commoners, to misperceive the role they play in the thinking process of others. Jervis was the first to discuss this phenomenon, now known as the “ego-centric bias,” which has been put to the test many times since he wrote four decades ago. Building on what was known as “attribution theory,” Jervis observed that actors tend to overestimate their importance in the decisions of others. Rarely are our actions as consequential upon their behavior as we believe them to be.92 This is not merely ego gratification, though that plays a role; actors are simply more conscious of their own actions than the other factors central to the internal deliberations in other capitals. Because people are more likely to remember their contributions to an outcome, they naturally grant themselves more causal weight.93 **Two further aspects of the ego-centric bias make US analysts even more susceptible to its effects.** First, the bias is magnified when the behavior of others is desirable. People generally take credit for positive outcomes and deflect responsibility for negative ones. This “self-serving bias” is one of the best-established findings in modern psychology, supported by many hundreds of studies.94 Supporters of Ronald Reagan are happy to give him credit for ending the Cold War, for instance, even though evidence that the United States had much influence on Premier Gorbachev’s decision making is scant at best.95 Today, since few outcomes are more desirable than global stability, it stands to reason that perceptions of the New Peace are prime candidates for distortion by ego-centric, self-serving biases. When war breaks out, it is not the fault of US leaders; when peace comes to a region, Washington is happy to take credit. There was for some time a debate among psychologists over just how universal self-serving biases were, or whether their effects varied across cultures. Extensive research has essentially settled the matter, to the extent that academic questions can ever be settled: a direct relationship appears to exist between cultural individualism and susceptibility to the bias, perhaps because of the value individualistic societies place on self-enhancement (as opposed to self-effacement).96 Actors from more collectivist societies tend to have their egos rewarded in different ways, such as through contributions to the community and connections to others. People from Western countries are far more likely to take credit for positive outcomes than those from Eastern, in other words, and subjects in the United States tower over the rest of the West. US leaders are therefore more culturally predisposed to believe that their actions are responsible for positive outcomes like peace. Second, self-perception is directly related to egocentric attributions. Individuals with high self-esteem are more likely to believe that they are at the center of the decision-making process of others than those who think somewhat more modestly.97 Leaders of any unipolar state may well be more likely to hold their country in high regard, and therefore are more vulnerable to exaggerated egocentric perceptions, than their contemporaries in smaller states. It might not occur to the lead diplomat of other counties to claim, as did Madeleine Albright, that “if we have to use force, it is because we are America; we are the indispensable nation. We stand tall and we see further than other countries into the future.” 98 It is not unreasonable to suspect that the US security community may be even more vulnerable to this misperception than the average group of people. For example, many in that community believed that the United States played a decisive role in Vladimir Putin’s decisions regarding Crimea and eastern Ukraine. President Obama’s various critics argued that perceptions of American weakness inspired or even invited Russian aggression. The refusal to act in Syria in particular emboldened Moscow (despite the fact that in 2008, in the face of ample displays of US action in the Middle East, Moscow had proven sufficiently bold to invade Georgia). Other critics suggested that a variety of provocative US behaviors since the end of the Cold War, especially the expansion of NATO and dissolution of the Anti-Ballistic Missile Treaty, poisoned US–Russian relations and led to an increase in Kremlin paranoia and eventually to the invasion.99 So, either through provocative weakness or bullying, we were responsible for their actions. Egocentric misperceptions are so ubiquitous and pervasive that they generate something of a law of political psychology: we are probably less influential in others’ decision making than we think we are. This extends to their decisions to resolve contentious issues peacefully. While it may be natural for US policymakers to interpret their role as crucial in the maintenance of world peace, it is very likely that Washington exaggerates its importance in the decision making of others, and in the maintenance of international stability. The effect of the ego-centric bias may be especially difficult for the unipolar United States to resist, because other countries do regularly take Washington’s position into account before acting. But US leaders—and the people who analyze them—should keep in mind that they are still probably less important to calculations made in other capitals than they believe. They may well be especially unlikely to recognize the possibility that hegemony is epiphenomenal, that it exists alongside, but does not affect, global stability and the New Peace. Overestimated Benevolence After three years in the White House, Ronald Reagan had learned something surprising: “Many people at the top of the Soviet hierarchy were genuinely afraid of America and Americans,” he wrote in his autobiography. He continued: “Perhaps this shouldn’t have surprised me, but it did … I’d always felt that from our deeds it must be clear to anyone that Americans were a moral people who starting at the birth of our nation had always used our power only as a force for good in the world…. During my first years in Washington, I think many of us took it for granted that the Russians, like ourselves, considered it unthinkable that the United States would launch a first strike against them.” 100 Reagan is certainly not alone in believing in the essential benevolent image of his nation. While it is common for actors to attribute negative motivations to the behavior of others, it is exceedingly difficult for them to accept that anyone could interpret their actions in negative ways. Leaders are well aware of their own motives and tend to assume that their peaceful intentions are obvious and transparent. Both strains of the hegemonic-stability explanation assume not only that US power is benevolent, but that others perceive it that way. Hegemonic stability depends on the perceptions of other states to be successful; it has no hope to succeed if it encounters resistance from the less powerful members of the system, or even if they simply refuse to follow the rules. Relatively small police forces require the general cooperation of large communities to have any chance of establishing order. They must perceive the sheriff as just, rational, and essentially nonthreatening. The lack of balancing behavior in the system, which has been puzzling to many realists, seems to support the notion of widespread perceptions of benevolent hegemony.101 Were they threatened by the order constructed by the United States, the argument goes, smaller states would react in ways that reflected their fears. Since internal and external balancing accompanied previous attempts to achieve hegemony, the absence of such behavior today suggests that something is different about the US version. Hegemonic-stability theorists purport to understand the perceptions of others, at times better than those others understand themselves. Complain as they may at times, other countries know that the United States is acting in the common interest. Objections to unipolarity, though widespread, are not “very seriously intended,” wrote Kagan, since “the truth about America’s dominant role in the world is known to most observers. And the truth is that the benevolent hegemony exercised by the United States is good for a vast portion of the world’s population.” 102 In the 1990s, Russian protests regarding NATO expansion—though nearly universal—were not taken seriously, since US planners believed the alliance’s benevolent intentions were apparent to all. Sagacious Russians understood that expansion would actually be beneficial, since it would bring stability to their western border.103 President Clinton and Secretary of State Warren Christopher were caught off guard by the hostility of their counterparts regarding the issue at a summit in Budapest in December 1994.104 Despite warnings from the vast majority of academic and policy experts about the likely Russian reaction and overall wisdom of expansion itself, the administration failed to anticipate Moscow’s position.105 The Russians did not seem to believe American assurances that expansion would actually be good for them**. The United States overestimated the degree to which others saw it as benevolent**. Once again, the culture of the United States might make its leaders more vulnerable to this misperception. The need for positive self-regard appears to be particularly strong in North American societies compared to elsewhere.106 Western egos tend to be gratified through self-promotion rather than humility, and independence rather than interdependence. Americans are more likely to feel good if they are unique rather than a good cog in society’s wheel, and uniquely good. The need to be perceived as benevolent, though universal, may well exert stronger encouragement for US observers to project their perceptions onto others. The United States almost certainly frightens others more than its leaders perceive. **A quarter of the 68,000 respondents to a 2013 Gallup poll in sixty-five countries identified the United States as the “greatest threat to world peace**,” which was more than three times the total for the second-place country (Pakistan).107 The international community always has to worry about the potential for police brutality, even if it occurs rarely. Such ungratefulness tends to come as a surprise to US leaders. In 2003, Condoleezza Rice was dismayed to discover resistance to US initiatives in Iraq: “There were times,” she said later, “that it appeared that American power was seen to be more dangerous than, perhaps, Saddam Hussein.” 108 Both liberals and neoconservatives probably exaggerate the extent to which US hegemony is everywhere secretly welcomed; it is not just petulant resentment, but understandable disagreement with US policies, that motivates counterhegemonic beliefs and behavior. To review, assuming for a moment that US leaders are subject to the same forces that affect every human being, they overestimate the amount of control they have over other actors, and are not as important to decisions made elsewhere as they believe themselves to be. And they probably perceive their own benevolence to be much greater than do others. These common phenomena all influence US beliefs in the same direction, and may well increase the apparent explanatory power of hegemony beyond what the facts would otherwise support. The United States is probably not as central to the New Peace as either liberals or neoconservatives believe. In the end, what can be said about the relationship between US power and international stability? Probably not much that will satisfy partisans, and the pacifying virtue of US hegemony will remain largely an article of faith in some circles in the policy world. Like most beliefs, it will remain immune to alteration by logic and evidence. Beliefs rarely change, so debates rarely end. For those not yet fully converted, however, perhaps it will be significant that corroborating evidence for the relationship is extremely hard to identify. If indeed hegemonic stability exists, it does so without leaving much of a trace. **Neither Washington’s spending, nor its interventions, nor its overall grand strategy seem to matter much to the levels of armed conflict around the world** (apart from those wars that Uncle Sam starts). The empirical record does not contain strong reasons to believe that unipolarity and the New Peace are related, and insights from political psychology suggest that hegemonic stability is a belief particularly susceptible to misperception. US leaders probably exaggerate the degree to which their power matters, and could retrench without much risk to themselves or the world around them. Researchers will need to look elsewhere to explain why the world has entered into the most peaceful period in its history. The good news from this is that the New Peace will probably persist for quite some time, no matter how dominant the United States is, or what policies President Trump follows, or how much resentment its actions cause in the periphery. The people of the twenty-first century are likely to be much safer and more secure than any of their predecessors, even if many of them do not always believe it.

