# 1AC

### 1AC---Innovation Advantage

#### Advantage 1 is Innovation:

#### Standards-Setting Organizations are industry members who jointly establish standards for IT defined by the adoption of standard-essential patents, which are licensed to companies on Fair, Reasonable, and Non-Discriminatory terms. Current standards promote price gouging, FRAND enforcement is critical.

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I. Standard Setting and the Competitive Process

The fundamental economics in the information technology sector, driven by network effects, implies that there is enormous value associated with establishing compatibility standards. Popular standards include the mobile broadband standards used in cell phones, which are established by the 3rd Generation Partnership Project (3GPP), and the Wi-Fi technology for wireless local area networks, which is enabled by the 802.11 standard established by the Institute of Electrical and Electronics Engineers (IEEE).4

There are many SSOs, and their rules and procedures differ considerably. In addition to IEEE, leading SSOs include the International Organization for Standardization (ISO), the International Telecommunication Union (ITU), the European Telecommunications Standards Institute (ETSI), the Internet Engineering Task Force (IETF), and the World Wide Web Consortium (W3C).5 SSOs generally establish standards by holding a series of committee meetings among industry participants. These meetings culminate in a vote on a technical specification that describes what features or attributes a product must have in order to comply with the standard. Most SSOs are open to all industry participants and seek to operate on a consensus basis, applying certain voting rules. SSOs do not normally engage in patent licensing, nor do they specify how patent royalties will be divided up among patent holders. They leave that to their members, which in some cases form patent pools to address these issues.6

SSOs adopt specific policies relating to intellectual property rights (IPRs).7 These IPR policies are generally intended to enable the SEP holders to obtain reasonable royalties for licensing their patents, while prohibiting them from charging excessive royalties after other industry participants have committed to the standard. At that point, firms committed to implementing the standard— which we call “implementers”—would find it very costly to avoid using the patented technology. For this purpose, most SSOs require SEP owners to license their SEPs on FRAND terms.8

FRAND policies are especially necessary because negotiations between SEP holders and implementers generally take place only after the implementers have used and infringed the technologies claimed by the SEPs. Standards involving information and communications technology can involve hundreds or even thousands of SEPs, many with uncertain boundaries for infringement. In addition, a time lag exists between patent application and patent issuance. For these and other reasons, it is impractical for implementers to enter into negotiations for patent licenses with all SEP owners prior to the establishment of a standard and to their implementation of it.9

The fact that patent negotiations generally do not take place until after implementers have used and infringed the technologies has several critical implications. First, at the time of negotiation, implementers are locked into the standard and the technologies claimed by the SEPs—that is, the cost to switch to an alternative technology or standard at that point—ex post—is much greater than it was ex ante, before the patented technology was first included in the standard. Ex post, the patent holder is no longer competing to have its technology included in the standard, nor is it competing to have implementers of the standard use its technology. Instead, because the patent holder owns an asset that is essential to the standard, implementers have no choice but to use the patented technology.

If the standard is commercially successful, implementers are willing to pay a much larger royalty for use of the patented technology than they would have paid ex ante, when the SEP holder faced competition from other technologies. In these circumstances, the SEP holder can be said to have obtained monopoly power in the market in which the patented technology is licensed for use in implementing the standard.10

Second, because of lock-in and the implementer’s ongoing infringement, the potential for litigation looms large in licensing negotiations. In effect, the parties are negotiating about how to settle an infringement suit, and that negotiation is heavily influenced by their predictions as to what the court will do if they cannot agree. This situation is not unique to SEPs; it arises frequently when firms are faced with patent infringement claims for products they have independently developed or technologies they have inadvertently infringed. Patent law addresses such instances by specifying that patent holders are entitled to “reasonable royalties,” defined as the royalties that the parties would have negotiated prior to the infringement and thus prior to lock-in.11 Those hypothetical ex ante royalties reflect the market value of the patent license. Notwithstanding the law’s embrace of this principle, however, as a practical matter, patent holders are generally able to recover more than the ex ante value of the patent when litigation occurs after the implementers are locked in. Further, negotiations in the shadow of litigation after lock-in tend to result in royalties in excess of the ex ante or market value of the patented technology.12

Third, the shadow of litigation is particularly problematic in the communications and technology sector, in which products typically include hundreds or thousands of patented technologies. A court-ordered injunction involving such products would deprive the implementer of not only the value of the technology covered by the patent-in-suit, but also the value of the entire product.13 Implementers that are forced to bear the risk of an injunction are thus induced to agree to royalties greater than those that would be appropriate if only the value of the patented technology were at stake. Those royalties systematically provide SEP holders with excessive compensation in comparison with the benchmark of ex ante royalties.

These implications of lock-in and ex post dealings are well-understood: they represent an example of the general concept of lock-in and opportunism developed by Oliver Williamson.14 The Federal Circuit has also recognized the market distortions caused by the inclusion of patented technologies in public standards and the resulting danger of patent holdup involving SEPs.15

For these and other reasons, the SEP holder has ex post monopoly power that, if left unchecked, would enable it to obtain royalties far in excess of the royalties that it could earn in a competitive market.16 To address this common problem and limit ex post opportunism by SEP holders, SSOs typically require participants that own SEPs to make certain FRAND commitments. In particular, by requiring a commitment to license on “fair and reasonable” terms, the FRAND requirement aims to prevent, or at least reduce, the extent of monopoly pricing by SEP holders. And by requiring a commitment to license on “nondiscriminatory” terms, the FRAND requirement can prevent SEP holders from extracting monopoly premiums by selective licensing or, more important, migrating their monopoly power from the FRAND-regulated market to unregulated standard-implementing product markets by licensing to only one or a few implementers or licensing to selected implementers on discriminatorily favorable terms.

#### Patent holdup is accentuated by the Ninth Circuit’s recent decision in *FTC v. Qualcomm* that permits ICT firms to engage in innovation-stifling conduct with antitrust impunity.

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Standards can enhance competition and consumer choice, but they also massively inflate the value of patents deemed essential to the standard, and give their owners the power to sue companies that implement the standard for money damages or injunctions to block them from using their SEPs. When standards cover critical features like wireless connectivity, SEP owners wield a huge amount of “hold-up” power because their patents allow them to effectively block access to the standard altogether. That lets them charge unduly large tolls to anyone who wants to implement the standard.

To minimize that risk, standard-setting organizations typically require companies that want their patented technology incorporated into a standard to promise in advance to license their SEPs to others on fair, reasonable, and non-discriminatory (FRAND) terms. But that promise strikes at a key tension between antitrust and patent law: patent owners have no obligation to let anyone use technology their patent covers, but to get those technologies incorporated into standards, patent owners usually have to promise that they will give permission to anyone who wants to implement the standard as long as they pay a reasonable license fee.

Qualcomm is one of the most important and dominant companies in the history of wireless communication standards. It is a multinational conglomerate that has owned patents on every major wireless communication standard since its first CDMA patent in 1985, and it participates in the standard-setting organizations that define those standards. Qualcomm is somewhat unique in that it not only licenses SEPs, but also supplies the modem chips used by a wide range of devices. These include chips that implement wireless communication standards, which lie at the heart of every mobile computing device.

Although Qualcomm promised to license its SEPs (including patents essential to CDMA, 3G, 4G, and 5G) on FRAND terms, its conduct has to many looked unfair, unreasonable, and highly discriminatory. In particular, Qualcomm has drawn scrutiny for bundling tens of thousands of patents together—including many that are not standard-essential—and offering portfolio-only licenses no matter what licensees actually want or need; refusing to sell modem chips to anyone without a SEP license and threatening to withhold chips from companies trying to negotiate different license terms; refusing to license anyone other than original-equipment manufacturers (OEMs); and insisting on royalties calculated as a percentage of the sale price of a handset sold to end users for hundreds of dollars, despite the minimal contribution of any particular patent to the retail value.

In 2017, the U.S. Federal Trade Commission [sued](https://www.ftc.gov/news-events/press-releases/2017/01/ftc-charges-qualcomm-monopolizing-key-semiconductor-device-used) Qualcomm for violating both sections of the Sherman Antitrust Act by engaging in a number of anticompetitive SEP licensing practices. In May 2019, the U.S. District Court for the Northern District of California agreed with the FTC, identifying numerous instances of Qualcomm’s unlawful, anticompetitive conduct in a comprehensive [233-page opinion](https://www.eff.org/document/ftc-v-qualcomm-district-court-opinion). We were pleased to see the FTC take action and the district court credit the overwhelming evidence that Qualcomm’s conduct is corrosive to market-based competition and threatens to cement Qualcomm’s dominance for years to come.

But this month, a panel of judges from the Court of Appeals for the Ninth Circuit unanimously [overturned](https://www.eff.org/document/ninth-circuit-opinion-ftc-v-qualcomm) the district court’s decision, reasoning that Qualcomm’s conduct was “hypercompetitive” but not “anticompetitive,” and therefore not a violation of antitrust law. To reach that result, the Ninth Circuit made the patent grant more powerful and antitrust law weaker than ever.

According to the Ninth Circuit, patent owners don’t have a duty to let anyone use what their patent covers, and therefore Qualcomm had no duty to license its SEPs to anyone. But that framing requires ignoring the promises Qualcomm made to license its SEPs on reasonable and non-discriminatory terms—promises that courts in this country and around the world have consistently enforced. It also means ignoring antitrust principles like the essential facilities doctrine, which limits the ability of a monopolist with hold-up power over an essential facility (like a port) to shut out rivals. Instead, the Ninth Circuit held rather simplistically that a duty to deal could arise only if the monopolist had provided access, and then reversed its policy.

But even when Qualcomm restricted its licensing policies in critical ways, the Ninth Circuit found reasons to approve those restrictions. For example, Qualcomm stopped licensing its patents to chip manufacturers and started licensing them only to OEMs. This had a major benefit: it let Qualcomm charge a much higher royalty rate based on the high retail price of the end user devices, like smartphones and tablets, that OEMs make and sell. If Qualcomm had continued to license to chip suppliers, its patents would be “exhausted” once the chips were sold to OEMs, extinguishing Qualcomm’s right to assert its patents and control how the chips were used.

Patent exhaustion is a century-old doctrine that protects the rights of consumers to use things they buy without getting the patent owner’s permission again and again. Patent exhaustion is important because it prevents price-gouging, but also because it protects space for innovation by letting people use things they buy freely, including to build innovations of their own. The doctrine thus helps patent law serve its underlying goal—promoting economic growth and innovation. In other words, the doctrine of exhaustion is baked into the patent grant; it is not optional. Nevertheless, the Ninth Circuit wholeheartedly approved of Qualcomm’s efforts to avoid exhaustion—even when that meant cutting off access to previous licensees (chip-makers) in ways that let Qualcomm charge far more in licensing fees than its SEPs could possibly have contributed to the retail value of the final product.

It makes no sense that Qualcomm could contract around a fundamental principle like patent exhaustion, but at the same time did not assume any antitrust duty to deal under these circumstances. Worse, it’s harmful for the economy, innovation, and consumers. Unfortunately, the kind of harm that antitrust law recognizes is limited to harm affecting “competition” or the “competitive process.” Antitrust law, at least as the Ninth Circuit interprets it, doesn’t do nearly enough to address the harm downstream consumers experience when they pay inflated prices for high-tech devices, and miss out on innovation that might have developed from fair, reasonable, and non-discriminatory licensing practices.

We hope the FTC sticks to its guns and asks the Ninth Circuit to go en banc and reconsider this decision. Otherwise, antitrust law will become an even weaker weapon against innovation-stifling conduct in technology markets.

#### Weakened antitrust enforcement emboldens firms to follow Qualcomm’s lead, which collapses FRAND integrity.

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While the FRAND process has been highly productive, it is also fragile. Firms are tempted to make commitments at the beginning when the incentive to join is large, but renege on them later when they can profit by doing so. At least in this particular case, private FRAND enforcement had not worked very well. Qualcomm had been able to violate FRAND commitments in order to exclude rivals and obtain higher royalties than FRAND would permit, largely with impunity. Other firms will very likely follow Qualcomm’s lead. If that happens the FRAND system will fall apart, doing irreparable injury to the modern wireless telecommunications network or, at the very least, diminishing the leadership role of the United States in preserving effective network competition.

While governments can be heavily involved in standard set-ting,9 the implementation of technical standards in information technologies is largely the work of private actors. Government involvement is limited mainly to enforcement of contract, intellectual property, or antitrust law. As private actors, those involved in standard setting or compliance are fully subject to the federal antitrust laws.

This Article addresses one question: when is an SSO participant’s violation of a FRAND commitment an antitrust violation, and if it is, of what kind and what are the implications for remedies? It warns against two extremes. One is thinking that any violation of a FRAND commitment is an antitrust violation as well. In the first instance FRAND obligations are contractual, and most breaches of contract do not violate any antitrust law. The other extreme is thinking that, because a FRAND violation is a breach of contract, it cannot also be an antitrust violation. The question of an antitrust violation does not de-pend on whether the conduct breached a particular agreement but rather on whether it caused competitive harm. This can happen because the conduct restrained trade under section 1 of the Sherman Act, was unreasonably exclusionary under section 2 of the Sherman Act, or amounted to an anticompetitive condition or understanding as defined by section 3 of the Clay-ton Act.10 The end goal is to identify practices that harm com-petition, thereby injuring consumers.

The Ninth Circuit’s Qualcomm decision will make antitrust violations in the context of FRAND licensing much more difficult to prove, even in cases where anticompetitive behavior and consumer harm seem clear.11 Indeed, in this case the court itself acknowledged the harm to consumers but appeared to think that they were not entitled to protection.12 If this decision stands, FRAND obligations will to a larger extent have to be settled through private litigation and the federal antitrust enforcement agencies will have a diminished role. Anticompetitive behavior by one firm that is not effectively disciplined will lead others to do the same thing.

#### Absence of domestic 5G competition cedes leadership in technical standards to China.

Duan 19, \*Charles Duan is a senior fellow and associate director of tech & innovation policy at the R Street Institute, where he focuses his research on intellectual property issues; (February 5th, 2019, “Why China Is Winning the 5G War”, https://nationalinterest.org/feature/why-china-winning-5g-war-43347)

There is little doubt today that American superiority in the next generation of mobile communications, commonly called 5G, is a matter of extraordinary national concern. There is also little doubt that China is a strong competitor, already having outspent the United States by [$24 billion](https://www2.deloitte.com/content/dam/Deloitte/us/Documents/technology-media-telecommunications/us-tmt-5g-deployment-imperative.pdf#page=3) and planning [$411 billion](https://www.scmp.com/tech/china-tech/article/2098948/china-plans-28-trillion-yuan-capital-expenditure-create-worlds) in 5G investment over the next decade. The Chinese government has also laid out multiple national plans for establishing the country as a leader in mobile technology, and the Chinese firm Huawei is poised to be the [top smartphone manufacturer](https://www.cnbc.com/2018/11/16/huawei-aims-to-overtake-samsung-as-no-1-smartphone-player-by-2020.html) by 2020.

And what are United States companies doing about this? Bickering over patents.

For years, the leading American supplier of advanced mobile communications chips has been the San Diego-based Qualcomm. The company has been an innovator of mobile technology, but it has also been a remarkable innovator of convoluted legal strategies. As an ongoing Federal Trade Commission [lawsuit alleges](https://www.ftc.gov/news-events/press-releases/2017/01/ftc-charges-qualcomm-monopolizing-key-semiconductor-device-used), Qualcomm has used its dominant position as a chip supplier and its extensive patent holdings to weave an intricate web of patent licensing across the mobile industry. The effect of that complex licensing scheme, the FTC claims, has been to force competitor chipmakers out of the market and to extract concessions and high patent royalties from smartphone and mobile-device makers.

Qualcomm today faces only one major U.S. competitor—Intel, whose chips Apple recently [started using](https://www.cultofmac.com/484250/intel-reaping-rewards-apples-scrap-qualcomm/) instead of Qualcomm’s. Not surprisingly, Qualcomm has leveraged its patents to force a retaliatory investigation against Apple, the effect of which could be, as an administrative judge [recently determined](http://www.fosspatents.com/2018/10/itc-judge-didnt-buy-testimony-for-which.html), to boot Intel out of the mobile-chip market and leave Qualcomm as a monopoly.

It is hard to imagine that this infighting among Apple, Intel and Qualcomm is getting the United States very far in 5G, and it is harder to imagine that Qualcomm’s desired outcome would do so, either. The best path, instead, is the obvious one: allowing competition and expanding the number of firms working on 5G.

Competition encourages companies to out-innovate each other in order to grab market share. Of particular importance to 5G, competition leads to [better cybersecurity](https://morningconsult.com/opinions/in-the-race-to-5g-monopoly-considered-harmful/) in products, making them less vulnerable to hacking or misuse.

Competition is especially crucial when it comes to the technical standards that define how 5G works. These standards are the work of 3GPP, an international consortium of technology companies in the field. Chinese players such as Huawei and ZTE are major participants in 3GPP. Ensuring that 3GPP’s standards reflect American values requires having as many American companies at the negotiating table as possible—which is harder to achieve when those companies are trying to sue each other out of business.

Certainly patents themselves, as rewards for new inventions, are a driver of innovation in areas such as 5G. The problem, though, is not the existence of a patent system but the ever-expanding power of the patent laws, which encourage companies to pour dollars into complex patent licensing and assertion schemes—as companies like Qualcomm have done—rather than to perform the hard work of building new technologies. When innovation in patent strategy is more profitable than actual innovation, we lose the race to 5G and other technologies.

But don’t take my word for it. [Multiple members of Congress](https://www.patentprogress.org/2019/01/11/congress-weighs-in-on-qualcomm-and-apple-at-the-itc/), from both sides of the aisle, have denounced the use of patents to kick companies like Intel out of 5G development, predicting that such actions would “dampen the quality, innovation, competitive pricing, and in this case the preservation of a strong U.S. presence in the development of 5G and thus the national security of the United States.”

Or look to what China itself is doing. The Chinese government is handing out rewards left and right to encourage technology research and development. Indeed, it grants subsidies and financial benefits (ranging from the [ordinary](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2818503) to the [imperfect](https://funginstitute.berkeley.edu/wp-content/uploads/2013/12/patent_subsidy_Zhen.pdf) to the [bizarre](https://www.scmp.com/news/china/article/1681850/how-get-out-jail-early-china-buy-inventors-idea-and-patent-it)) to encourage its citizens to file for patents. But while China specifically encourages filing for patents, it does little to encourage using them: Patent infringement awards in court are peanuts—often only [five figures](https://scholarship.law.berkeley.edu/btlj/vol33/iss2/2/)—and most Chinese patent owners drop their patents [within five years](https://www.bloomberg.com/news/articles/2018-09-26/china-claims-more-patents-than-any-country-most-are-worthless) of getting them. The message in China is clear: You will be rewarded for innovating, but not for quibbling over patents.

The United States should take the same tack if it wants to match China in 5G. Ever-stronger patent rights encourage counterproductive disputes that are a drag on industry, a drag on research and development, and ultimately a drag on domestic competitiveness on the global stage. If America wants to lead in 5G, then it must clear the path for strong competition among leading American technology companies.

#### Standards leadership allows China to export digital authoritarianism.

Drew et al. 21, \*Dr Alexi Drew, Research Associate, The Policy Institute, King’s College London; (May 7th, 2021, “The Critical Geopolitics of Standards Setting”, https://www.transatlantic-dialogue-on-china.rusi.org/article/the-critical-geopolitics-of-standards-setting)

However, this previously ‘western’ domain is challenged by a Chinese bloc of private industry actors with centrally directed, strategic motivations for their efforts who have managed to leverage the flaws of this system for political and economic advantage.  The market-driven self-regulation model of technical standards has proven itself unsustainable given the geopolitical power achievable through the control of these standards. The marketised approach is easily abusable by a technologically developed nation-state with geopolitical intentions firmly in mind.

Obscurity Through Complexity

Technical standards have the immediate appearance of being both apolitical and ethically neutral. This seems to set them apart from the debate over standards of state behaviour in [cyber space concerning espionage and actions below the threshold of armed conflict](https://www.cfr.org/blog/unexpectedly-all-un-countries-agreed-cybersecurity-report-so-what). Yet, technological standards are unequivocally connected to normative practices of international behaviour and ethics. The extremely complex nature of the standards under consideration in bodies such as the International Organization for Standardization, the International Electrotechnical Commission (IEC), the International Telecommunications Union (ITU), and the Third Generation Partnership Project (3GPP) obscures the very tangible real-world impact that the standards they set have. The 3GPP is responsible for standards setting for mobile telecommunications. It covers everything from 5G through to autonomous vehicles and the Internet of Things. These are the bodies defining how the modern world is constructed.

On the one hand they appear quite benign, responsible for such banalities as the use of Universal Serial Bus (USB) connectors versus proprietary standards. This hardly seems a matter of national security importance. But the same process is responsible for what ultimately shape the basic operating parameters of facial recognition technology in closed circuit television systems, the level of centralised state control at the technical foundations of the internet, and the protections of personally identifiable data. These generate profound implications for international policy and ethics.

Internal Competition vs Strategic Direction

Technical standards setting processes have, historically, been dominated by private sector actors who have had both the capacity to develop a particular technology to the point of holding a significant market share, and the ability to use that market share to advocate for the standardisation of the technology in line with their own production. The market led approach has continued to be the prevailing model by which American companies have globalised the technical standards behind US dominated technological innovation. This privatised form of self-regulation for technology companies is only partially influenced by the approach taken within the EU where [some licensing of standards are controlled by state or EU led institutions.](https://www.ui.se/globalassets/ui.se-eng/publications/ui-publications/2019/ui-brief-no.-2-2019.pdf)

In contrast to this approach the Chinese model has involved a high level of state-oriented direction, oversight, and direct engagement on the creation and signing off technical standards. Efforts to harmonise and centralise technical standards domestically have become increasingly internationalised as the CCP takes this centralised, strategic approach to technical standards setting bodies such as the ITU, 3GPP, and IEC. Technical standards have also become an increasingly central component of the Digital Silk Road with the openly expressed goal of increasing uptake of Chinese technical standards in partner countries.

The implications of this clash between a system of technical standardisation that is driven by the market versus one driven by an authoritarian government subsidised model are a direct challenge to the development of free, open, and ethical technology. Standardisation mechanisms have become political, or rather there has been a gradual realisation of the political power to be gained from the control of technical standards. While the PRC might have come to this awareness first, the US and Europe have since had a rude awakening about the missed opportunity. The privatised model of technical standards setting favoured by European and US markets relies upon the dynamics of financial competition to regulate behaviour. This is in stark contrast to the statist Chinese model.

#### Causes global backsliding.

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The risk that technology will usher in a wave of authoritarianism is all the more concerning because our own empirical research has indicated that beyond buttressing autocracies, digital tools are associated with an increased risk of democratic backsliding in fragile democracies. New technologies are particularly dangerous for weak democracies because many of these digital tools are dual use: technology can enhance government efficiency and provide the capacity to address challenges such as crime and terrorism, but no matter the intentions with which governments initially acquire such technology, they can also use these tools to muzzle and restrict the activities of their opponents.

#### Democracy solves a litany of existential threats.

Diamond 19, Professor of Political Science and Sociology at Stanford University, Senior Fellow at the Hoover Institution, Senior Fellow at the Freeman Spogli Institute for International Studies, PhD in Sociology from Stanford University, (Dr. Larry, Ill Winds: Saving Democracy from Russian Rage, Chinese Ambition, and American Complacency, p. 199-202)

The most obvious response to the ill winds blowing from the world’s autocracies is to help the winds of freedom blowing in the other direction. The democracies of the West cannot save themselves if they do not stand with democrats around the world. This is truer now than ever, for several reasons. We live in a globalized world, one in which models, trends, and ideas cascade across borders. Any wind of change may gather quickly and blow with gale force. People everywhere form ideas about how to govern—or simply about which forms of government and sources of power may be irresistible—based on what they see happening elsewhere. We are now immersed in a fierce global contest of ideas, information, and norms. In the digital age, that contest is moving at lightning speed, shaping how people think about their political systems and the way the world runs. As doubts about and threats to democracy are mounting in the West, this is not a contest that the democracies can afford to lose. Globalization, with its flows of trade and information, raises the stakes for us in another way. Authoritarian and badly governed regimes increasingly pose a direct threat to popular sovereignty and the rule of law in our own democracies. Covert flows of money and influence are subverting and corrupting our democratic processes and institutions. They will not stop just because Americans and others pretend that we have no stake in the future of freedom in the world. If we want to defend the core principles of self-government, transparency, and accountability in our own democracies, we have no choice but to promote them globally. It is not enough to say that dictatorship is bad and that democracy, however flawed, is still better. Popular enthusiasm for a lesser evil cannot be sustained indefinitely. People need the inspiration of a positive vision. Democracy must demonstrate that it is a just and fair political system that advances humane values and the common good. To make our republics more perfect, established democracies must not only adopt reforms to more fully include and empower their own citizens. They must also support people, groups, and institutions struggling to achieve democratic values elsewhere. The best way to counter Russian rage and Chinese ambition is to show that Moscow and Beijing are on the wrong side of history; that people everywhere yearn to be free; and that they can make freedom work to achieve a more just, sustainable, and prosperous society. In our networked age, both idealism and the harder imperatives of global power and security argue for more democracy, not less. For one thing, if we do not worry about the quality of governance in lower-income countries, we will face more and more troubled and failing states. Famine and genocide are the curse of authoritarian states, not democratic ones. Outright state collapse is the ultimate, bitter fruit of tyranny. When countries like Syria, Libya, and Afghanistan descend into civil war; when poor states in Africa cannot generate jobs and improve their citizens’ lives due to rule by corrupt and callous strongmen; when Central American societies are held hostage by brutal gangs and kleptocratic rulers, people flee—and wash up on the shores of the democracies. Europe and the United States cannot withstand the rising pressures of immigration unless they work to support better, more stable and accountable government in troubled countries. The world has simply grown too small, too flat, and too fast to wall off rotten states and pretend they are on some other planet. Hard security interests are at stake. As even the Trump administration’s 2017 National Security Strategy makes clear, the main threats to U.S. national security all stem from authoritarianism, whether in the form of tyrannies from Russia and China to Iran and North Korea or in the guise of antidemocratic terrorist movements such as ISIS.1 By supporting the development of democracy around the world, we can deny these authoritarian adversaries the geopolitical running room they seek. Just as Russia, China, and Iran are trying to undermine democracies to bend other countries to their will, so too can we contain these autocrats’ ambitions by helping other countries build effective, resilient democracies that can withstand the dictators’ malevolence. Of course, democratically elected governments with open societies will not support the American line on every issue. But no free society wants to mortgage its future to another country. The American national interest would best be secured by a pluralistic world of free countries—one in which autocrats can no longer use corruption and coercion to gobble up resources, alliances, and territory. If you look back over our history to see who has posed a threat to the United States and our allies, it has always been authoritarian regimes and empires. As political scientists have long noted, no two democracies have ever gone to war with each other—ever. It is not the democracies of the world that are supporting international terrorism, proliferating weapons of mass destruction, or threatening the territory of their neighbors.

#### Emergence of smart cities depends on IoT applications of 5G interoperability standards---absent FRAND, excessive royalties will undermine sustainable development.

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In December, we [outlined](https://actonline.org/2017/12/18/smart-cities-connecting-your-community-through-technology/%5d) the emergence of Smart Cities – cities that harness technological innovations like internet of things (IoT) devices and data analytics to improve essential infrastructure in growing urban centers. The technological foundation of Smart Cities aims to improve public safety, better allocate resources, and meet the needs of citizens more quickly.

A central element to Smart Cities is the comprehensive network of sensors and devices implemented within buildings, roads, traffic signs, and parking meters that allows them to interact with public, and potentially private-owned, infrastructure. These sensors will “speak” to one another, communicating information about energy usage, traffic density, or other elements of city management that have traditionally either been analyzed separately or not tracked at all. The potential of Smart Cities allows data to flow from previously disconnected branches of the city and be processed in real-time, unlocking previously unknown insights.

The powerful interoperability of Smart Cities will rely heavily on standardized technologies developed in organizations like the IEEE, which is responsible for standardizing the wi-fi technology we use every day. Standardized technologies often include standard-essential patents (SEPs), which, like their name suggests, are patents declared essential to an industry standard by a standards-setting organization. In simple terms, one cannot implement the standardized technology without using the patent.

Like regular patents, the users of SEPs must pay royalties or licensing fees to the patent owner before they may use it. For example, if a manufacturing company wants to make an IoT device interoperable with a 5G network, the manufacturer must pay a licensing fee to the owner of the SEP that is essential to the 5G standard. SEPs play a vital role in the new innovations we enjoy and have come to expect, and because of the value of these patents, SEP holders have the ability to demand high license fees from those who wish to implement the standard. To offset this competition issue, many SEP holders voluntarily agree to license their SEPs to any willing licensee under fair, reasonable, and non-discriminatory (FRAND) terms.

While wi-fi and LTE are standards that will be vital to Smart City deployment, countless new standardized technologies are being developed that will be integral to any fully-operational Smart City. With reasonable access to SEPs, assured by the FRAND commitment, innovators can enjoy the legal and business certainty they need to compete. While the meaning of the FRAND commitment continues to be refined – as evidenced by the development of SEP best practices recently launched by the App Association in Europe – its foundations are well-established.

But what happens when SEP holders do not abide by the FRAND licensing commitment, or simply refuse to license at all? Sadly, small and medium-sized companies would be forced to accept untenable licensing terms, but more realistically, they would be priced out of using the standard altogether. As a result, it would impose a barrier to innovation that would result in fewer products offered to consumers or cities eager to implement IoT technologies. For example, many hope the rise of autonomous vehicles will be seamlessly integrated into the Smart City network. But how beneficial would it be if only some autonomous vehicle brands are able to license the technology needed to communicate with traffic lights, simply because of the market power of a chipmaker? The FRAND commitment is an important backstop to that unfortunate possibility.

It is vital for SEP holders to honor FRAND licensing terms, if not for small and medium-sized innovators, then for the sustainability of future Smart Cities. FRAND creates a platform for innovation, providing a floor on which companies can stand, innovate, and compete. If the foundation of the FRAND commitment is reneged, American innovators pay a steep price – not only do they lose a key component of product development and market entry, but they are also left with years of expensive negotiations and litigation if they choose to challenge the licensing practice. What’s more, the confidence developed in the open standards development system is shaken, and Smart Cities have fewer choices in IoT solutions for their future.

To achieve the promise of Smart Cities, a balanced standards ecosystem is essential. We must allow small and medium-sized developers to leverage industry standards for innovation and prevent cost-prohibitive royalty structures and negotiating practices that are detrimental to competition, while also ensuring that SEP owners can protect their intellectual property and be fairly compensated for its use. The FRAND commitment continues to be the best framework to achieve this balance, and adherence to its principles will determine the future and success of Smart Cities.

#### Climate change is anthropogenic and causes extinction---5G-enabled smart cities are critical for mitigation and adaptation.

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Currently, the entire planet is at risk due to continual climate change [1–3]. The recorded increase in average temperature across the world in the past hundred years, and the associated changes attributed to this, are known as global warming. Many scientists are convinced by the published evidence that this change is anthropogenic and resulted from the elevated emission levels of global greenhouse gases (GHGs) [4,5]. Gases such as water vapor, carbon dioxide, methane, nitrous oxide, and ozone are responsible for the absorption and emission of thermal radiation. These changes in the relative quantities of the GHGs induce a proportional change in the amount of preserved solar energy. Presently, the accepted indicator for global warming is the sustained rise in the mean temperature worldwide. This definition is designed to account for the fact that there may be some localized exceptions to this rise. For example, there may be cooling experienced in a region while the global temperature may increase altogether, hence the need for average temperature. A key concern with the GHGs trapping of more heat in the atmosphere is that it affects both climate and short scale weather patterns. Consequently, it results in greater numbers of adverse weather events such as storms, heat waves, cold snaps, droughts, and fires [6]. Climate-related risks to health, livelihoods, food security, water supply, human safety, and economic growth are projected to increase with global warming of 1.5 ◦C [7] and further increase further at 2 ◦C, as shown in Figure 1. In addition, the risks to global aggregated economic growth due to the climate change impacts are projected to be lower at 1.5 ◦C than at 2 ◦C by the end of this century.

Carbon dioxide has the most substantial effect on global warming [8]. Although it was once assumed to have an ~100 year lifespan in the atmosphere, careful studies revealed that the situation is far worse, with three-quarters of the gas expected to remain for a time in the region of up to ~1000 years, with the remainder lasting for an indefinite period of time [9]. It was indicated that the present impacts of humanity on the atmosphere can certainly cause a long term problem [10]. Carbon dioxide is released when oil, coal, and other fossil fuels are burnt for the energy we use to power our homes, cars, and smartphones. By lessening its usage, we can curb our own contribution to climate change while saving money. The first challenge is eliminating the burning of coal, oil, and, eventually, natural gas. Oil is the lubricant of the global economy as it is hidden inside such ubiquitous items as plastic and corn, fundamental to the transportation of both consumers and goods. Coal is the substrate, supplying roughly half of the electricity worldwide, a percentage that is likely to grow according to the International Energy Agency (IEA). In fact, buildings contribute up to 43% of all the greenhouse gas emissions worldwide [11], even though investing in thicker insulation and other cost-effective as well as temperature-regulating strategies can save money in the long run. Investment in new infrastructures, or radical upgradation of the existing highways and transmission lines, may help to reduce greenhouse gas emissions, yielding economic growth in the developing countries.