#### S risk impact is stupid.

**Pinker 18** (Stephen, professor of psychology at Harvard, “Enlightenment Now: The Case for Reason, Science, Humanism, and Progress, EM)

Prominent among the existential risks that supposedly threaten the future of humanity is a 21st-century version of the Y2K bug. This is the danger that we will be subjugated, intentionally or accidentally, by artificial intelligence (AI), a disaster sometimes called the Robopocalypse and commonly illustrated with stills from the Terminator movies. As with Y2K, some smart people take it seriously. Elon Musk, whose company makes artificially intelligent self-driving cars, called the technology “more dangerous than nukes.” Stephen Hawking, speaking through his artificially intelligent synthesizer, warned that it could “spell the end of the human race.”19 But among the smart people who aren’t losing sleep are most experts in artificial intelligence and most experts in human intelligence. The Robopocalypse is based on a muzzy conception of intelligence that owes more to the Great Chain of Being and a Nietzschean will to power than to a modern scientific understanding.21 In this conception, intelligence is an all-powerful, wish-granting potion that agents possess in different amounts. Humans have more of it than animals, and an artificially intelligent computer or robot of the future (“an AI,” in the new count-noun usage) will have more of it than humans. Since we humans have used our moderate endowment to domesticate or exterminate less well-endowed animals (and since technologically advanced societies have enslaved or annihilated technologically primitive ones), it follows that a supersmart AI would do the same to us. Since an AI will think millions of times faster than we do, and use its superintelligence to recursively improve its superintelligence (a scenario sometimes called “foom,” after the comic-book sound effect), from the instant it is turned on we will be powerless to stop it.22 But the scenario makes about as much sense as the worry that since jet planes have surpassed the flying ability of eagles, someday they will swoop out of the sky and seize our cattle. The first fallacy is a confusion of intelligence with motivation—of beliefs with desires, inferences with goals, thinking with wanting. Even if we did invent superhumanly intelligent robots, why would they want to enslave their masters or take over the world? Intelligence is the ability to deploy novel means to attain a goal. But the goals are extraneous to the intelligence: being smart is not the same as wanting something. It just so happens that the intelligence in one system, Homo sapiens, is a product of Darwinian natural selection, an inherently competitive process. In the brains of that species, reasoning comes bundled (to varying degrees in different specimens) with goals such as dominating rivals and amassing resources. But it’s a mistake to confuse a circuit in the limbic brain of a certain species of primate with the very nature of intelligence. An artificially intelligent system that was designed rather than evolved could just as easily think like shmoos, the blobby altruists in Al Capp’s comic strip Li’l Abner, who deploy their considerable ingenuity to barbecue themselves for the benefit of human eaters. There is no law of complex systems that says that intelligent agents must turn into ruthless conquistadors. Indeed, we know of one highly advanced form of intelligence that evolved without this defect. They’re called women. The second fallacy is to think of intelligence as a boundless continuum of potency, a miraculous elixir with the power to solve any problem, attain any goal.23 The fallacy leads to nonsensical questions like when an AI will “exceed human-level intelligence,” and to the image of an ultimate “Artificial General Intelligence” (AGI) with God-like omniscience and omnipotence. Intelligence is a contraption of gadgets: software modules that acquire, or are programmed with, knowledge of how to pursue various goals in various domains.24 People are equipped to find food, win friends and influence people, charm prospective mates, bring up children, move around in the world, and pursue other human obsessions and pastimes. Computers may be programmed to take on some of these problems (like recognizing faces), not to bother with others (like charming mates), and to take on still other problems that humans can’t solve (like simulating the climate or sorting millions of accounting records). The problems are different, and the kinds of knowledge needed to solve them are different. Unlike Laplace’s demon, the mythical being that knows the location and momentum of every particle in the universe and feeds them into equations for physical laws to calculate the state of everything at any time in the future, a real-life knower has to acquire information about the messy world of objects and people by engaging with it one domain at a time. Understanding does not obey Moore’s Law: knowledge is acquired by formulating explanations and testing them against reality, not by running an algorithm faster and faster.25 Devouring the information on the Internet will not confer omniscience either: big data is still finite data, and the universe of knowledge is infinite. For these reasons, many AI researchers are annoyed by the latest round of hype (the perennial bane of AI) which has misled observers into thinking that Artificial General Intelligence is just around the corner.26 As far as I know, there are no projects to build an AGI, not just because it would be commercially dubious but because the concept is barely coherent. The 2010s have, to be sure, brought us systems that can drive cars, caption photographs, recognize speech, and beat humans at Jeopardy!, Go, and Atari computer games. But the advances have not come from a better understanding of the workings of intelligence but from the brute-force power of faster chips and bigger data, which allow the programs to be trained on millions of examples and generalize to similar new ones. Each system is an idiot savant, with little ability to leap to problems it was not set up to solve, and a brittle mastery of those it was. A photo-captioning program labels an impending plane crash “An airplane is parked on the tarmac”; a game-playing program is flummoxed by the slightest change in the scoring rules.27 Though the programs will surely get better, there are no signs of foom. Nor have any of these programs made a move toward taking over the lab or enslaving their programmers. Even if an AGI tried to exercise a will to power, without the cooperation of humans it would remain an impotent brain in a vat. The computer scientist Ramez Naam deflates the bubbles surrounding foom, a technological Singularity, and exponential self-improvement: Imagine that you are a superintelligent AI running on some sort of microprocessor (or perhaps, millions of such microprocessors). In an instant, you come up with a design for an even faster, more powerful microprocessor you can run on. Now . . . drat! You have to actually manufacture those microprocessors. And those fabs [fabrication plants] take tremendous energy, they take the input of materials imported from all around the world, they take highly controlled internal environments which require airlocks, filters, and all sorts of specialized equipment to maintain, and so on. All of this takes time and energy to acquire, transport, integrate, build housing for, build power plants for, test, and manufacture. The real world has gotten in the way of your upward spiral of self-transcendence.28 The real world gets in the way of many digital apocalypses. When HAL gets uppity, Dave disables it with a screwdriver, leaving it pathetically singing “A Bicycle Built for Two” to itself. Of course, one can always imagine a Doomsday Computer that is malevolent, universally empowered, always on, and tamperproof. The way to deal with this threat is straightforward: don’t build one. As the prospect of evil robots started to seem too kitschy to take seriously, a new digital apocalypse was spotted by the existential guardians. This storyline is based not on Frankenstein or the Golem but on the Genie granting us three wishes, the third of which is needed to undo the first two, and on King Midas ruing his ability to turn everything he touched into gold, including his food and his family. The danger, sometimes called the Value Alignment Problem, is that we might give an AI a goal and then helplessly stand by as it relentlessly and literal-mindedly implemented its interpretation of that goal, the rest of our interests be damned. If we gave an AI the goal of maintaining the water level behind a dam, it might flood a town, not caring about the people who drowned. If we gave it the goal of making paper clips, it might turn all the matter in the reachable universe into paper clips, including our possessions and bodies. If we asked it to maximize human happiness, it might implant us all with intravenous dopamine drips, or rewire our brains so we were happiest sitting in jars, or, if it had been trained on the concept of happiness with pictures of smiling faces, tile the galaxy with trillions of nanoscopic pictures of smiley-faces.29 I am not making these up. These are the scenarios that supposedly illustrate the existential threat to the human species of advanced artificial intelligence. They are, fortunately, self-refuting.30 They depend on the premises that (1) humans are so gifted that they can design an omniscient and omnipotent AI, yet so moronic that they would give it control of the universe without testing how it works, and (2) the AI would be so brilliant that it could figure out how to transmute elements and rewire brains, yet so imbecilic that it would wreak havoc based on elementary blunders of misunderstanding. The ability to choose an action that best satisfies conflicting goals is not an add-on to intelligence that engineers might slap themselves in the forehead for forgetting to install; it is intelligence. So is the ability to interpret the intentions of a language user in context. Only in a television comedy like Get Smart does a robot respond to “Grab the waiter” by hefting the maître d’ over his head, or “Kill the light” by pulling out a pistol and shooting it. When we put aside fantasies like foom, digital megalomania, instant omniscience, and perfect control of every molecule in the universe, artificial intelligence is like any other technology. It is developed incrementally, designed to satisfy multiple conditions, tested before it is implemented, and constantly tweaked for efficacy and safety (chapter 12). As the AI expert Stuart Russell puts it, “No one in civil engineering talks about ‘building bridges that don’t fall down.’ They just call it ‘building bridges.’” Likewise, he notes, AI that is beneficial rather than dangerous is simply AI.

## 2NC

### Section 5 CP

#### Modifications to the Sherman or Clayton act operate too slow and harm innovation---sole Section 5 use is the best way to minimize firm harm and maintain innovation.

Crane 13 – Professor of Law, University of Michigan.

Daniel Crane, 2013, “Section 5 and the Innovation Curve,” University of Michigan Law School, <https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1125&context=book_chapters>

There is a case to be made for using Section 5 to remove restraints on innovation that might not be reachable under the Sherman Act because the technological conditions they raise have not previously been considered. But that case should not amount to an undiff erentiated assumption that legal innovation by the FTC should be applied consistently to keep pace with technological innovation. To the contrary, legal innovation will oft en be grossly outpaced by technological innovation. No amount of effort or determination to enhance the alacrity of legal innovation will do the trick, as even commissions (as contrasted with courts, which are notably ponderous) are constitutionally incapable of keeping up with many fast-moving industries. Nor would it be wise to rush the rate of legal innovation with the hopes of staying within sight of the technological innovation—like the turtle taking steroids to keep within striking distance of the hare. A legal innovation that lags a generation behind the technological state of the art will often do far more damage than good.

It should be clear that there is a time for declining to apply even traditional antitrust rules when the pace of innovation is so fast that application of the rule might interfere with technological progress. In the specifi c context of Section 5, the question is whether the Commission should be entitled to go beyond traditional antitrust principles—to impose liability beyond that which would obtain under the Sherman Act. Where the rate of innovation is high, and particularly where the innovation curve is steep, it should not.

#### Doing both undermines the authority of the FTC as companies will win Section 2 litigations and use them to undermine Section 5 authority.