Nations across the globe have kept very high targets to reducing their GHG discharges [12,13]. In order to meet these goals, considerable reductions in city energy usage is required. At a global scale, urban communities represent over half (55%) of the population, which is predicted to reach 68% by the middle of this century [14]. Urban areas claim ownership of the highest levels of energy use, gas emission, and also the largest local economy. As such, it is crucial for urban areas to reduce their consumption and utilize renewable sources wherever available to reduce their gas discharge levels. Smart cities often utilize digital sensors to measure and transmit data about the levels of GHGs in the city at that moment, as a means of tackling them [15]. The efficacy of such a system is thus reliant on the network used to collate and analyze the data collected as an extant network. The mobile telecommunications networks offer a convenient solution to this desire, as their pre-existence has the clear benefit of reducing costs compared to the design and implementation of a novel system. It is recognized that smart cities will certainly act as the key players meeting these ambitious targets [16,17]. In this study, we focused primarily on the potential applications of 5G network technology to control climate change in Singapore. In addition, a clear overview of the sustainability benefits of introducing 5G technology compatible smart cities, buildings, and farms in all aspects of urbanization is provided. Herein, the main purpose is to tackle the negative outcomes associated with anthropogenic climate change, with a particular focus on the contributions that are best made by the telecoms network operators.

Climate change is one of the most challenging problems that humanity has ever faced. Presently, hundreds of millions of lives, innumerable species, entire ecosystems, health, economy, and the future habitability of this planet are at risk. Fortunately, climate change is solvable, we just need to wisely exploit the existing technologies and sciences. Climate change mitigation is a pressing international need in which many management actions are required. The development of 5G technology has been largely driven by smart mobile devices and advanced communication technologies. It may thus serve as a technical enabler for a whole new range of business opportunities, energy, and facilities management, together with industrial applications. Moreover, it may enable different devices to work together seamlessly. Definitely, the 5G cellular network technology is expected to revolutionize the global industries with profound effects on the savings of energy, waste generation and recycling, and water resources management, thus reducing the climate change impacts.

#### Patent holdup is real and necessitates intervention, even if it can’t be systemically proven.

Contreras 19, \*Jorge Contreras, Professor, University of Utah S.J. Quinney College of Law; (2019, “MUCH ADO ABOUT HOLD-UP”, <https://www.illinoislawreview.org/wp-content/uploads/2019/08/Contreras.pdf>)

III. CAN WE PLEASE STOP SEARCHING FOR SYSTEMIC HOLD-UP?

It is not the purpose of this article to critique the data or methodologies used by researchers who claim that there is no evidence of systemic hold-up. Though questions remain, the data presented in the cited studies finding no empirical evidence of systemic hold-up present plausible descriptions of current markets for products such as smart phones and other connected technology devices. Instead, this critique is directed at the core assumption that runs through each of these studies: that a lack of evidence of systemic hold-up means that hold-up does not represent a threat that justifies policy intervention. In this Part, I argue that, notwithstanding the findings of these studies, patent hold-up in standardized product markets may indeed be a threat that merits preventative policy measures, but that those measures should be directed toward the prevention of well-understood and actionable forms of anticompetitive conduct rather than the economic phenomenon of hold-up.

A. The Absence of Systemic Hold-Up Does Not Mean that Hold-Up Does Not Occur

In a 2017 article, Galetovic and Haber utilize an extended analogy drawn from the field of Mayan archeology to make the point that scholars sometimes ignore the facts in front of them in order to cling to pre-formed (and empirically unsupported) beliefs.92 In this analogical tradition, I will use a hypothetical from public health epidemiology to illustrate a related point. Let us consider the often fatal and highly contagious viral infection Ebola. U.S. public health officials, aware of the dangerous effects of Ebola, might propose the implementation of prophylactic measures to prevent the spread of Ebola in the United States. Such measures might include early detection systems at U.S. hospitals, a network of Ebola experts ready to investigate suspected cases, and potential vaccines for particularly vulnerable populations. All of these measures, of course, would come at a cost. Those opposing the incurrence of this cost might argue that such measures are unjustified because there is no empirical evidence that Ebola is a problem in the U.S. After all, there are no documented outbreaks of the disease, and the only reported cases have been sporadic and linked to other factors (such as health workers returning from abroad). In fact, both lifespan and overall health in the United States have been improving steadily over the past several decades. Most declines in population health can be traced to causes such as tobacco use, poor dietary choices, lack of exercise and the like, but not to Ebola. Thus, because there is no evidence that Ebola outbreaks have occurred in the United States nor any linkage between decreased health and Ebola, and because the overall health of the United States population continues to improve, there is no justification for preventative measures to stop Ebola outbreaks in the United States.

This reasoning is, of course, fallacious and, in the case of a disease like Ebola, dangerously so. In the field of public health, prophylactic measures are often taken before a health risk affects a significant portion of the population. This is the reason for prophylactic measures in the first place. In the field of public health, it is widely recognized that risks arising from any number of environmental and pathogenic sources can be assessed based on laboratory analysis and test cases, without population-level epidemiological data. In fact, once population level data for such outbreaks is available, it is often too late: an epidemic has broken out and millions are at risk. Luckily, it is doubtful that public health officials would apply the fallacious reasoning outlined above to important public health decisions.

Curiously, however, this “Ebola fallacy” has taken root in the debate over patent hold-up. As discussed above, the purported lack of empirical evidence of system-wide patent hold-up is used as a justification for abandoning or forestalling policy interventions aimed at reducing the risk of hold-up. Because hold-up has not been detected at a systemic level, so the argument goes, it must not be a problem. Therefore, measures designed to prevent hold-up from occurring must be the result of gratuitous or over-zealous policy making. The logical fallacies in this argument should be apparent.

In fact, there are numerous examples of anticompetitive conduct by individual firms in markets that are not otherwise overrun by anticompetitive behavior. For example, in 2009, the Federal Trade Commission brought an action against pharmaceutical manufacturer Solvay and a group of generic drug manufacturers for violating Section 5 of the FTC Act by entering into an arrangement whereby the generic manufacturers agreed not to challenge Solvay’s patent on its AndroGel product and not to market their generic versions of AndroGel, in exchange for a significant payment by Solvay to each of the generic manufacturers (a so-called “pay for delay” scheme).94 The Supreme Court held in 2013 that such conduct was actionable and reversed the Eleventh Circuit’s dismissal of the FTC’s claim.95 Yet even in 2009, the year in which the FTC brought its action, of the 68 agreements settling patent disputes filed by pharmaceutical manufacturers with the FTC,96 the FTC estimated that only 19 of these (28%) were potential pay for delay agreements; and by 2014, the year after the Actavis decision, only 21 out of 160 such agreements (13%) were deemed by the FTC likely to represent illegal pay for delay schemes.97 Thus, while pharmaceutical industry patent settlements have attracted significant attention as potentially anticompetitive arrangements, most such settlements do not merit investigation by the FTC.98

An even more telling example is found in the area of mergers and acquisitions. During fiscal year 2016, a total of 1,832 merger and acquisition transactions were reported to the FTC and DOJ under the Hart-Scott-Rodino Antitrust Improvements Act.99 Of these, the FTC challenged only twenty-two (1.2%). 100 Thus, while some anticompetitive mergers may exist, the vast majority are not anticompetitive.101 But the absence of market-wide anticompetitive conduct in the area of mergers and acquisitions hardly excuses the handful of transactions that do present antitrust risks, nor does it suggest that mergers should not be subject to governmental monitoring and, when merited, enforcement.

B. Protective Measures May Already Be Working to Reduce Hold-Up

Another important factor that should be considered regarding the purported lack of empirical evidence of systemic hold-up is the effect that existing policy measures have already had in reducing hold-up. As noted above, the threat of patent hold-up was a primary motivating factor for many SDOs to adopt policies requiring the disclosure and licensing of SEPs. These policies have been in place for decades. In the United States, the first such policy was adopted in 1959 by the American Standards Association (the predecessor to today’s American National Standards Institute (ANSI).102 Today, every one of the more than 200 ANSI-accredited developers of American National Standards must adhere to ANSI’s essential requirements, including the adoption of such a licensing policy for SEPs. Similar policies have existed in European and international standards organizations since at least the 1980s.103 These policies, which were developed by SDOs in large part to reduce the likelihood of hold-up within standard-setting systems, have had several decades to work, and it is likely that the lack of observed hold-up in some studies can be attributed to the successful operation of these policies.

Similarly, antitrust and competition enforcement agencies in the U.S. and Europe have been aware of the potential for hold-up connected with standardization for many years. Accordingly, they have brought enforcement actions when it has been alleged that hold-up behavior has resulted in a violation of the antitrust laws. High-profile enforcement actions against patent holders such as Rambus, 104 Google 105 and Qualcomm106 send powerful deterrent signals to the market and warn others not to engage in similar behavior lest they, too, become the subject of agency enforcement. Like SDO policies, it is likely that the general market awareness of agency interest in standard-setting and hold-up has, to a degree, limited the amount of hold-up that is actually attempted in the marketplace, thereby limiting the direct evidence of hold-up as a systemic problem.

But do the deterrent effects of SDO and agency efforts to reduce hold-up signify that hold-up is not a problem? Certainly not. To reach such a conclusion would be perverse: akin to claiming that burglary is not a problem in a neighborhood that experiences reduced burglary rates after it has implemented an active neighborhood watch program and enhanced policing.

C. Indicia of Healthy Markets do not Prove the Absence of Anticompetitive Conduct

As noted above, one of the principal arguments advanced by commentators seeking to refute the “hold-up theory” is that markets for telecommunications products, namely smart phones, are robust – evidenced by increasing product functionality, decreasing consumer prices and rapid innovation -- and that this degree of robustness indicates that hold-up cannot be a problem in these markets.107 If hold-up were a problem in these markets, they reason, we would see product stagnation, stable (but high) prices, and a lack of competition – features associated with classic examples of hold-up in markets for products such as natural resources and agricultural goods.108

But this argument relies on a false syllogism: hold-up results in market dysfunction; if a market functions well, then it cannot be subject to hold-up. The weaknesses in this argument are multifold. First, hold-up may exist in individual instances without sufficient weight to affect overall market characteristics, particularly in a large global market such as mobile telecommunications. Thus hold-up may exist, even in a market that outwardly appears to be functioning well. Second, there is no valid counterfactual to use to compare the health and robustness of the market for mobile telecommunications products.109 Other consumer electronics devices, such as televisions and DVD players, do not compare well with mobile telecommunications devices, which have taken on a unique character in the modern networked economy. Thus, observing the strength of the market fails to answer the critical questions “compared to what?” and how much stronger the market might be (through more product diversity, functionality, price reduction) without hold-up?

A simple historical illustration is useful in this context. During the decade leading up to the enactment of the Sherman Antitrust Act of 1890, several major U.S. commodity markets (e.g., steel, salt, petroleum, coal, sugar, lead, and others) came under intense scrutiny for a variety of allegedly anticompetitive industrial arrangements. One might have argued that these markets, had they been subject to the sorts of anticompetitive collusion that the Sherman Act sought to address, should have seen reductions of output and increases in price. Yet, between 1880 and 1890, U.S. output of salt, petroleum, steel, and coal all increased significantly, and prices of steel, sugar and lead all dropped significantly.110 Do these positive market indicia demonstrate that the subject markets were not subject to anticompetitive collusion, and that the Sherman Act was not necessary? Certainly, investigations of these industries revealed significant cartel behavior. I would suggest that few commentators today would argue that the coal, steel, sugar and other major industrial producers of the late nineteenth century were innocent of collusive and anticompetitive conduct, or that the Sherman Act was not a necessary and beneficial measure for the U.S. economy.111 Yet, had we relied solely on the positive characteristics exhibited by these markets as proof that anticompetitive conduct did not exist, then perhaps the Sherman Act never would have been enacted.

By the same token, the fact that global markets for standardized products such as computers and smart phones appear to be thriving does not itself refute the possibility of hold-up nor the existence of anticompetitive conduct in these markets. Nor does it allow regulators and policy makers to drop their guard or cease to monitor these important industries.

### 1AC---Cyber Advantage

#### Advantage 2 is Cybersecurity:

#### Aggressive patent strategies create structural flaws in 5G standardization that imperils domestic cybersecurity---market competition reduces vulnerability and severity of attacks.

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III. COMPETITION AND CYBERSECURITY

In addition to the historical review done so far, another approach to understanding the relationship among patents, competition, and national security is to consider the role of cybersecurity. There is little doubt that computer system vulnerabilities that enable hacking and spread of computer exploits are a threat to the nation’s defenses, so better cybersecurity is a key part of national security strategy.155

Strong competition can thus complement national security by enhancing domestic cybersecurity, and patent assertion that unduly weakens competition detracts from cybersecurity.156 Competition promotes better cybersecurity in at least two ways. First, multiple studies show that competition encourages firms to improve their products on multiple vectors including cybersecurity. Second, competition avoids a situation that security experts call a “monoculture,” which increases vulnerability to severe cyberattacks. As former Secretary of Homeland Security Michael Chertoff wrote recently, “We need competition and multiple providers, not a potentially vulnerable technological monoculture,” to guarantee national security.157 Thus, cybersecurity provides a useful lens for understanding how unfettered patent assertion and licensing can detract from national security.

A. Cybersecurity as Competitive Value-Add

Competition enhances national security by reducing the incidence of technical vulnerabilities. That effect is especially important for security sensitive systems such as mobile telecommunications.

Intuitively, a causal chain from competition to cybersecurity makes logical sense. Computer security is a value-added benefit to consumers, so firms in competitive markets are likely to use security to gain an edge over their competitors.158 In monopolized markets, though, there may be less external impetus to test products for flaws, and the monopolist may choose to focus less on security and more on new product features or increased product quality.

Economic research confirms these hypotheses about competition leading to better cybersecurity. A 2009 empirical study of web browsers considered the impact of market concentration on the amount of time that vendors took to fix security vulnerabilities as they were discovered.159 The study found that the presence of more competitors correlated with faster cybersecurity response—a reduction of 8–10 days in response time per additional market rival.160 Similarly, business researchers in 2005 modeled incentives for firms to engage in sharing of cybersecurity information, and concluded that the “inclination to share information and invest in security technologies increases as the degree of competitiveness in an industry increases.”161 Another study found that, where two software firms are in competition, at least one will be willing to take on some degree of risk and responsibility for cybersecurity, whereas a monopoly software firm will consistently fail to accept such responsibility.162 To be sure, an unpublished study from 2017 found that some market concentration can make firms more responsive to cybersecurity issues, but only to a point: “being in a dominant position reduces the positive effect of having less competitors on the responsiveness of the vendor,” and indeed the “more dominant the firm is, the less rapid it is in releasing security patches.”163 This research confirms that competition is more conducive to cybersecurity.

It is not hard to see how this applies to emerging communication technologies markets. In the absence of competition, the above research suggests that device manufacturers, chip makers, and software developers will lack incentives to respond to vulnerabilities, to share information about cybersecurity practices and issues, and to take responsibility for security matters. Mobile phone chips have had their share of cybersecurity failures already.164 The best way to flush out ongoing and future cybersecurity issues is to maintain competitive pressure at all levels of the supply chain.

B. Vulnerabilities of “Monocultures”

A second reason why monopoly undermines cybersecurity is that monopoly leads to a “monoculture” of single-vendor products, opening the door to massive systemic failure in the case of a cyberattack. Computer researchers developed the theory of software monocultures in the early 2000s, in response to the regular phenomenon of computer viruses and other attacks spreading rapidly by exploiting flaws in the dominant operating system at the time, Microsoft Windows.165 Where a computer system such as Windows has a commanding share of users, a virus that exploits a flaw in that system can quickly spread to infect a whole interconnected ecosystem. An operating system monopoly thus enables fast and easy spread of cyberattacks, and better cybersecurity would be achieved through greater diversity in online systems.166 As one research group posited, “a network architecture that supports a collection of heterogeneous network elements for the same functional capability offers a greater possibility of surviving security attacks as compared to homogeneous networks.”167

There has been considerable study of the theory that computer monocultures are naturally more vulnerable to attacks.168 In one study, computer science researchers reviewed a catalog of 6,340 software vulnerabilities recorded in 2007, to compare whether comparable software would share the same flaws.169 Of the 2,627 vulnerabilities applicable to application software (as opposed to operating systems, web scripts, and other software components), only 29 (1.1%) applied to substitute products from different vendors but providing the same functionality.170 By contrast, different versions of a single software product were found to share vulnerabilities 84.7% of the time.171 Thus, software monocultures share exploitable flaws even when there is some variation in versions across the monoculture; by contrast, diversity in software is almost guaranteed to prevent a single flaw from affecting all users.

In the case of 5G and wireless mobile communications, a monoculture is an especially concerning possibility. To the extent that systems such as smart city sensors or communication networks are widely deployed in a monoculture fashion, a widespread attack could have devastating consequences, potentially blacking out a region and affecting essential services such as 911.172 A monoculture that is vulnerable to so-called “rootkits” or “backdoors”—maliciously installed software that enable bad actors to commandeer systems—could also enable mass surveillance or spying by private hackers or foreign governments.173 The presence of systems from multiple vendors would mitigate these possibilities.

#### Only maximizing redundancy and diversity prevents devastating attacks from single vulnerabilities.

Rajiv Shah 20, President of the Rockefeller Foundation. Former administrator of the United States Agency for International Development, graduate of the University of Michigan and the University of Pennsylvania, 2020, “Ensuring a trusted 5G ecosystem of vendors and technology,” https://www.aspi.org.au/report/ensuring-trusted-5g-ecosystem-vendors-and-technology

Why is cybersecurity seen as so critical for 5G networks? Because 5G isn’t just the next natural stage in the evolution of wireless networks. 5G is about more than movie downloads. The likely applications and use cases will become critical to the functioning of governments, companies and society, including cyber-physical and safety-critical systems that will rely on the network. Not only do we need to be concerned about the confidentiality of data and users on the network, but we also need to consider the impacts of an attacker potentially compromising the availability and integrity of the systems, including the risks of the attacker being able to take down the whole network at once.

Australian and many other governments have already identified telecommunications networks as critical national infrastructure that’s essential to the effective functioning of society and therefore requiring additional regulation and attention, and it’s easy to understand why.12 In Australia in recent months, we’ve seen the chaos caused by outages of electronic payment (EFTPOS) systems for a few hours, making it impossible for people to buy basic items because they’re unused to carrying cash.13

Now imagine the impact of a smart city suddenly losing all traffic sensor data and the ability to control traffic lights. An attacker could cause major accidents by maliciously changing the data being sent to traffic lights. In fact, given some of the potential applications enabled by 5G, it could be possible to cause major disruption by more subtle changes. If applications such as remote driving of vehicles rely on ultra-low latency, what would happen if an attacker introduced a small delay to some or all network traffic?

The increasing importance of the network, combined with the increased risk that a cyber breach will cause major real-world consequences, means that the cybersecurity of 5G networks must be a critical consideration, planned and accounted for from the outset. Risk management approaches should also consider the more sensitive functions that are used by national security and law enforcement authorities, such as compliance with legislation on telecommunications interception and data retention, which may create additional security risks.

Building an understanding of 5G security requires integrating security and the 5G network architecture. Both suffer from a major skills gap in Australia14 and globally,15 so we would expect a major shortage of professionals with a detailed understanding of both, exacerbated by the fact that 5G architectures are complex and still evolving.

One example is the debates about the separation of the ‘core’ and ‘edge’ components of a 5G network. Can they be effectively segregated so that a threat in the edge can’t affect the core? Australian authorities say they can’t be effectively segregated, whereas UK authorities appear to be suggesting they can. Without getting involved in the details of the debate here, it’s likely that the true answer is that it depends on architectural choices and complex overall system-level interactions. Concepts such as network slicing will make this even more complex. End users are given effective control and exclusive use of an end-to-end slice of the network, and attention will need to be paid to the security safeguards required to minimise the risk of them escaping their own virtual slice and getting access to other parts of the network.

Vendor trust and security

The issue of vendor trust and security has been prominent in discussions about 5G security. Australia and the US have announced decisions to bar certain vendors, the UK has been formulating a compromise approach,16 (although this seems to be still evolving) and active debates in Europe are seemingly close to reaching a conclusion.

The risks from using a particular vendor can be many and varied. Much commentary on the subject talks about hardware ‘backdoors’ being inserted by a vendor at the factory,17 but that’s probably not the biggest issue. In fact, it’s probably an unhealthy focus that can drive the debate onto specific component manufacturers, when the bigger risks probably come higher up the technology stack.

A much more worrying vendor risk occurs when carriers are critically dependent on vendors for maintaining the quality of service and so give the vendors access to the live network for support and maintenance. The nature of 5G networks as ‘software defined everything’ also means that there are security risks throughout the network that can be hidden in the complexity of software—vulnerabilities that are deliberately introduced by the vendor, or that come from genuine errors and oversights.

Different vendors have different approaches to and cultures of security. The extent to which they use approaches such as secure software development, system integrity validation and third-party supplier checks can be a useful guide, as well as their approach to the reporting and patching of security issues.

However, the control and ownership of vendors, in particular those from nation-states in which companies may be subject to extrajudicial direction, has, to date, been the main criterion used to measure vendor risk.18 This should be broadened to consider all sources of risk. As well as foreign ownership and control, vendor threats can come from insiders, such as rogue employees, even in a vendor from a trusted country, and also depend on the quality of the security culture and secure-by-design approaches used by a vendor. This leads to a spectrum of vendor risk levels that can be used to guide appropriate treatments.

We can sensibly decide to exclude very high risk vendors, but since no vendor will be zero-risk, other mitigation measures will be needed in addition. While, given the criticality of 5G networks, we should impose a high standard of cybersecurity control and risk management across the network even for the lowest risk vendors, additional measures may be needed for intermediate levels. It’s important that carriers understand these requirements and can factor the different security costs into their procurement decisions (so potentially avoiding the incentive to simply choose the cheapest supplier who isn’t excluded due to being very high risk).

Independent testing of vendor equipment may be of some use to assess and mitigate risk (see, for example the Huawei testing facility set up and used by the UK over the past few years), but it’s not just a matter of testing the product from the factory. For any software components, each new release will require retesting, and in a 5G world the software becomes the most critical layer. The public reports from the UK testing facility19 show a series of damning findings and a lack of any assurance that identified flaws are resolved effectively. This means that, at best, this approach can be only a small part of a broader strategy.

In some cases, architectural approaches can be used to mitigate the risk. For example, end-to-end encryption could be used to mitigate the risk that particular network equipment could have unnecessary access to user details and data on the network. However, if we look at the risk of an adversary seeking to completely disable a network, the vendor risk is much greater, as ultimately the end-to-end network works only if every component in the chain is working—RAN, core access and routing.

This means it isn’t just a matter of assessing and using a vendor with an acceptable level of risk. Any farmer will tell you to avoid monoculture—growing just one crop means that one disease can wipe you out overnight. Similarly, if a network is dependent on a single vendor and a vulnerability is found, the vendor becomes untrusted for some reason or the company collapses, the equipment will be almost impossible to replace, and entire networks can become at risk overnight.

Therefore, as well as vendor trust, we need to ensure vendor diversity and redundancy in design.

Operators need to have confidence that multiple vendors’ equipment can interoperate, and ideally have multiple vendors’ systems in service for each major function. This will provide resilience and options to reduce dependence on a particular vendor if circumstances change. In a given carrier’s network, there should be at least two vendors for each key equipment type, and across the market there should be four or more viable suppliers considered acceptable to use. These are bare minimums from a competition policy and resilience perspective; from a long-term resilience point of view, there should be as many vendors as possible, subject to ensuring that each has critical mass and is commercially sustainable in the long term.

#### Actors have the means and motivations to strike critical infrastructure.

Wintch 21, \*Timothy M. Wintch, an active-duty Major in the United States Air Force. He is currently a graduate student at the Oettinger School of Science & Technology Intelligence, National Intelligence University, in Bethesda, Maryland. Mr. Wintch has over 11 years of experience in command-and-control operations as an Air Battle Manager. He holds a Bachelor of Arts in Politics from the University of California, Santa Cruz, and a Master of Arts in Military Studies from American Military University. (April 20th, 2021, “PERSPECTIVE: Cyber and Physical Threats to the U.S. Power Grid and Keeping the Lights on”, https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/)

Among critical infrastructure sectors in the U.S., energy is perhaps the most crucial of the 16 sectors defined by the Department of Homeland Security. This sector is so vital because it provides the energy necessary to run every other critical infrastructure sector. However, the U.S. power grid, the backbone of the energy sector, is built upon an aging skeleton that is becoming increasingly vulnerable every day. Whether from terrorists or nation-states like Russia and China, the power grid is susceptible to not just physical attacks, but also to cyber intrusion as well. However, much of this threat can be mitigated if the U.S. takes the appropriate steps to safeguard the power grid and avoid a potential catastrophe in the future.

Since Sept. 11, 2001, terrorism on U.S. soil has been at the forefront of American consciousness. Critical infrastructure provides an appealing target because of the disproportionally large impact even a small attack can have on the sectors. In particular, the power grid represents a particularly lucrative target, both in terms of the ease of access and the large impact it can make. The National Research Council stated that the U.S. power grid is “vulnerable to intelligent multi-site attacks by knowledgeable attackers intent on causing maximum physical damage to key components on a wide geographical scale.”[[1]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn1) Additionally, the physical security of transmission and distribution systems is difficult due to the dispersed nature of these key components, which in turn is advantageous to attackers as it reduces the likelihood of their capture.[[2]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn2) From 2002-2012, approximately 2,500 physical attacks occurred against transmission lines and towers worldwide and approximately 500 attacks against transformer substations.[[3]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn3) Terrorists have the motivation to attack the U.S. power grid but the very nature of the grid makes it highly vulnerable. The power grid is not only at risk from physical attacks, but also nation-state cyberattacks.

One nation that has shown both the capability and intent to use attacks against critical energy infrastructure is Russia, as demonstrated in their 2015 annexation of Crimea from Ukraine. A Russian cyber threat group known as Sandworm, which used its BlackEnergy malware, attacked Ukrainian computer systems that provide remote control of the Ukraine power grid.[[4]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn4) This attack, and another in 2016, each left the capital Kiev without power, prompting cyber experts to raise concern about the same malware already existing in NATO and the U.S. power grids.[[5]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn5) In any conflict between Russia and NATO, not only would similar cyberattacks pose a threat, but so would potential physical attacks severing fuel oil and natural gas lines to Western Europe. Russia has both the capability and intent to attack critical infrastructure, particularly power grids, during future conflicts in their “hybrid warfare” approach.

Another nation that has the capability to attack critical energy infrastructure is China, representing a threat to not just the U.S. energy infrastructure but also that of our allies whose support would be vital in a major conflict. A recent NATO report highlighted this threat from China’s Belt and Road Initiative, stating that “[China’s] foreign direct investment in strategic sectors [such as energy generation and distribution] …raises questions about whether access and control over such infrastructure can be maintained, particularly in crisis when it would be required to support the military.”[[6]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn6) Like Russia, China has been active with cyber intrusions in U.S. energy infrastructure. The Mission Support Center at Idaho National Laboratory characterized these as attacks as “multiple intrusions into US ICS/SCADA [Industrial Control Systems/Supervisory Control and Data Acquisition] and smart grid tools [that] may be aimed more at intellectual property theft and gathering intelligence to bolster their own infrastructure, but it is likely that they are also using these intrusions to develop capabilities to attack the [bulk electric system], as well.”[[7]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn7) China, therefore, has both the capability and intent to conduct cyber intrusions and attacks for myriad reasons.

Another arm of this threat is the reliance the U.S. energy industry has on imports from China, especially transformers. In early 2020, federal officials seized a transformer in the port of Houston that had been imported by the Jiangsu Huapeng Transformer Company before sending it to Sandia National Laboratory in Albuquerque. Sandia is contracted by the U.S. Department of Energy for mitigating national security threats.[[8]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn8) The Wall Street Journal reported that “Mike Howard, chief executive of the Electric Power Research Institute, a utility-funded technical organization, said that the diversion of a huge, expensive transformer is so unusual – in his experience, unprecedented – that it suggests officials had significant security concerns.”[[9]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn9) Previously destined for the Washington Area Power Administration’s Ault, Colo., substation, the transformer is believed to have been seized due to “backdoor” exploitable hardware emplaced by the Chinese prior to shipment.[[10]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn10) Shortly after these events, President Trump issued Executive Order 13920, “[Securing the United States Bulk-Power System](https://trumpwhitehouse.archives.gov/presidential-actions/executive-order-securing-united-states-bulk-power-system/),” essentially limiting the import of Chinese-built critical energy infrastructure components due to concerns about cybersecurity.[[11]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn11) Interestingly, Jiangsu Huapeng “boasted that it supported 10 percent of New York City’s electricity load.”[[12]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn12)

Franklin Kramer, the former Assistant Secretary of Defense for International Security Affairs, testified before a U.S. House of Representatives Energy and Commerce subcommittee during an energy and power hearing in 2011 and said that a “highly-coordinated and structured cyber, physical, or blended attack on the bulk power system, however, could result in long-term (irreparable) damage to key system components in multiple simultaneous or near-simultaneous strikes.” He added that “an outage could result with the potential to affect a wide geographic area and cause large population centers to lose power for extended periods.”[[13]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn13) Even the inclusion of features such as smart grids to the overall grid structure poses new vulnerabilities through their connectivity. Kramer stated that “such connectivity means that the distribution system could be a key vector for a national security attack on the grid.”[[14]](https://www.hstoday.us/subject-matter-areas/infrastructure-security/perspective-cyber-and-physical-threats-to-the-u-s-power-grid-and-keeping-the-lights-on/" \l "_ftn14)

#### Those attacks cause accidental nuclear escalation.

Klare 19, \*Michael T. Klare is a professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association; (November 19th, “Cyber Battles, Nuclear Outcomes? Dangerous New Pathways to Escalation”, https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation)

Yet another pathway to escalation could arise from a cascading series of cyberstrikes and counterstrikes against vital national infrastructure rather than on military targets. All major powers, along with Iran and North Korea, have developed and deployed cyberweapons designed to disrupt and destroy major elements of an adversary’s key economic systems, such as power grids, financial systems, and transportation networks. As noted, Russia has infiltrated the U.S. electrical grid, and it is widely believed that the United States has done the same in Russia.[12](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote12) The Pentagon has also devised a plan known as “Nitro Zeus,” intended to immobilize the entire Iranian economy and so force it to capitulate to U.S. demands or, if that approach failed, to pave the way for a crippling air and missile attack.[13](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote12)

The danger here is that economic attacks of this sort, if undertaken during a period of tension and crisis, could lead to an escalating series of tit-for-tat attacks against ever more vital elements of an adversary’s critical infrastructure, producing widespread chaos and harm and eventually leading one side to initiate kinetic attacks on critical military targets, risking the slippery slope to nuclear conflict. For example, a Russian cyberattack on the U.S. power grid could trigger U.S. attacks on Russian energy and financial systems, causing widespread disorder in both countries and generating an impulse for even more devastating attacks. At some point, such attacks “could lead to major conflict and possibly nuclear war.”[14](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote14)

These are by no means the only pathways to escalation resulting from the offensive use of cyberweapons. Others include efforts by third parties, such as proxy states or terrorist organizations, to provoke a global nuclear crisis by causing early-warning systems to generate false readings (“spoofing”) of missile launches. Yet, they do provide a clear indication of the severity of the threat. As states’ reliance on cyberspace grows and cyberweapons become more powerful, the dangers of unintended or accidental escalation can only grow more severe.

#### Cyber-compromised NC3 causes nuclear war.

Klare 19, \*Michael T. Klare is a professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association; (November 19th, “Cyber Battles, Nuclear Outcomes? Dangerous New Pathways to Escalation”, <https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation>)

The Nuclear-Cyber Connection

These links exist because the NC3 systems of the United States and other nuclear-armed states are heavily dependent on computers and other digital processors for virtually every aspect of their operation and because those systems are highly vulnerable to cyberattack. Every nuclear force is composed, most basically, of weapons, early-warning radars, launch facilities, and the top officials, usually presidents or prime ministers, empowered to initiate a nuclear exchange. Connecting them all, however, is an extended network of communications and data-processing systems, all reliant on cyberspace. Warning systems, ground- and space-based, must constantly watch for and analyze possible enemy missile launches. Data on actual threats must rapidly be communicated to decision-makers, who must then weigh possible responses and communicate chosen outcomes to launch facilities, which in turn must provide attack vectors to delivery systems. All of this involves operations in cyberspace, and it is in this domain that great power rivals seek vulnerabilities to exploit in a constant struggle for advantage.

The use of cyberspace to gain an advantage over adversaries takes many forms and is not always aimed at nuclear systems. China has been accused of engaging in widespread cyberespionage to steal technical secrets from U.S. firms for economic and military advantages. Russia has been accused, most extensively in the Robert Mueller report, of exploiting cyberspace to interfere in the 2016 U.S. presidential election. Nonstate actors, including terrorist groups such as al Qaeda and the Islamic State group, have used the internet for recruiting combatants and spreading fear. Criminal groups, including some thought to be allied with state actors, such as North Korea, have used cyberspace to extort money from banks, municipalities, and individuals.[4](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote04) Attacks such as these occupy most of the time and attention of civilian and military cybersecurity organizations that attempt to thwart such attacks. Yet for those who worry about strategic stability and the risks of nuclear escalation, it is the threat of cyberattacks on NC3 systems that provokes the greatest concern.