Rosch 11 – Commissioner, Federal Trade Commission.

J. Thomas Rosch, January 27 2011, “The Great Doctrinal Debate: Under What Circumstances is Section 5 Superior to Section 2?” Federal Trade Commission, https://www.ftc.gov/sites/default/files/documents/public\_statements/great-doctrinal-debate-under-what-circumstances-section-5-superior-section-2/110127barspeech.pdf

Some may say that the Commission has a fourth option which is to sue in Part 3 under both Section 2 and Section 5, as the majority elected to do in Intel. To be honest, the trial lawyer in me hasn’t yet been persuaded that a tag-along Section 2 claim will ever make sense if the Commission’s goal is to actually win a Section 5 case. The minute we allege both claims, the respondent has the upper hand because it can go before the ALJ (and ultimately an appellate court, if necessary) and get a ruling on the Section 2 claim. Once a court finds that conduct is protected under Section 2, I think a federal court is going to be hard pressed to say the same conduct is nevertheless inappropriate under Section 5. The reason for this is that the core of any Section 5 argument must be that the Commission has special expertise to add and that, for whatever reason, the conduct should not be subject to damages. Once the Commission has proffered the Section 2 claim, it has severely undercut these arguments. It was for this reason, in addition to the others that I discussed above, that I dissented from the Commission’s decision to challenge Intel’s conduct under Section 2.19

#### Severs “expand the scope”: agencies can’t do that.

Cook 95 – Judge, Illinois Appeals Court, Fourth District

Robert W. Cook, Springwood Assocs. v. Health Facilities Planning Bd., 269 Ill. App. 3d 944, Appellate Court of Illinois, Fourth District, March 1995, LexisNexis

With regard to the Board's position, we note that the regulations must control in the event of a conflict between the regulations and the application instructions. The regulations have the force and effect of law ( Union Electric, 136 Ill. 2d at 391, 556 N.E.2d at 239); the application and instructions do not. The application and instructions merely represent the Board's interpretation of the information which it needs in order to determine the need for a proposed project. While such an interpretation is entitled to some deference, it is not binding on a court. Further, an agency interpretation cannot expand or limit the scope of the relevant statute. ( Van's Material Co. v. Department of Revenue (1989), 131 Ill. 2d 196, 202-03, 545 N.E.2d 695, 699, 137 Ill. Dec. 42.) The regulation in question here required "market studies of the area indicating the characteristics of the population to be served." ( 77 Ill. Adm. Code § 1110.230(a)(1) (1992-93).) This is not the same as a memo of the facility's own internal experiences. Other interested parties cannot easily question the facility's own internal reports. The fact that many of a facility's present patients are from a given area does not necessarily predict the future population of the facility.

#### Severs “core antitrust laws”---they’re the Sherman and Clayton Acts.

Felsenfeld 93 – Professor of Law, Fordham University School of Law

Carl Felsenfeld, “The Bank Holding Company Act: Has It Lived Its Life?,” Villanova Law Review, Vol. 38, January 1993, LexisNexis

It is well established that, despite the "extensive blanket of state and federal regulation of commercial banking, much of which is aimed at limiting competition,"480 the United States' core antitrust statutes (the Sherman and Clayton Acts) apply to banks.481 There is respectable opinion that "existing antitrust laws are fully adequate to guard against anticompetitive mergers or acquisitions, or other anticompetitive activity, in the banking industry."482 A proposal to remove the BHCA, however, is not a suggestion that only the Sherman and Clayton Acts would impose antitrust limitations on banks. The other bank laws and regulations would continue in effect.483

Whether the antitrust laws are sufficient to curb bank abuse that is otherwise dealt with by the BHCA has been disputed. One relatively early opinion suggested that illicit bank behavior is "almost impossible to detect and prove in a court of law" and, consequently, explicit legislation, like the BHCA, which foreclosed banks from other fields was desirable. 484 In contrast, a former Deputy Assistant Attorney General for Antitrust later opined that bank antitrust problems within the BHCA sphere are simply traditional antitrust issues that can be dealt with by those laws.485 He was countered by a then current Attorney General for Antitrust who believed the BHCA was essential to keep banks separate from commerce.486 Because these last two views were expressed in 1969 and 1970, one must assess current antitrust laws to analyze what view is valid today.487

There is a high degree of flexibility in the antitrust laws. One of the functions of the antitrust laws is to adapt their application to the particular industry under consideration and to the particular markets within which the industry operates.488 The general approach of the antitrust laws towards a merger or consolidation of the sort that currently requires preapproval under the BHCA is to accept the industry in its existing form as the norm and then to establish the effects of the merger or acquisition in terms of its effects on that norm. The net effect is the antitrust laws' disposition in favor of the existing structure.

The Justice Department has the power under existing law to challenge banking mergers and acquisitions for violation of the antitrust laws even when the Fed has first found the BHCA's antitrust tests satisfied.489 For example, in December 1990, the Justice Department challenged the acquisition of First Interstate of Hawaii, Inc. by First Hawaiian, Inc. under the BHCA even though the Fed had approved the transaction. The suit was settled by the agreement of the parties to a divestiture plan proposed by the Justice Department.490 In July 1991, the Justice Department challenged an acquisition by Fleet/Norstar of assets from the FDIC after the transaction was approved by the Fed under the Bank Merger Act.491 As these two cases show, the Justice Department has sufficient regulatory authority to police the antitrust aspects of bank acquisitions effectively without the BHCA statutory protections.

2. Federal Trade Commission Act

Secondary to the core antitrust laws, and of more potential than experiential significance in regulating bank holding company behavior in the absence of the BHCA, is the Federal Trade Commission Act (FTC Act). \492 In its broad scope the FTC Act is inapplicable to banks. 493 The FTC, however, may require banks to produce documentary evidence required during agency investigations. 494 The FTC Act's basic function is the prevention of precisely the type of activity that banks and their nonbank affiliates were accused of in the initial drafting of and amendments to the BHCA 495 - the perpetration of "unfair methods of competition." 496

#### Non-respondent liability can be used in lieu of any court proceedings---means preemption doesn’t matter. BUT, preemption also literally doesn’t make any sense bc it’s abt how fed and state law interact.

Melissa and Saunders 21 – Melissa Runsten is a corporate associate and a member of the Healthcare & Life Sciences Group. Her practice focuses on FDA/FTC regulatory matters and includes the representation of drug, device, food, cosmetic and other consumer product companies. Adam Saunders is an associate in the Litigation Department and a member of the firm’s Commercial Litigation and Antitrust Practice Groups. Mr. Saunders has extensive experience with complex commercial matters in both Federal and state court, including insurance and securities class actions, contractual disputes, and antitrust concerns before the U.S. Department of Justice and Federal Trade Commission.

Melissa Runsten and Adam Saunders, April 26 2021, “Unanimous Supreme Court Curtails the Federal Trade Commission’s Authority to Obtain Monetary Remedies in Federal Court,” Debevoise and Plimpton, https://www.debevoise.com/insights/publications/2021/04/unanimous-supreme-court-curtails-the-federal-trade

Moving forward, the FTC is likely to rely more heavily on administrative actions in lieu of initial proceedings in federal court. If the Commission issues a final administrative cease and desist order, the FTC may then bring a subsequent federal court case to obtain monetary remedies, though it would face a heightened standard of proof requiring evidence of “dishonest or fraudulent” conduct.11 Similarly, the FTC is likely to bring more “non-respondent liability” (also called “penalty offense authority”) cases, where the FTC fully adjudicates a matter, obtains a final cease and desist order, widely distributes the order provisions and then charges third parties for knowingly violating the order provisions. In fact, FTC Commissioner Rohit Chopra (who has been nominated to lead the Consumer Financial Protection Bureau and will likely be leaving the FTC in the near future) recently suggested the FTC should more frequently bring such cases.

#### They’re wrong---consensus is in favor of Section 5 being broader than the Sherman Act.

Lande 09 – Robert H. Lande is Venable Professor of Law, University of Baltimore School of Law.

Robert Lande, February 2009, “Revitalizing Section 5 of the FTC Act Using “Consumer Choice” Analysis,” University of Baltimore Law, https://scholarworks.law.ubalt.edu/cgi/viewcontent.cgi?article=1727&context=all\_fac

There is no doubt that when Congress enacted Section 5 of the FTC Act, it intended the law to be more aggressive than the Sherman and Clayton Acts. 1 The legislative history and Supreme Court decisions2 demonstrate that Section 5 was intended to cover incipient violations of the other antitrust laws, conduct violating the spirit of the other antitrust laws, conduct violating recognized standards of business behavior, and conduct violating competition policy as framed by the Commission. 3 Even though reasonable people may differ as to whether the FTC Act should be more expansive than the other antitrust laws, congressional intent concerning this point is clear. 4 Some might question the propriety of subjecting conduct to a different, tougher legal standard when it is challenged under Section 5 of the FTC Act. For example, one might ask why an exclusive dealing arrangement should be evaluated under an incipiency standard when it is challenged under the FTC Act, but not when challenged under the Sherman Act? 5 One answer is that Sherman Act violations lead to automatic treble damages and award of attorneys’ fees to victorious plaintiffs. 6 By contrast, there is no private right of action under the FTC Act, and FTC Act violations are not precedents that lead to private litigation unless an FTC decision specifically finds a Sherman Act or Clayton Act violation; a “pure” FTC Act violation would not do this. 7 Moreover, mergers already are judged under two different laws that employ two different standards. Mergers can potentially violate Section 2 of the Sherman Act, 8 but only if they violate a monopolization standard. Mergers also can violate Section 7 of the Clayton Act, where they are scrutinized under a much stricter incipiency standard. 9 In other words, despite the existence of the 1890 Sherman Act, Congress wanted mergers challenged more aggressively, so in 1914 it enacted the Clayton Act. Similarly, Congress believed that the Sherman Act was not aggressive, flexible, or broad enough, 10 so in 1914 it enacted the FTC Act.

#### Informing companies of prior determinations makes them assume liability under Section 5.

Chopra and Levine 20 – Commissioner, Federal Trade Commission. Attorney Advisor to Commissioner Rohit Chopra, Federal Trade Commission.

Rohit Chopra and Samuel A.A. Levine, November 3 2020, “The Case for Resurrecting the FTC Act’s Penalty Offense Authority,” University of Pennsilvania Law Review, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3721256&download=yes

The Commission has rarely deployed its Penalty Offense Authority, but it can offer three key advantages over seeking monetary relief solely under Section 13(b). First, the authority allows the Commission to seek civil penalties, which unlike equitable relief can be calibrated to actually deter wrongful conduct, while promoting practices like self-reporting. Second, particularly given the challenges before the Supreme Court, the Penalty Offense Authority creates less litigation risk than 13(b). Finally, the Authority is well-suited to having a market-wide impact, which promotes widespread compliance and saves taxpayer resources. Each of these advantages is discussed in turn. (i) Deterrence The most important difference between Section 13(b) and the Penalty Offense Authority is that 13(b) authorizes the Commission to seek equitable monetary relief – restitution and disgorgement – while the Penalty Offense Authority authorizes the agency to seek civil penalties. Penalties offer a number of advantages over restitution or disgorgement available through Section 13(b), particularly when it comes to effectuating general deterrence. As discussed above, equitable relief under Section 13(b) is awarded based on a fairly rigid formula, according to which an award generally cannot exceed the amount directly lost by victims or earned by wrongdoers. This formula can under-deter serious wrongdoing, especially when the consequences of that wrongdoing are difficult to calculate, or far exceed direct losses or gains. In fact, the Supreme Court has indicated that punitive remedies are not available in equity.85 Unlike equitable relief, civil penalties are, by their nature, punitive. They are intended not only to punish the wrongdoer but also to deter others from engaging in similar misconduct.86 Because the likelihood of being caught by a law enforcement agency is usually very low, basic deterrence theory indicates that penalties on those who are caught must be severe. As one economist put it: Since some who engage in deception will not be caught, the actual fine must be greater than the observed harm for those who are detected. If, for example, one offender of three is detected, then the fine must be equal to three times the harm caused by those who are punished.87 Penalties can and should exceed ill-gotten gains. In a 2012 action against Google, for example, the Commission estimated that the penalties obtained (based on an alleged order violation) constituted more than five times the company’s ill-gotten gains.88 Meanwhile, penalties that do not exceed (or even capture) illgotten gains are generally too lenient, in that they are unlikely to deter others from engaging in similar misconduct, especially when the likelihood of detection is low.89 In addition to deterring wrongful conduct more effectively than equitable relief, civil penalties can be calibrated to the severity of the misconduct. 90 The FTC Act already lays out factors for courts to consider when ordering civil penalties. However, the Commission has never issued any interpretive rules or guidance, and these factors leave courts with considerable discretion.91 In contrast, many agencies explicitly outline when self-reporting of unlawful conduct will be rewarded with a degree of leniency.92 Armed with civil penalty authority, the Commission can do the same.93 Notably, in addition to advancing deterrence, civil penalties can also further the goal of obtaining adequate equitable relief. When the Commission has a clear basis to seek civil penalties against a firm, it is well positioned to instead seek fulsome redress as part of a negotiated settlement, or to seek a combination of the two. As noted earlier, a unique feature of civil penalty actions is that the Commission must refer complaints for civil penalties to the Attorney General to litigate the matter in the name of the United States. This has been successful. For example, in 2017, the Department of Justice litigated to a final judgment a civil penalty action against Dish Network. The judgment included $280 million in civil penalties.94 This arrangement also allows the Department of Justice to evaluate the Commission’s investigation for violations of other civil and criminal statutes. It can also bring to bear the expertise of the appropriate federal prosecutor, such as the United States Attorney of a federal district, whose office may have unique insights into local markets where the conduct may have occurred. The arrangement can help preserve FTC resources while also preserving its independence. If the Attorney General does not take action within 45 days of the civil penalty action referral, the Commission may file the complaint in its own name.95 In addition, the Attorney General will generally not settle any Commission referral without the agency’s assent.96 If the Commission resurrects the use of the Penalty Offense Authority, the agency should formalize an agreement between the Federal Trade Commission and the Attorney General that would help to mature and operationalize the existing referral process, which has the risk of being undermined by turf battles unrelated to the underlying goals of the enforcement action.

### Innovation DA

#### Timeframe—Immediate implementation is bad—it undermines the economic recovery—turns case.

Jan Rybnicek is Counsel in the antitrust practice of Freshfields Bruckhaus Deringer and a Senior Fellow at the Global Antitrust Institute at Antonin Scalia Law School at George Mason University, February 12, 2021, Op-ed: Recent antitrust proposals could ‘throw sand in the gears’ of economic recovery by stalling M&A, https://www.cnbc.com/2021/02/12/op-ed-recent-antitrust-proposals-add-friction-to-ma-at-wrong-time.html

Last year, some in Congress called for a merger moratorium banning all M&A during the pandemic. Then, in a surprise announcement, the FTC — over the objection of two commissioners — said it would no longer quickly approve the vast majority of transactions notified to the government that cannot plausibly reduce competition. Most recently, Senator Amy Klobuchar, D-Minn., introduced antitrust reform legislation that would give the government even greater power to block M&A it deems problematic.

While these proposals are well-intentioned, they threaten to throw sand in the gears of the economy and to do far more harm than good. Adding friction to M&A activity has the potential to stall capital markets, reduce innovation and investment, and frustrate economic growth. And it does so at precisely the wrong time — when the nation is attempting an economic recovery during an ongoing global pandemic that has upended how we work.

Antitrust has seized lawmakers’ interest like no other time in modern memory. Senator Klobuchar’s legislation is the most ambitious attempt to reform the antitrust laws in nearly half a century. A key focus of the bill is to make it even easier for the federal antitrust authorities — the Federal Trade Commission (FTC) and the Department of Justice (DOJ) — to intervene in private parties’ dealings by blocking M&A that they decide will harm competition.

Under existing law, the antitrust agencies must convince a judge that a deal is likely to substantially lessen competition in order to obtain an injunction preventing the transaction. The agencies bear the burden in proving their case. That typically has not been too tall an order. While reviewing a government challenge to a small grocery store merger and lamenting the internal contradictions in antitrust law, Supreme Court Justice Potter Stewart once observed that the only thing consistent about merger litigation is that the government always wins.

Over the last several decades, antitrust has become a more principled body of law through the incorporation of economics and a focus on promoting consumer welfare, but one thing has not changed: the government still nearly always wins.

Reform advocates would have you believe that the FTC and DOJ show up in court on a wing and a prayer and rarely are able to convert the power and credibility of the federal government into merger litigation victories. But reality is far different. The government has no problem blocking mergers it believes are problematic. Over the last 20 years the DOJ and FTC have prevailed in nearly 85% of merger challenges. That is a record any litigator would envy. And the government’s win-rate only improves when looking at more recent cases. In fact, after the DOJ or FTC challenge a merger, companies more often than not abandon their deal before trial because the legal standard is so favorable to the government. This even includes successful challenges against deals involving the acquisition of a nascent firm that does not compete against the acquirer today but, in the government’s view, could in the future, such as the DOJ’s recent success in blocking Visa’s purchase of fintech upstart Plaid.

Senator Klobuchar’s legislation would put the thumb on the scale even more in favor of the government. It would lower the legal standard and allow the government to stop any deal that raises even an “appreciable risk of materially lessening competition.” It also would create presumptions against large deals that do not even involve competitors. Most significantly, the legislation flips the traditional burdens of proof on their head and requires defendants to prove that their deal should be allowed to close. In light of the disadvantages companies already face when confronted with government opposition, such changes are unwarranted, unless you believe the government is infallible and should win 100% of its cases.

Giving the government greater discretion to intervene in deals would add unnecessary friction to the M&A market and reduce the types of investments that have fueled U.S. economic growth, including in the many startups whose founders and investors develop new and innovative products in part due to the prospect of exit through M&A.

#### Link alone turns case – big companies will use the aff’s expanded liability to screw over competitors.

Dorsey et al., Associate at Wilson Sonsini Goodrich, ‘18

(Elyse, Rosati. Jan M. Rybnicek is a Senior Associate at Freshfields Bruckhaus Deringer, and Joshua D. Wright, JD, PhD, University Professor and the Executive Director, Global Antitrust

Institute, Scalia Law School at George Mason University, Former FTC Commissioner, “Hipster Antitrust Meets Public Choice Economics: The Consumer Welfare Standard, Rule of Law, and Rent Seeking,” CPI Antitrust Chronicle, April)

Additionally, the incredibly costly nature of antitrust proceedings exacerbates its vulnerability to rent seeking.39 Antitrust cases and investigations can drag on for years, entail the collecting, processing, and production of millions of documents, and involve tremendous attorneys’ fees. Remedies (or consent terms) can be invasive, last for years, and impair a defendant’s ability to adapt to changing circumstances and thus to remain competitively viable. Looming in the background is the possibility of trebled damages at the end of the day. Consider that an unhappy competitor could embroil a rival in an antitrust quagmire via its own litigation, or by complaining to a government agency and potentially triggering an investigation, that would divert significant amounts of that rival’s resources for years — thereby crippling a rival and diminishing the amount of competition it faces. With so much at stake, conditions are ripe for actors to engage in just such rent-seeking activities in an attempt to appropriate some of this vast wealth for themselves. The empirical evidence and historical record of antitrust actions — particularly during the era when antitrust was explicitly governed by a vague, multi-faceted standard — provide ample support for public choice theory and the economic theory of regulation, while tending to reject the public interest account of regulatory behavior.40

Finally, given this reality, what can be done to mitigate rent seeking? Public choice economics instructs that rent seeking opportunities are diminished when agencies have less discretion (e.g. when rules are clearer) and when another body (e.g. the public, a court, Congress) can more easily hold them accountable for their actions — factors that tend to go hand-in-hand.41 The rule of law thus diminishes incentives for rent seeking and corruption. When these constraining factors are in place, agencies have lowered ability to depart from what is required of them or to otherwise manipulate outcomes to respond to rent-seeking incentives. As such, what antitrust enforcement craves is a clear, well-established standard by which the public and the courts can evaluate agency decisions and identify and correct any deviations that undermine consumer outcomes.