This concern stems from the fact that, despite the immense effort devoted to protecting NC3 systems from cyberattack, no enterprise that relies so extensively on computers and cyberspace can be made 100 percent invulnerable to attack. This is so because such systems employ many devices and operating systems of various origins and vintages, most incorporating numerous software updates and “patches” over time, offering multiple vectors for attack. Electronic components can also be modified by hostile actors during production, transit, or insertion; and the whole system itself is dependent to a considerable degree on the electrical grid, which itself is vulnerable to cyberattack and is far less protected. Experienced “cyberwarriors” of every major power have been working for years to probe for weaknesses in these systems and in many cases have devised cyberweapons, typically, malicious software (malware) and computer viruses, to exploit those weaknesses for military advantage.[5](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote05)

Although activity in cyberspace is much more difficult to detect and track than conventional military operations, enough information has become public to indicate that the major nuclear powers, notably China, Russia, and the United States, along with such secondary powers as Iran and North Korea, have established extensive cyberwarfare capabilities and engage in offensive cyberoperations on a regular basis, often aimed at critical military infrastructure. “Cyberspace is a contested environment where we are in constant contact with adversaries,” General Paul M. Nakasone, commander of the U.S. Cyber Command (Cybercom), told the Senate Armed Services Committee in February 2019. “We see near-peer competitors [China and Russia] conducting sustained campaigns below the level of armed conflict to erode American strength and gain strategic advantage.”

Although eager to speak of adversary threats to U.S. interests, Nakasone was noticeably but not surprisingly reluctant to say much about U.S. offensive operations in cyberspace. He acknowledged, however, that Cybercom took such action to disrupt possible Russian interference in the 2018 midterm elections. “We created a persistent presence in cyberspace to monitor adversary actions and crafted tools and tactics to frustrate their efforts,” he testified in February. According to press accounts, this included a cyberattack aimed at paralyzing the Internet Research Agency, a “troll farm” in St. Petersburg said to have been deeply involved in generating disruptive propaganda during the 2016 presidential elections.[6](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote06)

Other press investigations have disclosed two other offensive operations undertaken by the United States. One called “Olympic Games” was intended to disrupt Iran’s drive to increase its uranium-enrichment capacity by sabotaging the centrifuges used in the process by infecting them with the so-called Stuxnet virus. Another left of launch effort was intended to cause malfunctions in North Korean missile tests.[7](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote07) Although not aimed at either of the U.S. principal nuclear adversaries, those two attacks demonstrated a willingness and capacity to conduct cyberattacks on the nuclear infrastructure of other states.

Efforts by strategic rivals of the United States to infiltrate and eventually degrade U.S. nuclear infrastructure are far less documented but thought to be no less prevalent. Russia, for example, is believed to have planted malware in the U.S. electrical utility grid, possibly with the intent of cutting off the flow of electricity to critical NC3 facilities in the event of a major crisis.[8](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote08) Indeed, every major power, including the United States, is believed to have crafted cyberweapons aimed at critical NC3 components and to have implanted malware in enemy systems for potential use in some future confrontation.

Pathways to Escalation

Knowing that the NC3 systems of the major powers are constantly being probed for weaknesses and probably infested with malware designed to be activated in a crisis, what does this say about the risks of escalation from a nonkinetic battle, that is, one fought without traditional weaponry, to a kinetic one, at first using conventional weapons and then, potentially, nuclear ones? None of this can be predicted in advance, but those analysts who have studied the subject worry about the emergence of dangerous new pathways for escalation. Indeed, several such scenarios have been identified.[9](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote09)

The first and possibly most dangerous path to escalation would arise from the early use of cyberweapons in a great power crisis to ~~paralyze~~ undermine the vital command, control, and communications capabilities of an adversary, many of which serve nuclear and conventional forces. In the “fog of war” that would naturally ensue from such an encounter, the recipient of such an attack might fear more punishing follow-up kinetic attacks, possibly including the use of nuclear weapons, and, fearing the loss of its own arsenal, launch its weapons immediately. This might occur, for example, in a confrontation between NATO and Russian forces in east and central Europe or between U.S. and Chinese forces in the Asia-Pacific region.

Speaking of a possible confrontation in Europe, for example, James N. Miller Jr. and Richard Fontaine wrote that “both sides would have overwhelming incentives to go early with offensive cyber and counter-space capabilities to negate the other side’s military capabilities or advantages.” If these early attacks succeeded, “it could result in huge military and coercive advantage for the attacker.” This might induce the recipient of such attacks to back down, affording its rival a major victory at very low cost. Alternatively, however, the recipient might view the attacks on its critical command, control, and communications infrastructure as the prelude to a full-scale attack aimed at neutralizing its nuclear capabilities and choose to strike first. “It is worth considering,” Miller and Fontaine concluded, “how even a very limited attack or incident could set both sides on a slippery slope to rapid escalation.”[10](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote10)

What makes the insertion of latent malware in an adversary’s NC3 systems so dangerous is that it may not even need to be activated to increase the risk of nuclear escalation. If a nuclear-armed state comes to believe that its critical systems are infested with enemy malware, its leaders might not trust the information provided by its early-warning systems in a crisis and might misconstrue the nature of an enemy attack, leading them to overreact and possibly launch their nuclear weapons out of fear they are at risk of a preemptive strike.

“The uncertainty caused by the unique character of a cyber threat could jeopardize the credibility of the nuclear deterrent and undermine strategic stability in ways that advances in nuclear and conventional weapons do not,” Page O. Stoutland and Samantha Pitts-Kiefer wrote in 2018 paper for the Nuclear Threat Initiative. “[T]he introduction of a flaw or malicious code into nuclear weapons through the supply chain that compromises the effectiveness of those weapons could lead to a lack of confidence in the nuclear deterrent,” undermining strategic stability.[11](https://www.armscontrol.org/act/2019-11/features/cyber-battles-nuclear-outcomes-dangerous-new-pathways-escalation#endnote11) Without confidence in the reliability of its nuclear weapons infrastructure, a nuclear-armed state may misinterpret confusing signals from its early-warning systems and, fearing the worst, launch its own nuclear weapons rather than lose them to an enemy’s first strike. This makes the scenario proffered in the 2018 NPR report, of a nuclear response to an enemy cyberattack, that much more alarming.

#### Cracking down on anticompetitive patent licensing reintroduces competition—solves cybersecurity

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IV. LESSONS AND POLICY DIRECTIONS

The above discussion shows that patent protection can have mixed effects on national security: On the one hand, patents can encourage innovation that ensures domestic technological leadership and produces useful security-protective technologies; on the other hand, patents can stifle innovation-producing and cybersecurity-enhancing competition and can stymie the government’s own ability to achieve national security goals. To navigate the complex effects of patent policy on national security, policymakers may consider the following recommendations as guideposts.

A. Anticompetitive Patent Licensing

An area of particular concern should be the use of patents and patent licensing strategies to diminish competition or put up roadblocks to new entrants. Policymakers should certainly not support these abuses of the patent system, and indeed should take steps to prevent them.

In the mobile communications space, patent licensing already plays an outsized role. There are reportedly between 250,000 and 314,000 patents on the smartphone alone, and litigation over cell phone technologies has lasted decades by now. Patents will thus inevitably have an impact on technologies like 5G or the Internet of Things, so the question is what that impact will be.

Patents are supposed to encourage innovation, but research finds that patents alone will not do so; competition is another requirement. A 2015 study considered the impact of competition policy and patent strength on innovation among European firms, measured in terms of research and development spending.183 Initially, the study compared firms in countries with strong patent laws against those in countries with weaker patent laws, and found that patent protection has “no effect on R&D intensity,” a conclusion consistent with multiple other studies.184 However, the study found that when a major competition reform went into effect, strong-patent countries enjoyed a boost in innovation greater than that experienced in weak-patent countries.185 In other words, strong patent protection is complementary to strong competition; the former does not promote innovation without the latter. The practical import of this research is that patent protection is beneficial up to a point, but to the extent that patents—or, more commonly, legal strategies involving patents—overreach to suppress competition, that overreach should be cause for concern.

Yet today, strategic patent behavior contrary to competition is prevalent. The Federal Trade Commission’s ongoing lawsuit against mobile phone chip manufacturer Qualcomm, for example, challenges Qualcomm’s practice of refusing to sell chips to any phone manufacturer who does not first pay a hefty sum for patent licenses—even if the manufacturer does not actually have need for all those licenses.186 To the extent that Qualcomm’s “no license, no chips” practice is in fact anticompetitive—that is what the courts overseeing the case will decide—monopolization of that market could substantially harm cybersecurity for the reasons noted above.187 The company’s about-50% market share in the advanced mobile chip market 188 means that there is a virtual monoculture of Qualcomm chips already, and there are ongoing concerns about security vulnerabilities in those chips.189 It is thus puzzling that some have opposed the FTC litigation on the grounds that it is making the United States “less competitive in the global 5G arms race.”190 As one scholar explains, this rhetoric “smacks of ‘national champion’ thinking” and ultimately fails to ensure that “national security warnings are being balanced against competitive imperatives.”191

With respect to emerging information technologies, policymakers should be concerned that a leading firm could undertake similar patent licensing strategies to control the market. Indeed, the district court in the Qualcomm litigation found that Nokia and Ericsson already “have imitated Qualcomm’s practice” because it is “more lucrative.”192

### 1AC---Plan

#### Plan: The United States federal judiciary should substantially increase prohibitions on private sector conduct that is more restrictive of competition than reasonably necessary to enable creation of information technology standards.

### 1AC---Solvency

#### Solvency:

#### The plan strengthens FRAND effectiveness while enabling SEP holders to capture appropriate royalties---strikes the best competition-innovation balance.

Melamed & Shapiro 18, \*A. Douglas Melamed is Professor of the Practice of Law at Stanford Law School; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley; (May 2018, “How Antitrust Law Can Make FRAND Commitments More Effective”, https://www-cdn.law.stanford.edu/wp-content/uploads/2018/05/How-Antitrust-Law-Can-Make-FRAND-Commitments-More-Effective.pdf)

3. Application of the Basic Legal Principles

The antitrust principle is straightforward: industry-wide collaboration through SSOs to establish procompetitive standards is permitted only if it is no more restrictive of competition than reasonably necessary to enable creation of the standards. When standard setting predictably creates technology monopolies that, if unrestrained, will enable anticompetitive ex post opportunism that would otherwise not occur, an SSO that does not take effective measures to pre- vent or minimize such ex post opportunism engages in conduct that is more restrictive of competition than necessary. In that case, the SSO and, in appropriate cases, its members, may well violate Section 1 of the Sherman Act.

Under this principle, SSO procedures and FRAND rules should be evaluated based on whether they lead to reasonable SEP royalties, using the competitive ex ante licensing standard discussed above, which has been adopted by the courts in patent law. Put differently, FRAND rules should be evaluated based on their ability to prevent SEP holders from obtaining more than the ex ante value of their technology from implementers.

This limitation would not prevent a SEP holder from proﬁting, perhaps greatly, from participating in the SSO and having its patented technology included in the standard. The SEP holder continues to be rewarded for its technology because the inclusion of its technology in the standard can still greatly increase the volume of licensing opportunities available to the SEP holder.

Whether a particular set of FRAND rules are sufficiently effective in preventing ex post opportunism will depend on the particular circumstances. The procedural unfolding of the case will also depend upon the circumstances. As a general matter, the case would probably be structured as an ordinary Rule of Reason case.82

First, the plaintiff would have to demonstrate harm to competition as a result of the collaboration of the SSO’s members, many of which compete with one another. In this case, the harm to competition would stem from the ability of the SEP holder to exercise monopoly power by obtaining royalties in excess of the competitive, ex ante level. The decision to include patented technologies in the standard would be the allegedly unlawful agreement. Notably, the court need not determine what a FRAND royalty is; it would suffice to determine that market power has been created or exercised, and that existing SSO rules and policies were not adequate to prevent the competitive harm. The defendant, which could be the SSO or perhaps one or more SSO members, would win at this point if the plaintiff failed to show harm to competition. If might fail if the standard faces substantial competition and the court concludes that the SEP holder therefore does not have market power or if the SSO’s rules and policies are found to be effective in preventing ex post opportunism, even if the plaintiff or even the court thinks that other rules and policies would be preferable.

Second, if the plaintiff makes the requisite showing of harm to competition, the defendant(s) would then have to show some procompetitive justiﬁcation— in this case, the beneﬁts of the standard. These two initial steps should be straightforward.

Third, if as is likely the defendant is able to show a procompetitive justiﬁcation, the plaintiff would have to show that the SSO could have used available, reasonable alternatives to realize the efficiency beneﬁts with less or none of the competitive harms. The plaintiff might identify reasonable alternatives that would have led to a different standard, based on including unpatented technology in the standard or perhaps involving fewer SEPs or fewer owners of SEPs, which would be less subject to patent holdup. More likely, the plaintiff could suggest alternative SSO rules that would not change the standard, but would reduce the likelihood or extent of ex post opportunism. For example, the plaintiff might suggest more rigorous FRAND-type rules, such as rules that set forth more precise principles on which FRAND royalties are to be determined and the circumstances under which SEP holders might seek injunctions.

Fourth, the burden would then shift to the defendant(s) to show that the beneﬁts of the standard could not have been realized if the SSO had adopted any of the proffered alternatives or that those alternatives were unrealistic.83 The plaintiff would be entitled to judgment if the court concludes that those beneﬁts could have been realized with less competitive harm if the SSO had adopted the standard with different IPR rules or policies.

Our overall sense, based on experience and the empirical literature, is that the extant FRAND rules are generally useful, but tend to be inadequate because they are imprecise and leave unresolved such critical issues as (a) the meaning of a reasonable royalty, even conceptually; (b) the meaning of “non-discriminatory;” (c) to whom licenses must be offered; and (d) under what circumstances may a SEP holder obtain an injunction.84 These imprecise FRAND commitments are therefore not sufficient to adequately prevent ex post opportunism. The recent revisions to IEEE’s FRAND policy represent a signiﬁcant step in the right direction, but even this advance leaves important questions unanswered.85 If FRAND rules are inadequate in these ways, litigation involving extant FRAND rules would likely be resolved only at the ﬁnal, fourth step. The defendant would be able to demonstrate the beneﬁts created by the standard; the plaintiff would be able to demonstrate the creation of market power and that other reasonable and practical rules or policies would ameliorate the problem. The case would thus turn on whether the defendant is able to demonstrate that signiﬁcant beneﬁts associated with standardization could not have been realized if the SSO had adopted those other rules or policies.

The court would have available a variety of possible remedies if the plaintiff prevails. Implementers that paid supracompetitive royalties or were unlawfully excluded in whole or in part from product markets as a result of the inadequate FRAND policies would be entitled to damages and, in some cases, to treble damages.86 If the unlawful SSO conduct is regarded as the collective action of the SSO and its members, which is likely to be the case in most instances, SSO members would be jointly and severally liable for the damages. Forward-looking injunctive relief aimed at restoring competition would need to be fashioned to the requirements of the individual case. For example, a court could order the SSO to adopt a new rule or policy proposed by the plaintiff. If the court is reluctant to take on that governance role, it might give the SSO a period of time—maybe ninety days—to develop a rule, subject to the court’s ultimate approval, which would adequately ameliorate the competitive problem created by the SSO. Alternatively or in addition, the court might order the parties to attempt to negotiate a rule or policy on which they can agree. And, depending on the circumstances, the court might order SEP holders, including at least those that were defendants in the case, to comply with the new SSO rules and policies.

#### Threatening antitrust liability lures SSO’s into adopting best practices.

Lemley & Shapiro 13, \*Mark Lemley is the William H. Neukom Professor at Stanford Law School and a partner at Durie Tangri LLP; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business, University of California at Berkeley and a Senior Consultant at Charles River Associates; (2013, “A SIMPLE APPROACH TO SETTING REASONABLE ROYALTIES FOR STANDARD-ESSENTIAL PATENTS”, (https://faculty.haas.berkeley.edu/shapiro/frand.pdf)

Under our approach, many of these issues should become moot, since the patentee cannot obtain an injunction (or transfer the patent to someone who can) against a willing licensee, and since competitors are not involved in jointly setting the reasonable royalty rate. If SSOs set clear, reasonable rules following the best practices we recommend, and parties follow those rules, there should be little or no need for antitrust to intervene. Indeed, even the risk of non-disclosure of a patent is lessened, since the patentee has committed to license its essential patents whether or not it discloses them. For the most part, the rules we have described are self-executing, meaning that even if a party tries to break the rules set by the SSO there still may be no need for antitrust to intervene. Thus, we suggest that parties who abide by these procedures—patentees, implementers, and the SSOs themselves—should be immune from antitrust liability for activities that merely follow those rules.107 They have entered into an arrangement that is on balance good for competition, one that allows patentees to receive reasonable royalties but prevents holdup and reduces the risk of monopolization by trickery.

The fact that antitrust remains a last resort available when SSOs don’t follow best practices may have two practical benefits, however. First, under our approach the promise of avoiding the risk of antitrust liability will be a powerful incentive for both SSOs and patent owners to adopt the best practices we propose. Second, the risk of antitrust liability may be relevant when an individual patentee wants to adopt best practices but the SSO governing the standard has not yet done so. We propose that a patentee that unilaterally commits to the FRAND procedures we describe here should be immune from antitrust liability for following these procedures.108 A patentee’s unilateral binding commitment to arbitration could be enforced whether or not it was elicited by an SSO. Thus, just as the prospect of antitrust immunity might lure SSOs to adopt best practices, it might also lure patentees to implement those practices even if the SSO has not done so. Given the large number of standard-essential patents based on preexisting standards,109 and given that SSOs tend to update their IP rules rather slowly,110 this is not a small matter.

#### Only antitrust enforcement creates a consumer-action feature that counterbalances SSO’s conspiratorial incentives---private action fails.

Melamed & Shapiro 18, \*A. Douglas Melamed is Professor of the Practice of Law at Stanford Law School; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley; (May 2018, “How Antitrust Law Can Make FRAND Commitments More Effective”, <https://www-cdn.law.stanford.edu/wp-content/uploads/2018/05/How-Antitrust-Law-Can-Make-FRAND-Commitments-More-Effective.pdf>)

2. Why Antitrust Enforcement Is Necessary

Some SSO members have an interest in ensuring that the SSO takes steps to minimize the potential harms from the SEP holders’ monopoly power, and this undoubtedly explains in part why most SSOs have adopted FRAND policies or similar requirements. But, as shown in the economic model in the Appendix,73 SSOs cannot in general be counted on to adopt effective FRAND policies. The bases for this conclusion, which is central to our argument for the applicability of Section 1 to SSO FRAND rules, can be summarized as follows.74

First, the SSO members collectively have an interest in permitting SEP holders to charge supracompetitive royalties that elevate the downstream price of compliant devices to the monopoly level. Doing so will enable the members in aggregate to collect increased revenues from consumers, and thus to generate increased profits that in theory could be shared by all the members. In other words, supracompetitive royalties can enrich industry participants as a group at the expense of final consumers. This fact alone should serve as a clear and strong signal regarding the dangers of counting on SSOs to implement effective FRAND policies: if the SSO members negotiate efficiently, the outcome will be just as bad for consumers as if the members agreed to fix downstream prices.75 The fundamental problem is that final consumers are not at the table when the SSO rules are negotiated.

Second, SSO members that own SEPs but earn little or no profits as implementers have a powerful self-interest in being able to exercise the ex post monopoly power associated with their SEPs. Because SSO policies are usually determined by a consensus process, these members will likely be able to block the adoption of fully effective FRAND policies. Moreover, these SSO members often have the greatest interest in SSO patent policies. Since much of their income may be attributable to patent licensing, they can be expected to devote substantial resources to block the adoption of FRAND policies that effectively prevent patent holdup.

Third, even SSO members that earn significant profits as implementers may have mixed incentives if they also own SEPs, which can also lead to weak or in-effective FRAND rules. In the Appendix, we show that, if the requisite share of votes in the SSO are cast by firms whose share of SEP royalties is at least as large as their share of downstream profits, and if these firms can coordinate their voting over the FRAND rules, then an SSO unconstrained by antitrust laws will establish FRAND rules leading to an outcome no better for consumers than would result from an integrated monopolist controlling all SEPs and all downstream sales.76

Fourth, even SSO members that are downstream implementers and own few, if any, SEPs may have only a modest interest in promoting effective policies to restrict ex post opportunism. Because all implementers will be subject to the opportunism, all of them will face increased licensing costs, and therefore will likely be able to pass on most or all of the increased costs to their customers.77 Furthermore, these implementers might not be especially active or effective in the standard-setting process for free-riding or public-good reasons, especially if SEP royalties constitute only a relatively small portion of the costs of their standard-implementing products. Public choice theory predicts that the highly motivated SEP holders are likely to have the greatest influence over patent policies.

Empirical evidence bears out these concerns. As a starting point, we find it striking that SSO FRAND rules are almost always quite vague.78 Notably, SSOs in which SEP holders are more prevalent tend to have weaker FRAND rules.79 Further, to our knowledge, SSOs have made almost no effort to enforce their FRAND rules and have, instead, left enforcement efforts to others.80 This evidence raises serious doubts about the effectiveness of the existing FRAND rules in preventing ex post opportunism.

# 2AC

## ADVANTAGE---INNOVATION

### 2AC---AT: No Patent Holdup---TL

#### Their argument is akin to saying speed limits don’t matter because high ways are safe.

Gilbert 20, \*Richard J. Gilbert is an [American Economist](https://en.wikipedia.org/w/index.php?title=American_Economist&action=edit&redlink=1), professor at [UC Berkeley](https://en.wikipedia.org/wiki/University_of_California,_Berkeley) from 1976 to 2000, and founder of [LECG](https://en.wikipedia.org/wiki/LECG_Corporation) Corp. ([Law and Economics Consulting Group](https://en.wikipedia.org/wiki/LECG_Corporation)). Richard ('Rich') Gilbert served as Deputy Assistant General in the [Antitrust Division](https://en.wikipedia.org/wiki/United_States_Department_of_Justice_Antitrust_Division) of the [U.S. Department of Justice](https://en.wikipedia.org/wiki/United_States_Department_of_Justice) in the White House from 1993 to 1995. He led the development of Joint Department of [Justice and Federal Trade Commission](https://en.wikipedia.org/w/index.php?title=Justice_and_Federal_Trade_Commission&action=edit&redlink=1) [Antitrust](https://en.wikipedia.org/wiki/Competition_law) Guidelines for the Licensing of [Intellectual Property](https://en.wikipedia.org/wiki/Intellectual_property) and is currently [Emeritus Professor](https://en.wikipedia.org/wiki/Emeritus_Professor) of Economics at the [University of California at Berkeley](https://en.wikipedia.org/wiki/University_of_California,_Berkeley); (2020, “Innovation Matters: Competition Policy for the High-Technology Economy”, https://mitpress.mit.edu/books/innovation-matters)

Conduct that enables a patent owner to evade FRAND commitments should not be lawful. High royalties harm consumers and can impede innovation for technologies for which a patent license is necessary. Some have argued that patent holdup is no more than an academic curiosity because innovation and competition for smartphones and other devices have thrived, despite the fact that these devices implement standards covered by hundreds of SEPs.[26](javascript:void(0)) But this argument is flawed. It does not recognize that prices for smartphones and other devices would likely be much higher if the antitrust authorities and the courts stopped policing FRAND licensing obligations.[27](javascript:void(0)) The fact that it is reasonably safe to drive on highways in the US does not mean that speed limits are unnecessary. FRAND limitations are speed limits on the information superhighway.

## ADVANTAGE---CYBER

### 2AC---Holdup Bad---Melamed

#### Monopoly pricing undermines innovation by reducing product output, taxing follow-on inventions, and distorting the standards-development process.

Melamed & Shapiro 18, \*A. Douglas Melamed is Professor of the Practice of Law at Stanford Law School; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley; (May 2018, “How Antitrust Law Can Make FRAND Commitments More Effective”, https://www-cdn.law.stanford.edu/wp-content/uploads/2018/05/How-Antitrust-Law-Can-Make-FRAND-Commitments-More-Effective.pdf)

II. The Need For Effective FRAND Commitments

Restrictions on ex post opportunism are needed to prevent a wealth transfer from implementers and their customers to SEP holders as a result of monopoly pricing.17 But much more is at stake.

A. Underlying Economic Principles

Basic economic principles instruct that ex post monopoly pricing by SEP holders harms consumers by raising the cost of products that comply with the standard. Ex post monopoly pricing also creates welfare-reducing deadweight loss in three respects. First, it increases the cost of, and thus reduces the output of, standard-implementing products. Second, and perhaps more important, supracompetitive pricing by SEP holders increases the cost of follow-on inventions that build on or improve the technologies claimed by the SEPs. This cost acts as a tax on follow-on innovation, reducing such innovations and impairing the very process of invention that the patent laws are intended to promote. Third, the prospect of ex post monopoly pricing by SEP holders exaggerates incentives for firms to obtain patents that might become SEPs and, perhaps more important, to jockey for inclusion of their patented technologies in industry standards. The latter incentive in turn could cause delays and induce expensive rent-seeking conduct in the standard-setting process and distort the standards-development process away from optimal technical solutions in ways that further the interests of rent seekers.

### 2AC---Holdup Bad---Innovation

#### Monopoly pricing and selective licensing undermines 5G innovation---FRAND enforcement is key.

Actonline 20, the App Association represents more than 5,000 app companies and information technology firms across the mobile economy; (August 26th, 2020, “Save Our Standards: The Ninth Circuit Court of Appeals Reverses Decision in FTC v. Qualcomm”, <https://actonline.org/2020/08/26/save-our-standards-the-ninth-circuit-court-of-appeals-reverses-decision-in-ftc-v-qualcomm/>), ability edited

Moreover, the FRAND agreement is a critical tool used by standard setting organizations to ensure the process enhances competition and does not run afoul of antitrust laws. Generally, a collaboration between competitors to choose market winners or set prices raises significant questions for competition regulators. Royalty free and FRAND licensing requirements were created by standards bodies to avoid potential antitrust scrutiny by limiting the market power and the potential for abuse by those involved in developing a standard. This is why the American National Standards Institute (ANSI) will not accredit any standards developing organization (SDO) that does not require standard-essential patent holders to provide licensing terms at least as favorable as FRAND.

The most important beneficiary of open interoperability standards and FRAND licensing requirements are the entrepreneurs and small businesses that have long fueled America’s innovation engine. They don’t have giant patent portfolios, market power, or the resources to hire legions of lawyers and spend years battling SEP abusers in civil court. Without some level of certainty about their ability to obtain licenses—let alone what they may cost—entrepreneurs will have trouble justifying the pursuit of any innovation that uses a standard and will certainly struggle to raise money from investors for such innovation. And Qualcomm’s vague and toothless promise simply “not to sue” smaller companies and component makers is no substitute for a license.

The adoption of 5G technology is expected to open unprecedented opportunities for innovation and economic growth as we move toward a world where everything from cars to tractors to buildings will connect to wireless networks. At every stage of the information technology revolution, America has been the undisputed leader because of the unparalleled entrepreneurial innovation ecosystem that we have built. If 5G SEP holders are able to arbitrarily refuse licenses to smaller firms, it would ~~cripple~~ undermine America’s innovation ecosystem at the start of the next big wave of innovation. As economic tensions continue to rise with China, Chinese-based companies could use their 5G SEPs as international economic weapons to thwart U.S. competitors.

The 5G standard is supposed to be a platform for competition, innovation, and entrepreneurship, but if the Ninth Circuit decision is allowed to stand, it will become a chokepoint for snuffing out competitors and demanding monopoly rents. Open standards and FRAND licensing commitments are fundamental to competition in the modern economy, and the idea that they aren’t a subject for antitrust enforcement is patently absurd.

### 2AC---Link Turn---Overclaiming

#### Ex ante valuations streamline innovation by weeding out the nonessentials and rewarding truly essential patents.

Arsego 15, \*David Arsego, J.D., Brooklyn Law School, May 2016, Certificate in Intellectual Property Law, B.S. in Mechanical Engineering, Villanova University, May 2010, works at Fay Kaplun & Marcin; (“The Problem with FRAND: How the Licensing Commitments of Standard-Setting Organizations Result in the Misvaluing of Patents”, <https://brooklynworks.brooklaw.edu/cgi/viewcontent.cgi?article=1416&context=bjil>)

A common theme in current FRAND litigation is inflated claims for damages and desired royalty rates. Judge Holderman in In re Innovatio IP Ventures reduced IP Ventures’ award to a few percentage points of its original claim. He justified this action by stressing the importance of the patent to the standard at issue and ruled that patents of lesser importance are not entitled to as high of rates as patents of greater importance. This proposed valuation framework intends to assess that very same importance, ex ante and prior to any negotiations or litigation. The intent is for contracting parties to have an initial understanding of the patent value prior to negotiations. In the same way that Judge Holderman’s judgement turned on the classification of the at-issue patents as “of moderate to moderate-high importance to the standard”, an opinion from ETSI that assesses this same importance would give negotiation parties a relatively clear picture of the importance of their patents.

D. The Effects of Such Valuation

The intended effect of this mandatory patent valuation is not to solve every patent-licensing disagreement that parties will have. It is merely a proposed tool that will help companies come to an agreement more efficiently. Both parties will be aware if one party has a portfolio full of patents with little importance and will not waste time debating the value. Similarly, if two parties are in litigation regarding whether or not a royalty rate is FRAND, the judge will not have to perform an independent analysis of the patent’s importance herself, but can instead rely on ETSI’s determination. The effect of this reliance, and the initial determination of essentiality, will be far reaching. Duplicitous patent holders that may claim essentiality for meritless patents will now be barred from asserting SEP rights.246 Important innovators with valuable patents will be more justly rewarded for their innovation, not only by having an “important” label on their SEPs, but by no longer competing for royalties with patents that are deemed to be nonessential.

## AT: T---CORE ANTITRUST LAWS

### 2AC---AT: T---Core Antitrust Laws---TL

#### The private sector includes subsets---refers to many different actors.

Waler and Hofstetter 16 (Katharina Walker is Advisor for vocational skills development and Helvetas’ youth focal person. Sonja Hofstetter joined Swisscontact in Cambodia in July 2016. She is the Quality Assurance Manager and Deputy Team Leader of the Skills Development Programme. “ Study on Agricultural Technical and Vocational Education and Training (ATVET) in Developing Countries” Federal Department of Foreign Affairs FDFA, Swiss Agency for Development and Cooperation SDC, Global Programme Food Security, 25.1.2016, <https://www.shareweb.ch/site/Agriculture-and-Food-Security/focusareas/Documents/ras_capex_ATVET_Study_2016.pdf> , date accessed 7/19/21)

In many developing countries, the private sector1 [[BEGIN FOOTNOTE 1]] 1 The private sector is not perceived as a homogenous mass even though the terminology might suggest this to be the case. In this study, the term “private sector” is used to circumscribe the various actors such as small and medium sized companies, large companies, sectorial associations, business associations, chambers of commerce, etc.[[END FOOTNOTE 1]] faces challenges in finding adequately skilled employees. This also holds true for sectors linked to agriculture, e.g. processing, distribution, marketing, etc. The development of ATVET from a purely productivity-oriented approach to provide broader and more specialised skills sets along agricultural value chains is likely to raise the interest of private sector actors. This incentive can result in a stronger and more sustainable financial and conceptual engagement of employers in ATVET.

#### ‘By’ only requires anticompetitive practices resulting from private sector action.

Michigan Court of Appeals 10 (SAWYER, J. Opinion in DEQ. v. Worth Twp., 808 N.W.2d 260, 289 Mich. App. 414 (Ct. App. 2010). Google scholar caselaw. Date accessed 7/23/21).

Second, we look to the meaning of the phrase "by the municipality." This phrase is key because it answers plaintiffs' contention that MCL 324.3109(2) imposes responsibility for a discharge on a municipality without regard to the source of the discharge. That is, plaintiffs argue that any discharge of raw sewage within a municipality constitutes prima facie evidence of a violation by the municipality even if the municipality is not the source of the discharge. We disagree. The word "by" has many meanings. For its meaning as a nonlegal term, we look to a layman's dictionary rather than a legal one. Horace v. City of Pontiac, 456 Mich. 744, 756, 575 N.W.2d 762 (1998). We find these definitions from the Random House Webster's College Dictionary (1997) to be particularly helpful: "10. through the agency of" and "12. as a result or on the basis of[.]" Thus, MCL 324.3109(2) imposes responsibility on the municipality not when the violation merely occurs within the boundaries 264\*264 of the municipality, but when the violation occurs "through the agency of" the municipality or "as a result" of the municipality, that is to say, when it is the actions of the municipality that lead to the discharge.

#### The plan increases the scope of the Sherman Act.

Melamed & Shapiro 18, \*A. Douglas Melamed is Professor of the Practice of Law at Stanford Law School; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley; (May 2018, “How Antitrust Law Can Make FRAND Commitments More Effective”, https://www-cdn.law.stanford.edu/wp-content/uploads/2018/05/How-Antitrust-Law-Can-Make-FRAND-Commitments-More-Effective.pdf)

Antitrust enforcement aimed only at SEP holders is not sufficient to prevent or remedy ex post opportunism. First, as described in Part I, that kind of enforcement must be implemented separately for each patent holder, and for many standards, there are hundreds or even thousands of SEP holders. Second, some of the most common kinds of opportunism are arguably beyond the reach of antitrust claims against SEP holders. 61 Moreover, enforcement aimed at SEP holders is not directed at the basic problem: the failure of the SSOs to take adequate steps to prevent the ex post opportunism that the SSOs’ conduct enabled. There is, therefore, another important role for Section 1 of the Sherman Act to help guard against ex post opportunism by SEP holders—one that the courts have not yet had occasion to recognize. This role is soundly based on well-established Supreme Court precedent regarding the application of Section 1 to activities by SSOs and their members.