#### The threshold is small – lowered plaintiff burdens means tech companies like are subject to more treble damages – treble damages force companies to significantly limit investment in tech to avoid liability

Delrahim, JD, former Assistant Attorney General for the Antitrust Division of the United States Department of Justice, ‘20

(Makan, “Assistant Attorney General Makan Delrahim Delivers Remarks at IAM’s Patent Licensing Conference in San Francisco,” September 18, <https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-iam-s-patent-licensing>)

It can be a serious mistake for a court to allow either type of claim to proceed under the Sherman Act. To understand why that is the case, one should consider the policies underlying Section 2 of the Sherman Act.

One crucial element in establishing any claim of unlawful monopolization under Section 2 is a showing that a defendant acquired, enhanced, or maintained monopoly power in the relevant market through anticompetitive conduct that is “exclusionary” or “predatory” in nature. I will focus on so-called “exclusionary” conduct—the umbrella concept often invoked by licensees bringing Section 2 claims premised on FRAND violations.

The term exclusionary conduct in antitrust law is potentially misleading because there is a difference under the Sherman Act between “lawful” and “unlawful” conduct that results in exclusion of a competitive alternative. In market economies, every rational business wants to exclude and defeat its competitors, and indeed antitrust law encourages fierce competition among companies aiming for as high a market share as they can achieve. That is why courts applying Section 2 are careful not to condemn “exclusionary” conduct that is driven by competition on the merits such as innovation. Most obviously, legitimate competition on the merits can be “exclusionary” in the sense that consumers choose a superior product or service. That conduct does not violate Section 2. By comparison, conduct that “excludes” a competitor by hindering its ability to offer a superior product or service, without offering any benefit to competition, likely would constitute a Section 2 violation.

When courts police the line between lawful and unlawful “exclusionary” conduct, a few themes emerge.

First, courts have recognized that not every type of conduct that may enhance a business’s market power is actionable, such as when the application of Section 2 would impose a duty that contravenes the policies of the antitrust laws themselves. For example, in Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, the plaintiff alleged that Verizon refused to deal with a rival in order to limit competitive entry, thereby enhancing its monopoly position. The Supreme Court held that the claim did not satisfy Section 2 as a matter of law. That is because the claim would condemn a monopolist’s refusal to share its resources and effectively would create an antitrust duty to help a competitor. Such a duty, the Court explained, is in “tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities.” The Court applied a legal rule, rather than a fact-specific rule, to protect conduct that may have an exclusionary, monopoly-enhancing effect.

Second, the Supreme Court has cautioned against antitrust standards that would create an unacceptable risk of “false positives” or condemnations of lawful pro-competitive conduct. As the Court has explained, “Mistaken inferences and the resulting false condemnations ‘are especially costly, because they chill the very conduct the antitrust laws are designed to protect.’” Judge Robert Bork, in his famous Antitrust Paradox, highlighted the same risk in the application of Section 2 theories, explaining with respect to exclusive dealing that “[t]he real danger for the law is less that predation will be missed than that normal competitive behavior will be wrongly classified as predatory and suppressed.”

This backdrop helps frame the question whether a unilateral refusal to license a lawful patent on “FRAND” terms after committing to do so constitutes a form of unlawful exclusionary conduct. A unilateral violation of a FRAND commitment should not give rise to a cause of action under Section 2 of the Sherman Act, even if a patent holder is alleged to have misled or deceived a standard-setting organization with respect to its licensing intentions. Applying Section 2 to this sort of unilateral conduct would contravene the underlying policies of the antitrust laws. This conduct may warrant remedies under contract law, but the important difference is that contract remedies do not involve the threat of treble damages that can deter lawful, pro-competitive conduct.

In the context of legitimate standard setting, the collective decision to incorporate a patented technology into a standard necessarily involves the “exclusion” of rival technologies. Moreover, as a result of having its technology incorporated into a standard, a patent holder may gain incremental market power beyond any power that holding a patent would already convey. By voluntarily participating in the standard setting process, however, owners of rival technologies and prospective licensees assume the risk that the outcome of that process may have an exclusionary effect where there are patents covering the “winning” technology. Simply winning selection by a standard setting process does not constitute unlawful exclusionary conduct under the antitrust laws. This is because that selection, regardless the reason for it, contributes to unification around a single standard, which creates interoperability benefits for consumers that could not be achieved without unification.

This form of lawful and pro-competitive exclusionary conduct should not be condemned as unlawful under the Sherman Act when a licensee believes that a patent-holder opportunistically has reneged on its commitment to license on “FRAND” terms and engaged in so-called “hold-up.” That is also true even where a patent holder never allegedly intended to license on the terms that a court ultimately determines are “FRAND.” I will explain why.

There is no duty under the antitrust laws for a patent holder to license on FRAND terms, even after having committed to do so. A FRAND commitment is a contractual representation that a patent holder will license on “fair,” “reasonable,” and “non-discriminatory” terms. It is not the same as a promise to pay a specific price in a final contract. Indeed, commentators have noted that by failing to specify a specific price, a FRAND commitment is an incomplete contract term.

To be clear, a FRAND commitment may create a duty under contract law to fulfill that obligation, and courts may be tasked with determining the relevant FRAND rate where parties disagree over this contract term. Section 2, however, is agnostic to the price that a patent-holder seeks to charge after committing to such a term. Breaking down “FRAND” by its component terms makes clear why this is so.

First, the Sherman Act does not police “fair” prices or competition; it protects the competitive process. Judge Easterbrook once asked, “Who says that competition is supposed to be fair, that we judge the behavior of the marketplace by the ethics of the courtroom? . . . When economic pressure must give way to fair conduct . . . rivals will trim their sails”; introducing conceptions of “fairness” into the Sherman Act “is to turn antitrust law on its head.”

Second, having undertaken a contractual duty to charge “nondiscriminatory” rates, the Sherman Act does not compel a patent-holder to abide by this promise. The Sherman Act is indifferent to price discrimination; indeed, in some circumstances price discrimination may be pro-competitive.

Third, the Sherman Act does not authorize courts to determine “reasonable” licensing rates. The Supreme Court has emphasized repeatedly that antitrust law does not recognize a cause of action that would “require[] antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill-suited.”

It, therefore, would be a mistake to infer that a contractual FRAND commitment somehow establishes a duty under the antitrust laws to license on terms demanded by a licensee or that violations of an ambiguous FRAND term become an antitrust violation. Transforming such a contract obligation into an antitrust duty would undermine the purpose of the antitrust laws and the patent laws themselves, both of which serve the same goal of increasing dynamic competition by fostering greater investment in research and development, and ultimately in innovation.

Making the duty to license on FRAND terms enforceable under the antitrust laws would contravene the policies of the Sherman Act. As the Supreme Court recognized in Trinko, a business has no antitrust duty to deal with another company, and only in limited circumstances will a refusal to deal give rise to a potential antitrust claim. As then-Tenth Circuit Judge Neil Gorsuch explained in Novell v. Microsoft, following Trinko, a monopolist’s refusal to license its intellectual property is actionable under the antitrust laws only if it terminates a “presumably profitable course of dealing between the monopolist and the rival” and that termination is “irrational but for its anticompetitive effect.”

I would note that then-Judge Gorsuch’s standard echoes what the United States and FTC advocated to the Supreme Court in its amicus brief in the Trinko case. The brief stated:

Where, as here, the plaintiff asserts that the defendant was under a duty to assist a rival, the inquiry into whether conduct is “exclusionary” or “predatory” requires a sharper focus. In that context, conduct is not exclusionary or predatory unless it would make no economic sense for the defendant but for its tendency to eliminate or lessen competition.

That narrow window for a refusal to deal claim is irreconcilable with the broader contention that Section 2 obligates an SEP-holder subject to a contractual FRAND commitment to license its technology to any comer—much less on FRAND terms. An antitrust duty to license on FRAND terms would also contravene the patent laws’ policy of promoting innovation by offering incentives for holders of valid patents to seek the greatest rewards possible for their inventions.

To be clear, contract law may very well require an SEP-holder to deal with any willing licensee, but the Sherman Act does not convert FRAND commitments into a compulsory licensing scheme. It logically follows that there is no antitrust liability for proposing to deal at terms that are above FRAND rates.

Nor should an antitrust duty spring into being if a patent holder allegedly “deceives” an SSO when it commits to license on FRAND terms and its participants rely on that representation in deciding to adopt the technology. That is because Section 2 should not condemn a patent holder’s profit-maximizing intentions or aspirations at the time it makes a FRAND commitment, particularly where remedies are already available to an unhappy licensee or SSO participant.

Suppose that, hypothetically, the holder of a standard-essential patent knew upfront precisely what price would satisfy the vague definition of “FRAND” and planned to demand a much higher price after the SSO incorporated its technology into a standard. By making a legally binding commitment, a patent-holder acknowledges that it will be required under contract law to license at a rate determined by a court if a disagreement over that rate arises later. A licensee, for its part, understands that it can bring suit if a price does not fit its own subjective understanding of “FRAND.” Because both patent-holders and licensees participating in a standard-setting process recognize that the proper “FRAND” rate will be determined after the fact—in court, if necessary—there is therefore no meaningful ex ante “deception” that should give rise to an antitrust claim.

To be sure, having one’s technology incorporated into a standard, in some circumstances, may increase a patent-holder’s market power. The same could be said, of course, about a monopolist’s refusal to deal with a rival who might gain market share if it had access to the monopolist’s inputs. Even if this occurs as a result of a patent holder’s so-called “deception” about its licensing obligations, this is not the sort of market-power-enhancing conduct that Section 2 should reach because a cause of action for treble damages would impede the policies underlying the Sherman Act. Even worse, such a cause of action would “require[] the court to assume the day-to-day controls characteristic of a regulatory agency.”

More fundamentally, recognizing a Section 2 cause of action for violations of a FRAND commitment would create an unacceptable risk of “false positive” condemnations of pro-competitive conduct by licensees. The prospect of antitrust liability and treble damages for breaching a potentially vague FRAND term—or allegedly “misrepresenting” one’s intentions to offer some FRAND rate—threatens to chill incentives for innovators to develop new technologies that fuel dynamic competition.

Where contract law remedies exist to remedy and deter breaches of a FRAND commitment, the additional deterrence that Sherman Act remedies offer could deter lawful, pro-competitive conduct—that is, research and development by innovators who make careful cost-benefit calculations as to how much to invest in technologies that may not pay off. Demanding a high price for one’s patented technology is permissible, and expected, conduct in a free market negotiation. A Section 2 cause of action would skew the patent licensing bargain away from the bargaining outcome that a free market dictates.

In particular, where the parties have a subjective disagreement over the meaning of an incomplete contract term, a Section 2 remedy threatens the patent holder with the risk of enormously costly litigation and a possible treble damages award. Bargaining in the shadow of litigation, a patent holder would be wary that a high license demand could be penalized by a significant damages award, whereas a prospective licensee’s low-ball offer would do no such thing. Such a remedy would bestow any putative licensee with disproportionate negotiating power. In turn, the cost-benefit calculation for innovators would change and the prospect of additional dynamic competition likely would decline.

#### Changing plaintiff standards *weaponizes antitrust* and encourages dubious litigation

**Jamison 21** – Mark Jamison is a nonresident senior fellow at the American Enterprise Institute. He is concurrently the director and Gunter Professor of the Public Utility Research Center at the University of Florida’s Warrington College of Business. Phd in Economics.

Mark Jamison, 4-26-2021, "Senator Hawley’s ‘trust-busting’ bill would actually bust consumers and small business," American Enterprise Institute - AEI, https://www.aei.org/technology-and-innovation/senator-hawleys-trust-busting-bill-would-actually-bust-consumers-and-small-business/

Now let’s consider some of the law’s provisions. The legislation provides that when a plaintiff in an antitrust case claims that the accused business has market power, the plaintiff does not need to specify the relevant market. This lacks coherence: How could a business be guilty of having market power if “market” has no definition?

The bill also encourages our most talented companies (demonstrated by their successes) to hold back from doing their best for customers. It proposes to place on the defendant in an antitrust case the burden of demonstrating that its conduct is more procompetitive than anticompetitive, if the defendant wants to argue that its conduct benefits customers.

This would effectively weaponize antitrust: A plaintiff could launch a case against a company claiming that some conduct was anticompetitive. If the defendant claims that it was doing good things, it must prove that. It must also prove that there was no “commercially reasonable” alternative that would strike a better balance. The plaintiff faces no such burdens.

This effectively reverses the burden of proof in antitrust cases, which would encourage more questionable lawsuits and more lawsuits overall. It would also raise costs for potential defendants, who would be encouraged to go soft on their competitors. For this, customers would pay the price.

#### It’s a distinctly powerful tool

Delrahim, JD, former Assistant Attorney General for the Antitrust Division of the United States Department of Justice, ‘20

(Makan, Brief of The United States of America as Amicus Curiae in Support of Neither Party, City of Oakland v. Oakland Raiders, available at: <https://www.justice.gov/atr/case-document/file/1328216/download>)

The automatic treble damages provision of Section 4 is an uncommonly powerful tool, serving both to encourage private enforcement and to deter wrongdoers. Wielded indiscriminately, however, it can impose more harm than good: “Given the potential scope of antitrust violations and the availability of treble damages, an overbroad reading of § 4 could result in ‘overdeterrence,’ imposing ruinous costs on antitrust defendants, severely burdening the judicial system and possibly chilling economically efficient competitive behavior.” Greater Rockford Energy & Tech. Corp. v. Shell Oil Co., 998 F.2d 391, 394 (7th Cir. 1993). Section 4’s rigorous standing requirements are intended to mitigate this risk: “[B]y restricting the availability of private antitrust actions to certain parties, we ensure that suits inapposite to the goals of the antitrust laws are not litigated and that persons operating in the market do not restrict procompetitive behavior because of a fear of antitrust liability.” Todorov v. DCH Healthcare Auth., 921 F.2d 1438, 1449 (11th Cir. 1991).

Oakland’s claim for lost general tax revenues poses the very threat contemplated by these courts. If upheld, local governments could bring substantial Section 4 claims anytime anticompetitive conduct was found to reduce economic activity in their jurisdictions. Congress did not intend this result. Though “it could have . . . required violators to compensate federal, state, and local governments for the estimated damage to their respective economies caused by the violations . . . [,] this remedy was not selected.” Hawaii, 405 U.S. at 262. To reverse the district court and award antitrust standing to Oakland for its lost tax revenues would expand antitrust liability beyond the intended scope of the Clayton Act and threaten to deter the very competition it was

designed to protect.

#### And it drives more litigation across sectors

Arthur et al., L. Q. C. Lamar Professor of Law, Emory Law, ‘21

(Thomas C., Amitai Aviram, University of Illinois Jodi S. Balsam, Brooklyn Law School Jorge L. Contreras, University of Utah Anthony Dukes, University of Southern California Vivek Ghosal, Rensselaer Polytechnic Institute Michael S. Jacobs, DePaul University Jordan Kobritz, SUNY Cortland Alexander Volokh, Emory University, Brief of Amici Curiae Antitrust Law and Business School Professors in Support of Petitioners, NCAA v. Alston, available at: <https://www.supremecourt.gov/DocketPDF/20/20-512/168408/20210208135430804_20-512%2020-520%20tsacAntitrustLawAndBusinessSchoolProfessors.pdf>)

Second, requiring a defendant to prove that a restraint is the least restrictive means of achieving its goal makes it nearly impossible for the defendant to succeed. This rule not only would impose on antitrust defendants the titanic burden of proving a universal negative,3 it also would empower antitrust plaintiffs to invalidate virtually all collaborations, no matter how procompetitive, merely by dreaming up marginal ways to make them slightly more competitive. See Smith v. Pro Football, 593 F.2d 1173, 1215 (D.D.C. 1978) (MacKinnon, J., concurring in part, dissenting in part) (“In evaluating less restrictive alternatives as a matter of law, it is difficult to imagine what kind of draft would be valid if the existence of a less restrictive alternative would automatically render the present draft unreasonable. Some less restrictive alternative can always be imagined.”) Indeed, “[a] skilled lawyer would have little difficulty imagining possible less restrictive alternatives to most joint arrangements.” Philip E. Areeda & Herbert Hovenkamp, ANTITRUST LAW ¶ 1913b (4th ed. 2018). And a skilled plaintiffs’ lawyer would have little difficulty finding attorneys’ fees and treble damages to be sufficient incentive to challenge virtually all such collaborations, thus ensuring that the most direct consequence of the Ninth Circuit’s application of the Rule of Reason would be a flood of antitrust litigation, followed by a reduction in collaborative enterprises and the negative effects of that reduction.

This consequence follows from the fact that the Ninth Circuit’s ruling is not limited to the NCAA’s “amateurism” rules. Instead, the Ninth Circuit’s opinion as written applies to all forms of joint ventures and procompetitive collaborations and thus is likely to disincentivize those arrangements. See, e.g., U.S. Dep’t of Justice & FTC, supra, at 1 (2000) (warning that making it too easy to condemn “agreements among actual or potential competitors may deter the development of procompetitive collaborations”).

The Ninth Circuit’s decision has sweeping implications for antitrust enforcement and may call into question collaborations and joint ventures across a host of areas including healthcare, pharmaceutical development, information technology, consumer electronics, and manufacturing. According to the Ninth Circuit’s approach, any court is empowered to re-write the rules of any industry before it so long as the plaintiff can conjure a slightly less restrictive alternative to the conduct being challenged, including, for example, asserting that a joint venture’s product is priced too high. But see Texaco Inc. v. Dagher, 547 U.S. 1, 6–7 (2006) (“As a single entity, a joint venture, like any other firm, must have the discretion to determine the prices of the products that it sells, including the discretion to sell a product under two different brands at a single, unified price.”). The potential exposure to treble damages for such conduct is likely to chill otherwise procompetitive arrangements, thus contradicting the ultimate goal of the antitrust laws: promoting competition.

#### Biden’s antitrust hullabaloo is all hype

Posner 21– Professor, UChicago Law.

Eric Posner, 7-21-2021, "The Antitrust War’s Opening Salvo," Project Syndicate, https://www.project-syndicate.org/commentary/biden-antitrust-executive-order-what-it-does-by-eric-posner-2021-07

CHICAGO – US President Joe Biden’s new executive order on “Promoting Competition in the American Economy” is more significant for what it says than for what it does. In fact, the order doesn’t actually order anything. Rather, it “encourages” federal agencies with authority over market competition to use their existing legal powers to do something about the growing problem of monopoly and cartelization in the United States. In some cases, the relevant agencies are asked merely to “consider” ramping up enforcement; in others, they are directed to issue regulations, but the content of those regulations remains largely up to them.

Nonetheless, it would be a mistake to dismiss the order’s tentative language as mere rhetoric. Antitrust is the main body of law governing market competition in the US, and it has been the object of sustained attack by business interests and conservative intellectuals for more than 50 years. Biden is the first president since Harry Truman to take a strong public anti-monopoly stand, and he has backed it up by appointing ardent anti-monopoly advocates to his government.