#### The “core antitrust laws” means Sherman, Clayton, and FTC.

**FTC ND**. “The Antitrust Laws.” 2013. Federal Trade Commission. June 11, 2013. https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/antitrust-laws.

Congress passed the first antitrust law, the Sherman Act, in 1890 as a "comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade." In 1914, Congress passed two additional antitrust laws: the Federal Trade Commission Act, which created the FTC, and the Clayton Act. With some revisions, these are the three core federal antitrust laws still in effect today.

#### Says IP is competition law, we just limit IP through antitrust

Gavil ’17 [Andrew I, Jonathan B Baker, William Kovacic, and Joshua D Wright; Professor at the Howard University School of Law and Senior of Counsel at Crowell & Moring LLP; Professor at the George Mason University School of Law, a commissioner of the U.S. Federal Trade Commission from 2006 to 2011; Research Professor of Law at American University, former Director of the Bureau of Economics at the Federal Trade Commission; the Executive Director of the Global Antitrust Institute, professor of law at George Mason University, commissioner of the U.S. Federal Trade Commission from 2013 to 2015; third edition published 2017; Antitrust Law in Perspective: Cases, Concepts, and Problems in Competition Policy, “Defining Competition Policy for a Global Economy,” Ch. 1, p. 5]

At the outset, we raise a point of terminology. Our Casebook speaks of "antitrust law" or "antitrust policy" and "competition law" or "competition policy somewhat interchangeably. A North American practitioner in this field likely calls herself an "antitrust lawyer"—a habit that reflects the vocabulary used in the United States since the late nineteenth century. In the rest of the world, specialists say that they practice "competition law," a phrase rooted in the experience of Europeans under the Treaty on the Functioning of the European Union and in the laws of the European Union's member states.

These terms sometimes are synonyms, but they can have different meanings. The term "antitrust law and policy" sometimes refers to the enforcement of prohibitions against certain conduct by private firms. By contrast, "competition law and policy" tends to embrace a larger range of intervention and policy tools. Examples include scrutiny of public restrictions on entry into a market or the design of an intellectual property system, by which a jurisdiction can influence the level of innovation and competition within its borders. The policy instruments beyond law enforcement include regulations, guidelines, competition advocacy, and speeches by enforcement agency personnel, all of which can influence the direction of competition policy. This Casebook focuses heavily on law enforcement, but it also draws attention to the broader array of public interventions that affect competition and emphasizes measures beyond law enforcement that antitrust agencies use to implement competition policy.

## AT: CP---Patent Law

### 2AC---AT: Patent Law CP---TL

#### A---consumer-action deficit. Patent infringers have attenuated incentives to cough up high royalties because SSO’s can profit in aggregate by passing costs onto consumers---that’s Melamed and Shapiro. That means widening the plaintiff pool beyond implementers is key---which the counterplan CANNOT do.

Cary et al. 11, \*Messrs. George Cary and Alex Sistla are members of the California and District of Columbia Bars. Mr. Mark Nelson is a member of the New York and District of Columbia Bars. Mr. Steven Kaiser is a member of the New Jersey and District of Columbia Bars; (2011, “THE CASE FOR ANTITRUST LAW TO POLICE THE PATENT HOLDUP PROBLEM INSTANDARD SETTING”, <https://www.clearygottlieb.com/~/media/organize-archive/cgsh/files/publication-pdfs/the-case-for-antitrust-law-to-police-the-patent-holdup-problem-in-the-standard-setting.pdf>)

One final point about patent remedies concerns standing: it is not just the type of harm that matters to antitrust, but whether anyone has a remedy to address it. Antitrust fills the gap left open by patent law by providing a remedy to those “outsiders”—consumers, competitors and others—who lack standing to seek relief under the patent laws. Consider Qualcomm: The use of equitable estoppel there was only available as a defense asserted by the alleged infringer. The elements of the defense discussed above, moreover, require that the infringer either be involved in the SSO process or have a specific basis for claiming that it was affirmatively misled by the patentee. No consumer injured by the wrongful acquisition of monopoly power in this context would meet these criteria, nor would other firms that have been excluded from the market due to the deception at issue. There is no government enforcement agency to protect such plaintiffs, because patent law has no provision for government enforcement intended to protect consumers from harm to competition.

In sum, the limitations of patent law would exclude many of the categories of potential plaintiffs suffering antitrust injury as a result of standard-setting abuse. We conclude that equitable estoppel is unequal to the task of policing monopolization through fraudulent conduct in the standard-setting process.

#### SSO interests do not align with consumers. Patent law is an insufficient proxy for securing competition.

Speegle 12, \*Adam Speegle, J.D., (May 2012, “Antitrust Rulemaking as a Solution to Abuse on the Standard-Setting Process Setting Process”, https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1128&context=mlr)

Even assuming that SSO members are willing and able to engage in litigation with a firm attempting patent holdup, consumer welfare takes a backseat to the members' financial considerations.3 8 Because the incentives of the SSO members do not align with those of consumers, enforcement actions by firms in the private sector cannot be relied on to adequately protect consumers. 39 This concept is illustrated by a practice known as injunction threats, in which a patent holder threatens to bring an injunction against a manufacturer for violating its patent unless the manufacturer pays a substantial royalty.4 ° While the patent holder's threat may have questionable legal footing, the manufacturer will often pay the royalty instead of engaging in extended litigation.4 This happens for several reasons. First, the manufacturer has a disincentive to engage a patent holder in litigation because the manufacturer will bear the cost of the litigation, the result of which could benefit competitors. 42 Companies will tend to pay the royalty and wait for another company to challenge the practice. 43 Second, the costs associated with challenging injunction threats may be substantial." On top of ordinary litigation costs, if the manufacturer has already begun making and distributing goods based on the patented technology, a potential preliminary injunction could have a devastating effect on its business.4 5 While engaging a patent holder in litigation may collaterally benefit consumers in that increased royalties are not passed through to the price of the ultimate product, this benefit does not tip the scales in favor of manufacturers pursuing such a path.' Thus, reliance on litigation by SSO members or other third parties will not provide a complete solution to patent holdup, as these parties serve as poor proxies for consumers.

#### B---targeting deficit---faulting the entire SSO is key to curtail monopolization---targeting individual SEP holders fails.

Melamed & Shapiro 18, \*A. Douglas Melamed is Professor of the Practice of Law at Stanford Law School; \*Carl Shapiro is the Transamerica Professor of Business Strategy at the Haas School of Business at the University of California at Berkeley; (May 2018, “How Antitrust Law Can Make FRAND Commitments More Effective”, https://www-cdn.law.stanford.edu/wp-content/uploads/2018/05/How-Antitrust-Law-Can-Make-FRAND-Commitments-More-Effective.pdf)

Antitrust enforcement aimed only at SEP holders is not sufficient to prevent or remedy ex post opportunism. First, as described in Part I, that kind of enforcement must be implemented separately for each patent holder, and for many standards, there are hundreds or even thousands of SEP holders. Second, some of the most common kinds of opportunism are arguably beyond the reach of antitrust claims against SEP holders. 61 Moreover, enforcement aimed at SEP holders is not directed at the basic problem: the failure of the SSOs to take adequate steps to prevent the ex post opportunism that the SSOs’ conduct enabled.

#### C---deterrence deficit---only antitrust law creates a legitimate cost to misconduct---that’s 1AC Melamed and Shaprio---whereas the loss of a private lawsuit wouldn’t change SEP holder’s calculus.

Tsilikas 17, \*Haris Tsilikas is an IP and Antitrust Consultant, a Doctoral Candidate and Visiting Research Fellow at the Max Planck Institute for Innovation and Competition, Munich; (2017, Antitrust Enforcement and Standard Essential Patents: Moving beyond the FRAND Commitment”, https://www.jstor.org/stable/pdf/j.ctv941t01.9.pdf?refreqid=excelsior%3A92dc720d1ebc7088811b40032a60f575)

Antitrust could play a meaningful role.165 The most important contribution of antitrust enforcement against abuses of SEPs is its deterrent effect.166 Although patent law reforms or contractual binding of subsequent SEPs-holders to FRAND licensing would provide to victims of hold-up useful defences in court, they do not sufficiently deter abusive assertion of SEPs in the first place. For instance, the contractual binding to FRAND could raise counterclaims of breach of contract or/and contractual performance; however, the opportunistic SEP-holder will, in case it loses on such grounds, be left no worse than with a licence on FRAND terms. In the end, a patent hold-up is indeed precluded, but contractual constraints can do little to prevent opportunistic assertion of SEPs in the first place. The victims still suffer the costs of uncertain and resource-draining litigation; most importantly, the reliability of the standards-setting process might still be at risk.

Antitrust enforcement on the other hand, in imposing tortfeasors positive monetary losses in the form of fines, alters the profit-cost calculus of opportunistic behaviour in the first place; opportunistic assertion of SEPs will come at a cost. Of course, a too-heavy-handed approach could have a chilling effect on legitimate patent assertions against implementers that are reluctant to pay FRAND royalties, thus leading to false positives. Antitrust enforcement should carefully examine the specificities of each case, such as the particular PAE conduct, the relationship between PAEs and practicing entities, the structure of downstream markets.167 More importantly, an economically informed antitrust analysis focusing on the actual and potential anticompetitive effects of opportunistic SEPs assertion should prohibit behaviour that is truly harmful to consumers. Safeguarding the inclusive and efficient character of the standards-setting process is a competition law problem. Informed antitrust analysis could provide adequate responses to opportunistic PAE behaviour and privateering.

#### D---litigation deficit---the counterplan limits damages from an infringement suit---that’s NOT sufficient because the threat of litigation alone will cause implementers to cave.

Rubin 17, \*Jonathan Rubin, Partner, Patton Boggs, LLP, Washington, D.C; (May 2017, “PATENTS, ANTITRUST, AND RIVALRY IN STANDARD-  
SETTING”, https://moginrubin.com/wp-content/uploads/2017/05/RutgersRubinVol382.pdf)

One justification put forward for favoring ex ante RAND commitments is that they should require patent holders to “contract out of an injunction- backed property rule, and into a reasonable-royalty liability rule.”107 In other words, ex ante RAND commitments are supposed to adequately protect standard-adopters because a patentee giving such a commitment presumably relinquishes its right to enjoin the adopters’ practice of the standard.108 The belief apparently is that an assurance that the patentee will, at worst, sue for a high level of royalties by forswearing injunctive relief is sufficient to allow standard-setters to adopt patented technology without fear of ex post hold-up.

At least three criticisms can be leveled against this justification for making the RAND commitment the centerpiece of an SSO’s patent policy. First, it applies only to patents that are known or disclosed ex ante and not to the more fundamental problem in which hold-up occurs because the existence of the patent remained unknown until after the standard had been adopted and implemented. The JEDEC policy, for example, did not prevent the hold-up that occurred in Rambus II.

Second, while a waiver of the injunctive remedy is certainly not meaningless, it is difficult to see how it could mean so much. Clearly, the threat of an injunction can be disruptive and may even put an immediate stop to an alleged infringer’s commercial operations. But, the specter of lengthy and costly litigation, the outcome of which could alter the alleged infringer’s fundamental business proposition, is not a negligible prospect for most businesses.

A third reason to be troubled by reliance solely on a voluntary RAND commitment is that it tends to suppress ex ante discussions or negotiations, particularly when coupled with a prohibition that discussions of licensing terms beyond their general description as RAND is not suitable for discussion within the SSO. There is some evidence that both U.S. antitrust agencies are moving toward recognition of the procompetitive potential of ex ante discussions.109 For reasons discussed below, the expansion of ex ante negotiations is likely to be procompetitive and should not be hampered by the mistaken belief that a simple RAND commitment is sufficient.110

## AT: CP---CON-CON

### 2AC---AT: Con-Con CP---TL

**Doesn’t solve---courts have the say on the counterplan’s enforcement.**

**Segal and Spaeth 02** (Jeffrey A. – Professor of Political Science at SUNY Stony Brook, Harold J. – Professor Emeritus of Political Science at Michigan State University, “The Supreme Court and the Attitudinal Model Revisited,” p. 5-6)

If action by Congress to undo the Court's interpretation of one of its laws does not subvert judicial authority, a fortiori neither does the passage of a constitutional amendment, for example, the Twenty-Sixth Amendment reducing the voting age to eighteen and thereby undoing the decision in Oregon v. Mitchell,' which held that Congress could not constitutionally lower the voting age in state elections. Furthermore, not only does a constitutional amendment not subvert judicial authority, courts themselves – ultimately, the Supreme Court – have the last word when determining the sanctioning amendment's meaning. Thus, the Court is free to construe any amendment – whether or not it overturns one of its decisions – as it sees fit, even though its construction deviates appreciably from the language or purpose of the amendment.

**Consensus on amendments doesn’t matter---either it’ll be evaded completely or enforcement is inevitable---won’t set a precedent.**

**Strauss 01**, \*Gerald Ratner Distinguished Service Professor of Law and Faculty Director, Jenner & Block Supreme Court and Appellate Clinic; (David A. Strauss, "The Irrelevance of Constitutional Amendments," 114 Harvard Law Review 1457 (2001), pp.1457-1478, Available Online at <http://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=2986&context=journal_articles>)

One cannot, however, just say simplistically that any set of political forces strong enough to bring about a constitutional amendment is strong enough to change society in some other way, because that is not always true. A supermajority might act, and adopt an amendment, even if society has not fundamentally changed. An amendment might represent a momentary high-water mark of popular sentiment on a question, or an effective effort by an interest group at the height of its power to secure its position." At a later time, many people, even a majority, might decide that the amendment was a mistake - but there it is, entrenched in the Constitution. On these occasions the formal amendment will be relatively insignificant for a different reason. When there is no lasting social consensus behind a textual amendment, the change in the text of the Constitution is unlikely to make a lasting difference - at least if it seeks to affect society in an important way - unless society changes in the way that the amendment envisions. Until that happens, the amendment is likely to be evaded, or interpreted in a way that blunts its effectiveness. This is, in a sense, the other side of the fact that a mature society has a variety of institutions, in addition to the text of the Constitution, that can affect how the society operates. Those institutions can change society without changing the Constitution; but they can also keep society basically the same - perhaps with some struggle, but still basically the same - even if the text of the Constitution changes. This was, most notoriously, the story of the Fourteenth and, especially, the Fifteenth Amendment. The Fifteenth Amendment was somewhat effective in the short run, but within a generation it had been reduced to a nullity in the South. 12 It does not follow that, owing to some kind of historical necessity, formal amendments cannot ever cause important changes. Rather the point is that the formal amendment process will be the means of significant change only in certain limited circumstances that hardly ever occur in a mature society. In particular, three conditions must be present for the amendment process to make a difference. First, a formal supermajoritarian amendment process is unlikely to be an important means of change unless the other usual means of change, such as legislation and judicial interpretation, are unavailable for some reason.' 3 If other means of change are available, they will probably have effected the change to a significant degree before a supermajority can be assembled to amend the Constitution. Second, a formal amendment process is likely to make a difference only when the supermajority that adopts the amendment is a temporary one that was assembled even though society had not fundamentally changed. Deep, enduring changes in society will find some way to establish themselves with or without a formal amendment - if not through legislation or changes in the composition of the courts, then through changes in private behavior. The formal amendment process will have its most significant effect when the supermajority sentiment does not persist. Finally, for an amendment to matter, it must be unusually difficult to evade. An amendment that specifies a precise rule, for example, is more likely to have an effect than one that establishes only a relatively vague norm. If its text is at all imprecise, an amendment that is adopted at the high-water mark of public sentiment will be prone to narrow construction or outright evasion once public sentiment recedes, as the Fourteenth and Fifteenth Amendments were. If all these circumstances occur together, a temporary supermajority's ability to adopt a formal amendment might bring about a permanent change that would not have occurred without the formal amendment. But this confluence of conditions is unlikely to happen very often. I suggest below one instance in which it might have happened - the Twenty-second Amendment, which limits presidents to two terms. Even that example is not entirely clear. But that may be the only occasion since the early days of the Republic when the formal amendment process seems to have made a substantial difference.