The executive order is ambitious in its scope and style. In strongly worded passages, it accuses businesses of monopolistic and unfair practices in major industries, including technology, agriculture, health care, and telecommunications. It laments the decline of government antitrust enforcement, and identifies numerous harms that have resulted – including economic stagnation and rising inequality.

The order also establishes a new bureaucratic organization in the White House to lead the anti-monopoly effort. Demanding a “whole-of-government” approach, it calls on the vast resources of numerous agencies, and not just the two that traditionally oversee antitrust (the Department of Justice and the Federal Trade Commission).

Still, the Biden administration’s antitrust agenda will face significant judicial obstacles. Over the past 40 years, an increasingly business-friendly Supreme Court has gutted antitrust law. In ruling after ruling, it has weakened the standards used to evaluate anti-competitive behavior; raised the burden of bringing an antitrust case; limited the types of antitrust victims who are allowed to bring cases; allowed businesses to use arbitration clauses to protect themselves from class action lawsuits; and much else.

On top of that, the Supreme Court has disseminated throughout the judiciary a generalized suspicion of antitrust claims. Judges at all levels have absorbed an academic skepticism about antitrust law that is now 30 years out of date. Accordingly, business plaintiffs are usually seen as sore losers who have resorted to the law because they were beaten in the marketplace. Consumer cases are attributed to the machinations of trial lawyers. The pretexts businesses offer for their anti-competitive practices are swallowed whole.

So, while Biden is right that “federal government inaction” is partly to blame for the decline in antitrust enforcement, there is little that his (or any) administration can do unless it has the courts on its side. This probably accounts for the order’s careful language. Agencies like the DOJ and the FTC would surely like to enforce antitrust laws more vigorously than in the past, but they are not going to commit resources to bringing cases that will fail in court.

#### Plan is one of the first major pro-plaintiff decisions in decades—that is magnified and affects every future case

Pale 04– R. Hewitt Pale, Former Assistant Attorney General, Antitrust Division @ US DOJ

(R. Hewitt Pale, “ANTITRUST LAW IN THE U.S. SUPREME COURT, Presented at British Institute of International and Comparative Law Conference, May 11, 2004, <https://www.justice.gov/atr/speech/antitrust-law-us-supreme-court>)

In considering my topic for a forum on comparative law, it occurred to me that it might be useful to focus on the special role of the United States Supreme Court in making American antitrust law. The topic is especially timely because our Supreme Court granted review in four antitrust cases this term, each of which is the object of intense study by U.S. antitrust practitioners. The Supreme Court, unlike the intermediate appellate courts of the federal system, has discretion to choose the cases it will hear, and its choices have a profound effect on the development of antitrust law.

Little has changed over the last century in terms of the wording of our antitrust statutes. The Sherman Act was enacted in 1890, and the Clayton Act in 1914, and the legislative amendments since that time have been minimal. Yet U.S. antitrust law has come a long way indeed in those years through judicial interpretations of the law. Congress chose not to enact detailed prescriptions for antitrust enforcement, relying instead on the courts to apply the broad statutory principles to particular fact situations. As former Assistant Attorney General William Baxter has observed, this "common law" approach may lack the certainty provided by a more detailed statute, but it "permits the law to adapt to new learning without the trauma of refashioning more general rules that afflict statutory law." (1) Our Supreme Court has described the antitrust laws as having "a generality and adaptability comparable to that found to be desirable in constitutional provisions."(2)

American antitrust law began to take shape only when the Supreme Court began to build the basic framework of antitrust analysis in its decisions. In 1911, it decided the landmark Standard Oil case, in which the United States sought to break up the famed oil conglomerate.(3) Observing that the standards of the antitrust law must be developed by the courts deciding each case "by the light of reason, guided by the principles of law and the duty to apply and enforce the public policy embodied in the statute,"(4) the Court announced the Rule of Reason, under which the Sherman Act is deemed to prohibit only "unreasonable" restraints of trade. In another decision that year, United States v. American Tobacco Co.,(5) involving a conglomerate in the tobacco industry, the Supreme Court emphasized the Rule of Reason's fundamental grounding in competition concerns. This standard proscribed "contracts or agreements or combinations which operated to the prejudice of the public interests by unduly restricting competition or unduly obstructing the due course of trade or which, either because of their inherent nature or effect or because of the evident purpose of the acts, etc., injuriously restrained trade . . . ."(6)

In 1918, Chicago Board of Trade v. United States(7) made clear that the Rule of Reason encompasses all the relevant circumstances. To determine whether a restraint is illegal, a court must "ordinarily consider the facts peculiar to the business to which the restraint is applied; its condition before and after the restraint was imposed; the nature of the restraint and its effect, actual or probable" and the "history of the restraint, the evil believed to exist, the reason for adopting the particular remedy, the purpose or end sought to be attained."(8)

Around the same time, the Court was also developing the doctrine of per se illegality, which provides bright-line guidance as to certain clearly anticompetitive practices. In United States v. Trenton Potteries Co., (9) the Court held that a price fixing agreement among competitors is an unreasonable restraint "without the necessity of minute inquiry whether a particular price is reasonable or unreasonable."(10) In 1940, in another landmark case brought by the United States in the oil industry, United States v. Socony-Vacuum Oil Co.,(11) the Supreme Court repeated that price-fixing agreements are illegal per se and that "no showing of so-called competitive abuses or evils which those agreements were designed to eliminate or alleviate may be interposed as a defense."(12) The per se rule underpins the Antitrust Division's criminal prosecution of collusion among competitors.

The Supreme Court's pre-1950 decisions set the stage for the late twentieth-century developments in antitrust law. They established the fundamental principle — consistent with the modern approach worldwide — that antitrust laws prohibit only conduct that unreasonably restricts competition, to the detriment of consumers. And the Court established that the type of inquiry required depended on the nature of the particular conduct at issue.

That auspicious beginning did not mean that the course of American antitrust analysis always ran smoothly through the last half of the century. A consequence of the common law approach is that when antitrust thinking veers from the path of promoting consumer welfare, the Supreme Court may follow. We experienced that effect in the 1960s and 1970s as our Supreme Court issued decisions emphasizing artificial presumptions not soundly grounded in economic reasoning. In Brown Shoe, Pabst, and Von's Grocery, the Court ruled that mergers could be found unlawful based on extremely small increases in market concentration.(13) In Schwinn,(14) it abandoned its formerly cautious approach to vertical practices,(15) holding exclusive dealer territories unlawful per se. Similarly, in Albrecht,(16) it held vertical maximum price fixing illegal per se.

As the sophistication of economic analysis increased, our Supreme Court began to reexamine some of these precedents and return to fundamental principles of competition and consumer welfare. In GTE Sylvania,(17) the Court overruled Schwinn, and in State Oil v. Khan,(18) it overruled Albrecht. The Court adopted a significantly different approach to mergers in General Dynamics,(19) refusing to find a violation, despite current high market shares, in a case where those market shares did not reflect a realistic threat to future competition. And in Matsushita,(20) the Court poured cold water on theories of liability that make little economic sense, and it expressed skepticism of liability theories based on price cutting, which is often "the very essence of competition."(21)

Of particular note is the Court's decision in Brunswick,(22) in which it rejected the theory that a private plaintiff could obtain treble damages as compensation for continued competition resulting from a merger that prevented a firm from leaving the market. This may be one of the Supreme Court's lesser-known decisions outside the United States, but it is of fundamental significance. Private treble damage litigation is an important tool in the U.S. antitrust enforcement scheme, and the Brunswick decision mandated that it, like government enforcement, be firmly anchored to pro-competition, pro-consumer principles. The Court emphasized that private damages must be based on conduct causing injury of the type that the antitrust laws were intended to prevent. Plaintiffs may not prevail unless they are harmed by anticompetitive consequences of a defendant's conduct, for the antitrust laws were enacted to protect competition, not competitors.

In the last quarter of the twentieth century, the Supreme Court began hearing fewer antitrust cases. In part this reflects a general trend in the Court's practices. In its 2002 term, it issued only 81 written opinions, having issued only 71 the year before.(23) In contrast, thirty years earlier, the Court issued 164 written opinions in its 1972 term and 151 in 1971, including full opinions in ten antitrust cases during those two terms.(24) A litigant's chance of obtaining review today is quite low. In the last complete term, 2002, the Supreme Court considered 8,340 petitions for review by writ of certiorari, but granted full review to only 91 cases, or 1.1%.(25) Even if the unpaid, in forma pauperis, petitions are left out of the calculation, the odds improve only to 4.5%.(26)

A change in the statute governing appeals in civil antitrust cases brought by the government has also had the effect of limiting the number of Supreme Court opinions in antitrust cases in recent years. Until 1974, appeals in these cases went directly to the Supreme Court under the Expediting Act. That statute was amended in 1974 to provide that these appeals go to the intermediate appellate courts unless the district court certifies that immediate Supreme Court review is of "general public importance in the administration of justice."(27) Even then, the Court retains discretion to remand the case to the court of appeals. District courts have certified only three such cases for direct appeal.(28) One of these was Microsoft, but the Supreme Court declined to hear the case and remanded it to the court of appeals.

Because there are so few Supreme Court antitrust decisions each year — and because each one sets precedent that will govern the application of the antitrust laws in the lower courts for decades to come — each decision is an event of major significance for antitrust enforcers and the antitrust bar. Every phrase is studied with care, and every future case is evaluated in terms of the Court's reasoning process.

#### AND, even if the substantive change is small—it signals that courts everywhere should favor plaintiffs

Tracy 21– Ryan Tracy and Brent Kendall, tech and legal reporters, respectively, in WSJ’s Washington Bureau

(Ryan Tracy and Brent Kendall, 3-12-2021, "Antitrust Law: What Is It and Why Does Congress Want to Change It? ," WSJ, <https://www.wsj.com/articles/antitrust-law-what-is-it-and-why-does-congress-want-to-change-it-11615554000>)

What would the changes mean?

Even if Congress acts on only a couple of middle-of-the-road proposals, it could mark the biggest substantive changes in decades, as courts have been reading current antitrust laws more narrowly. Very large companies could have trouble getting deals approved. Tech giants could have to divest themselves of certain business lines.

If lawmakers, for example, make slight changes to reinforce broad government authority to successfully challenge mergers that threaten consumers, “that would signal to the courts that merger enforcement is important and that doubts should not always be resolved in favor of defendants,” said Wayne State University law professor Stephen Calkins.

## 1NR

### T-Prohibit

#### Their card agrees it means “forbid by law” as the FIRST definition.

Washington Court of Appeals 19 (KORSMO-judge. Opinion in State v. Kimball, No. 35441-5-III (Wash. Ct. App. Apr. 2, 2019). Google scholar caselaw. Date accessed 7/13/21).

His argument runs counter to the meaning of the word "prohibit." It means "1. To forbid by law. 2. To prevent, preclude, or severely hinder." BLACK'S LAW DICTIONARY 1405 (10th ed. 2014). As "severely hinder" suggests, a "prohibition" need not be an all or nothing proposition.

#### Affirmatives that allow the conduct they affect to continue to a certain extent or which subject that conduct to certain conditions are imposing restrictions, not prohibitions.

Groves 97 – Solicitor with Pritchard Englefield, the City law firm, specialising in intellectual property law

Peter Groves, Sourcebook on Intellectual Property Law, Google Books

Then I come to the word ‘restrict’. A person though not prohibited is restricted from using something if he is permitted to use it to a certain extent or subject to certain conditions but otherwise obliged not to use it, but I do not think that a person is properly said to be restricted from using something by a condition the effect of which is to offer him some inducement not to use it, or in some other way to influence his choice. To my mind, the more natural meaning here is restriction of the licensee’s right to use the article and I am fortified in that opinion by two considerations.

#### The term “prohibitions” is unambiguously applicable to bans.

Espa 17 – Senior Assistant Professor of International Economic Law at the Università della Svizzera italiana (USI), Senior Research Fellow at the World Trade Institute (WTI), Adjunct Professor at the Law Faculty of the Università Cattolica del Sacro Cuore

Ilaria Espa, “Climate, energy and trade in EU–China relations: synergy or conflict?,” China-EU Law Journal, Vol. 6, June 2017, https://link.springer.com/article/10.1007/s12689-017-0076-0

7 The term ‘prohibitions’ unambiguously applies to measures that impede exports outright (i.e. export bans). Hence, it has not created interpretative problems. Ibid., p. 170.

#### “Prohibition” suggests specific actions disallowed by a formal governing authority.

Stevens 92 – United States Supreme Court Justice

John Paul Stevens, Cipollone v. Liggett Group, 505 U.S. 504, Supreme Court of the United States, June 1992, LexisNexis

Although the plurality flatly states that the phrase "no requirement or prohibition" "sweeps broadly" and "easily encompasses obligations that take the form of common-law rules," ante, 505 U.S. at 521, those words are in reality far from unambiguous and cannot be said clearly to evidence a congressional mandate to pre-empt state common-law damages actions. The dictionary definitions of these terms suggest, if anything, specific actions mandated or disallowed by a formal governing authority. See, e. g., Webster's Third New International Dictionary 1929 (1981) (defining "require" as "to ask for authoritatively or imperatively: claim by right and authority" and "to demand as necessary or essential (as on general principles or in order to comply with or satisfy some regulation)"); Black's Law Dictionary 1212 (6th ed. 1990) (defining "prohibition" as an "act or law prohibiting something"; an "interdiction").

#### “Prohibitions” aren’t rejections---a prohibition must be issued prior to and separate from administrative determinations regarding specific issues.

Sweet 03 – Judge, United States District Court, New York Southern

Robert W. Sweet, Am. Nat'l Fire Ins. Co. v. Mirasco, Inc., 249 F. Supp. 2d 303, United States District Court for the Southern District of New York, March 2003, LexisNexis

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

#### Prohibition is distinct from regulation---it requires ending something fully, which excludes regulating within the bounds of prescribed rules.

Feldman 86 – Member of Procopio's Native American Law practice

Glenn M. Feldman, On Appeal from the United States Court of Appeals for the Ninth Circuit, California v. Cabazon Band of Mission Indians, 1986 U.S. S. Ct. Briefs LEXIS 1221, Supreme Court of the United States, 1986, LexisNexis

In arguing that California's bingo laws are prohibitory rat ther than regulatory, the appeallants have simply misunderstood the fundamental distinction between "prohibition" and "regulation" of conduct. As succinctly put by the Supreme Court of Washington more than 50 years ago, after noting that the prohibition and regulation of the sale of liquor are entirely different things: "To prohibit the liquor traffic implies the putting a stop to its sale as a beverage, to end it fully, completely, and indefinitely." In contrast, regulation "implies that the sale of intoxicating liquor shall go on within the bounds of certain prescribed rules, restrictions, and limitations." Ajax v. Gregory, 32 P.2d 560, 563 (Wash. 1934). Because regulation of conduct involves prescribing limitations, regulation, by definition, necessarily involves some degree of prohibition. Blumenthal v. City of Cheyenne, 186 P.2d 556, 566 (Wyo. 1947). The two concepts, however, are analytically distinct. Therefore, when courts have been faced with statutory schemes similar to California's bingo laws, they have consistently held them to be regulatory and not prohibitory.

#### “Rule of reason” standards are derogations from prohibitions.

Doherty 2k – Lancashire Law School, University of Central Lancashire

Michael G. Doherty, “The judicial use of the principles of EC environmental policy,” Environmental Law Review, Vol. 2, Issue 4, December 2000, LexisNexis

The Walloon case concerned the legality of a ban on the importation of waste imposed by the Walloon Regional Executive. The case centred around the application of the 'rule of reason', allowing derogations from the prohibition on quantitative restrictions on imports. This doctrine was developed by the Court on the basis that obstacles to free movement caused by disparate national laws must be accepted 'in so far as those provisions may be recognised as being necessary in order to satisfy mandatory requirements'. The Court had earlier held that environmental protection was one of the mandatory objectives of the Community, and in this case found that the reason for the ban was genuinely environmental. On the face of it the Walloon restriction did not meet the criteria of being indistinctly applicable, that is, not discriminatory as between domestic and foreign goods. In deciding, however, that the ban was indistinctly applicable the Court relied heavily upon the principle in Article 174 that environmental damage should as a priority be rectified at source (the 'source principle').

#### “By” imposes an *accompanying* condition.

Prewitt et al. 2k (James K. Prewitt, judge. Phillip R. Garrison, judge. Robert S Barney, judge. Per Curiam. “Little Portion Franciscan Sisters, Inc. v. Boatright, 26 S.W.3d 443,” Court of Appeals of Missouri, Southern District, Division Two, 2000)

In so concluding, we note that the preposition "by" is defined as "with the use of; through," "to the extent of," or "through the agency or action of." THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (1978). The same source states that a synonym for "by" is "through" and that the preposition "by" indicates the agency or means by which something is accomplished. WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY (1976) defines "by" as "through the means or instrumentality of, [\*\*10] " "through the direct agency of," "through the medium of," or "through the work or operation of," and that it is "used as a function word to indicate something that forms an accompanying setting or condition . . . or that constitutes a manner . . . often with an added sense of means." For the ballot proposition to have had the meaning espoused by Defendants, the voter would have had to ignore the important word "by." To do so is to ignore the plain and ordinary reading of the words used.

#### A smaller topic leads to more in-depth topic education which boosts disciplinary thinking – that spills over to the broader topic which solves their offense.

**Conley 15** (Oct 13 2015, David T. Conley is a professor of educational policy and leadership and director of the Center for Educational Policy Research in the College of Education at the University of Oregon, "Breadth vs. Depth: The Deeper Learning Dilemma", <https://blogs.edweek.org/edweek/learning_deeply/2015/10/breadth_vs_depth_the_deeper_learning_dilemma.html>) MT

Few people overtly object to the idea that students should understand what they are learning at a deep level so that they might retain and use the knowledge and skills they are taught. To do so, however, almost always requires students to spend more time on a topic or concept. Spending more time in one area almost always means exposing students to less of the curriculum as a whole. This fundamental tug-of-war must be addressed for students to achieve the dual goals of acceptable performance on tests that cover the breadth of the curriculum and on assessments that plumb the depths of student understanding. Standardized tests are built around the concept of domain sampling. A test is constructed by creating items that are drawn from the overall knowledge domain of the subject or course. Ideally, the items taken as a whole are a representative cross-section of the knowledge and skills in the domain. The test does not gauge all that could conceivably be learned about the domain, but by sampling in an unpredictable but systematic fashion from the domain, the test purports to determine the degree to which the test taker has mastered the domain as a whole. Performance assessments take a different approach. They select a key subset of the knowledge in the domain and explore student understanding and facility within that subset. Such assessments are often multidimensional. In other words, they end up gauging both content knowledge and other skills essential to the subject area. While the results from one performance assessment cannot be used to judge the test taker's mastery of the entire domain, it is not unreasonable to assume that performance on a challenging performance assessment focused on key content and skills says a lot about overall student mastery of the domain without testing each and every part of it. The greatest challenge for teachers who wish to incorporate deeper learning is to balance the amount of content they cover with the depth to which students explore what they are learning. It's not practical for students to go to deeper levels on all the content they learn, and it may not be necessary for them to do so. The key is for teachers to determine which concepts or skills are the keystones that unify or connect the subject area. If students can go deep in those areas, they can gain insight into disciplinary thinking, the way experts in that subject go about applying their content knowledge.