#### Far right coopts the CP---extinction.

---their text fiated calling a “limited” concon, and passing the outcome---BUT did NOT fiat what happens in between, nor could they even if they wanted to

Marcetic 18, Staff Writer at Jacobin, holds an M.A. in History from the University of Auckland (New Zealand). (Branko. 11-16-18, Can Republicans Rewrite the Constitution?”, *Jacobin*, <https://jacobinmag.com/2018/11/gop-constitutional-convention-state-legislatures-balanced-budget-amendment/>)

In coverage of the midterms, we’ve heard a lot about the House, the Senate, governorships, and even ballot measures, but almost nothing about state legislatures. That may soon change, because the Democrats’ meager gains in this department will be crucial to stopping corporate America’s next strategy to further roll back the twentieth century. The weekend before election day, a little-noticed article was run by the Associated Press, detailing plans by right-wing groups to push for a constitutional convention after the midterms to alter the United States’ founding document. This itself is nothing new: the Right has spent the past few decades pushing for just such a thing. But with a historically radical GOP in power, and with the Democratic takeover of the House frustrating right-wing congressional legislation for the foreseeable future, the next couple of years could well see the Right go all in on circumventing Congress entirely by simply rewriting the Constitution. “Having a divided Congress may cause the proponents to feel even more committed to this idea,” says Michael Leachman, senior director of state fiscal research at the Center on Budget and Policy Priorities. “They might imagine that this is the only way they’re going to win the radical changes to the Constitution that they want.” There’s good news and, obviously, bad news to this. The bad news is, this is a scary prospect that would not only be a disaster for any future left-wing project — a Bernie Sanders presidency, for example — but would severely hobble efforts to mitigate rapidly intensifying environmental collapse. The good news is, it can be stopped. But first let’s back up for a second. For the last few decades, the Right has been gradually setting the table to pass a particular constitutional amendment (more on the details below). The most familiar way of doing this is to get two-thirds of both houses of Congress to approve it, before convincing three-fourths of all state legislatures — or thirty-eight of them — to ratify it. Congress actually came perilously close to doing this in 1995, when the amendment in question failed by one vote in the Senate. Now, with Democrats controlling the House and a thinning GOP majority in the Senate, this is a non-starter. But there is another way to pass an amendment: have two-thirds of all states, or thirty-four of them, adopt resolutions calling for a constitutional convention on just this issue. The proposed measure is the fabled balanced budget amendment. While its exact mechanics differ depending on who writes the language — in some versions Congress is simply barred from raising the debt ceiling, other times a supermajority is required to do so — the basic idea is to make it extremely hard, if not impossible, for the federal government to spend more than it takes in. It’s not hard to see why this measure would be disastrous. The strict spending limit would serve as a constant, ready-made pretext to slash social spending. It would debilitate any effort to forestall catastrophic climate change, such as through unprecedented, large-scale investment in infrastructure. And it would magnify the impact of economic crises by taking away the government’s ability to stabilize the economy through spending. According to a couple of different estimates, balancing the budget in the face of the Great Recession would have sent GDP plunging by 22 percentage points and doubled the unemployment rate to 18 percent. But wait, you say. Couldn’t a future Democratic president use this to jack up taxes on the rich? The answer is, not if the Right crams through any other constitutional amendments, such as an abolition of the federal income tax or a ceiling on federal spending, making brutal spending cuts the only avenue for meeting this legal standard. The Koch-funded American Legislative Exchange Council, one of the right-wing groups most aggressively engaged in this fight, included wording that would open the door to such limits in its model legislation in 2016. And that brings us to the other terrifying thing about an Article V convention, so-named after the constitutional provision that governs it: there’s a good chance it could see the entire Constitution rewritten amid an orgy of corporate spending and lobbying. This might sound like an exaggeration, but consider that the last time a constitutional convention met was in 1787. Originally called to simply amend the Articles of Confederation that then served as the country’s supreme legal document, the convention decided to rewrite the whole thing instead. Far from “the greatest document ever written,” the 1787 constitution — “the Constitution” — was the product of mess of bickering, wheeling and dealing, and bitter compromise that initially barely passed, and some of whose authors doubted would survive more than a couple of decades. Now imagine that already chaotic, rancorous process re-done, except with an army of lobbyists with bottomless wallets deployed to put their clients’ stamp on the process. Imagine every form of legalized bribery dangled in front of hapless delegates to ensure they vote in line with corporate America, from generous campaign donations to the prospect of cushy, well-paid corporate jobs just through the revolving door. “Ethics and campaign finance rules don’t apply to these delegates,” says Jay Riestenberg, who manages Common Cause’s campaign work on this issue. “I think Article V will work similar to ALEC — corporations and legislatures sitting around the table as equals.” “This would be the mother of all opportunities for powerful interests to change the country’s Constitution,” says Leachman. In such an environment, there’s no telling how many items on the Right’s long-term wishlist would be stuffed into a new founding document. One additional possibility mentioned in the AP report is a repeal of direct election of senators by voters, rather than selection by state legislatures, another anti-democratic bulwark against the GOP’s gradually fading electoral fortunes. There’s also no telling how the rules might be tilted to ensure the Right’s agenda passes. Republican dominance of the states guarantees the party would choose most of the delegates, and there’s no legal guidance as to how such a convention is supposed to work, from drafting all the way to voting. The ratification process could even be radically changed, as in 1787, when the convention straight up ignored the existing process and decided to make ratification substantially easier. But the sky would really be the limit. When 137 state legislators got together in 2016 to simulate such a convention, some of the drafted amendments required a congressional supermajority to raise taxes, empowered three-fifths of states to nullify federal laws, let congress override regulations, and limited the commerce clause of the constitution, which has been used to authorize everything from Obamacare to the Civil Rights Act. And it’s easy to imagine even more radical amendments being made: a constitutional ban on abortion, for instance, or all manner of language limiting government power at a time when large corporations, some industries in particular, are increasingly spooked about their future bottom lines.

## AT: CP---STATE ANTITRUST

### 2AC---Preemption

#### The Ninth Circuit imposed court-order limitations on antitrust law to preserve its balance with patent law.

Martino et al. 20, \*[Matthew M. Martino](https://www.skadden.com/professionals/m/martino-matthew-m) [Tara L. Reinhart](https://www.skadden.com/professionals/r/reinhart-tara-l) [Steven C. Sunshine](https://www.skadden.com/professionals/s/sunshine-steven-c) [Julia K. York](https://www.skadden.com/professionals/y/york-julia-k), works with clients at Skadden, Arps, Slate, Meagher & Flom LLP; (August 14th, 2020, “Ninth Circuit Strikes Down Sweeping Injunction Against Qualcomm and Reins In Expansive Interpretation of Sherman Act”, https://www.skadden.com/insights/publications/2020/08/ninth-circuit-strikes-down-sweeping-injunction)

In its highly anticipated decision, the Ninth Circuit panel unanimously rejected the lower court’s reasoning, vacating the judgment and reversing the worldwide injunction against Qualcomm. The panel concluded that the district court had erroneously imposed the antitrust duty to deal on Qualcomm, had impermissibly looked outside the relevant antitrust market in order to infer an anticompetitive act and had relied on outdated evidence of agreements that were terminated before the suit was filed to justify a broad, forward-looking global injunction. The Ninth Circuit further rejected the argument that a SEP holder’s violation of FRAND commitments could independently create antitrust liability, instead pointing to patent and contract law as sources for potential remedies. The decision reflects a considered effort to rei

n in the district court’s expansive interpretation of general antitrust principles and their specific application to SEP holders, as well as recognition that the antitrust laws aim to preserve companies’ incentives to innovate and compete. Recognizing that while “[a]nticompetitive behavior is illegal under federal antitrust law[,]” the panel was adamant that “[h]ypercompetitive behavior is not.”[7](https://www.skadden.com/insights/publications/2020/08/ninth-circuit-strikes-down-sweeping-injunction" \l "ftn7)

Rejection of District Court’s Expansive Interpretation of Antitrust Laws

The Ninth Circuit decision contains several notable conclusions regarding the scope of Section 2 of the Sherman Act and what constitutes cognizable antitrust harm.

#### State efforts to impose greater antitrust liability than established by federal courts will be preempted to protect that balance.

Samp 14, \*Richard A. Samp is the chief counsel for Washington Legal Foundation (WLF), a non-profit, public interest law firm in Washington, D.C. WLF filed an amicus brief in support of Love Terminal Partners. (2014, “The Role of State Antitrust Law in the Aftermath of Actavis”, https://scholarship.law.umn.edu/cgi/viewcontent.cgi?article=1062&context=mjlst)

V. ACTAVIS’S PREEMPTIVE EFFECT

Application of state antitrust law to reverse payment settlements is not merely a hypothetical possibility. There are a fair number of pending lawsuits that challenge reverse payment settlements on state-law grounds. The California Supreme Court has agreed to review one such suit.74 In seeking affirmance of the appeals court’s dismissal of the suit, the defendants argue inter alia that the suit is preempted by federal law.75

As noted above, there is precedent for a finding that state antitrust law is preempted to the extent that it conflicts with the policy underlying a federal statute.76 Moreover, in the context of patent law, federal courts have not hesitated to preempt state laws that the courts deem to stand as an obstacle to accomplishing Congress’s objectives (i.e., encouraging efforts to develop new and useful products).77 To the extent that any portions of Actavis’s holding can be deemed to reflect the Court’s perception of Congress’s new-product-development objectives, a state law is preempted if it is inconsistent with that holding and seeks to impose a greater degree of antitrust liability on the parties to a reverse payment settlement.

Actavis’s treatment of settlements involving a compromise entry date appears to meet that description. Actavis held that federal antitrust liability could not arise from a settlement in which the generic manufacturer agrees not compete for a number of years and in return is rewarded with an exclusive license to market its product several years in advance of the patent’s expiration date.78 Accordingly, states are not permitted to impose antitrust liability under similar circumstances because doing so would upset the balance that, according to Actavis, Congress sought to achieve between antitrust and patent law.

Other issues left open by Actavis are likely to be answered in the years ahead. For example, the Supreme Court did not specify whether noncash benefits received by a generic manufacturer in connection with a patent settlement can ever serve as the basis for federal antitrust liability. If the Supreme Court eventually answers that question by stating: “No, federal antitrust law will not examine settlement benefits other than cash that flow to the infringing party,” then it is likely that state antitrust law would be required to conform to that rule. The potential grounds for such a ruling (a desire both to promote settlement of patent disputes and to uphold reliance interests in existing patents) are based largely on values embedded in federal patent law.

There is little reason to believe, however, that the Court would prevent application of state antitrust law to patent settlement agreements where state law is fully consistent with federal antitrust law. Even in areas subject to extensive federal regulation, the Supreme Court has upheld the authority of states to engage in parallel regulation that is not inconsistent with the federal regulation.79 Unless the Court were to determine, as in Connell,80 that states could not be trusted to properly accommodate the objectives of the federal statute at issue (here, federal patent law), there is no reason to conclude that Congress would not have wanted states to be permitted to police the same sorts of anticompetitive conduct that is policed by federal antitrust law. Moreover, states are likely free to impose greater penalties on the proscribed conduct than is available under federal law. As the Court explained in California v. ARC America Corp., state antitrust law is not required to adhere to the same set of sanctions imposed by federal antitrust law.81

It seems reasonably clear, however, that Actavis prohibits states from adopting the procedural devices rejected by the U.S. Supreme Court—either a per se condemnation of reverse payment settlements or a presumption of illegality accompanied by “quick look” review. The Supreme Court rejected those approaches because it determined that in many cases there might well be pro-competitive economic justifications for reverse payment settlements and that presuming their illegality could result in the suppression of economically useful conduct.82 State antitrust laws that adopted the FTC’s proposed presumption of illegality would be subject to similar criticism, and thus would likely be impliedly preempted as inconsistent with the careful balance between antitrust and patent law established by Actavis.

CONCLUSION

Because Actavis left so many questions unanswered regarding the application of federal antitrust law to patent settlement agreements, the extent to which federal law preempts the application of state antitrust law to such agreements remains similarly unsettled. One can be reasonably confident that if private plaintiffs become dissatisfied with the results of pending litigation under federal antitrust law, they will turn with increasing frequency to state antitrust law as an alternative remedy. Even if state law ends up doing no more than “parallel” federal antitrust law, defendants are likely to incur substantial litigation costs fending off such state claims in the years to come.

#### Non-uniform state applications of the law undermine investor certainty and doesn’t solve foreign monopolization claims.

Cary et al. 11, \*Messrs. George Cary and Alex Sistla are members of the California and District of Columbia Bars. Mr. Mark Nelson is a member of the New York and District of Columbia Bars. Mr. Steven Kaiser is a member of the New Jersey and District of Columbia Bars; (2011, “THE CASE FOR ANTITRUST LAW TO POLICE THE PATENT HOLDUP PROBLEM INSTANDARD SETTING”, <https://www.clearygottlieb.com/~/media/organize-archive/cgsh/files/publication-pdfs/the-case-for-antitrust-law-to-police-the-patent-holdup-problem-in-the-standard-setting.pdf>)

Finally, Kobayashi and Wright argue that “jurisdictional competition in state contract and tort law is more likely to generate efficient rules and institutions than antitrust.”145 That argument, it seems to us, vastly overstates the degree to which there is “jurisdictional competition.” We are also skeptical that such competition among jurisdictions can be expected to lead to better results. Indeed, by its nature, such competition would lead to inconsistent results, which would simply inject uncertainty and doubt into the standard-setting process, which is surely not welfare enhancing. This inconsistency is exacerbated where the law of foreign jurisdictions also comes into play, as is likely where global standards are at issue.

## AT: DA---BUSINESS CONFIDENCE

### 2AC---AT: Business Confidence DA---TL

#### Turn---antitrust intervention strengthens business confidence---no evidence supports the DA.

Cary et al. 11, \*Messrs. George Cary and Alex Sistla are members of the California and District of Columbia Bars. Mr. Mark Nelson is a member of the New York and District of Columbia Bars. Mr. Steven Kaiser is a member of the New Jersey and District of Columbia Bars; (2011, “THE CASE FOR ANTITRUST LAW TO POLICE THE PATENT HOLDUP PROBLEM INSTANDARD SETTING”, <https://www.clearygottlieb.com/~/media/organize-archive/cgsh/files/publication-pdfs/the-case-for-antitrust-law-to-police-the-patent-holdup-problem-in-the-standard-setting.pdf>)

Other commentators believe that there are strong policy arguments against employing antitrust law to police the conduct of SSOs because it will undermine the incentives of SSO participants to innovate. For example, David Teece and Edward Sherry have argued that “antitrust intervention” could “re-duce the clarity of [SSO] rules thereby making participation in SSOs more risky and reducing the willingness of firms with valuable IP (and which there-fore presumably have much to contribute to selecting the appropriate standard) to participate.”44 As a result, they contend that there is a “significant risk of slowing down the standards-setting process, thus delaying the adoption of new standards and new products made in accordance with those standards, to the detriment of consumers and of society generally.”45 In effect, Teece and Sherry’s concern is one of delay—antitrust enforcement could delay innovation. In a commentary accompanying Teece and Sherry’s article, Michael Carrier found their claims to be overstated because they failed to engage in any serious antitrust analysis.46 We agree. But more importantly, Teece and Sherry make empirical claims without any evidence. In particular, they do not even offer anecdotal evidence that firms are discouraged from participating in SSOs because of the prospect of antitrust enforcement. Indeed, the opposite could be equally argued: participation in SSOs would be discouraged to the extent that participants could not rely on the commitments of their fellow participants to disclose and abide by other commitments intended to preclude opportunism. Teece and Sherry’s argument sounds a familiar refrain against antitrust: antitrust enforcement discourages procompetitive behavior and therefore should be limited. The conclusion rings hollow without facts.

#### Monopoly pricing and selective licensing undermines investor certainty.

Actonline 20, the App Association represents more than 5,000 app companies and information technology firms across the mobile economy; (August 26th, 2020, “Save Our Standards: The Ninth Circuit Court of Appeals Reverses Decision in FTC v. Qualcomm”, <https://actonline.org/2020/08/26/save-our-standards-the-ninth-circuit-court-of-appeals-reverses-decision-in-ftc-v-qualcomm/>), ability edited

Moreover, the FRAND agreement is a critical tool used by standard setting organizations to ensure the process enhances competition and does not run afoul of antitrust laws. Generally, a collaboration between competitors to choose market winners or set prices raises significant questions for competition regulators. Royalty free and FRAND licensing requirements were created by standards bodies to avoid potential antitrust scrutiny by limiting the market power and the potential for abuse by those involved in developing a standard. This is why the American National Standards Institute (ANSI) will not accredit any standards developing organization (SDO) that does not require standard-essential patent holders to provide licensing terms at least as favorable as FRAND.

The most important beneficiary of open interoperability standards and FRAND licensing requirements are the entrepreneurs and small businesses that have long fueled America’s innovation engine. They don’t have giant patent portfolios, market power, or the resources to hire legions of lawyers and spend years battling SEP abusers in civil court. Without some level of certainty about their ability to obtain licenses—let alone what they may cost—entrepreneurs will have trouble justifying the pursuit of any innovation that uses a standard and will certainly struggle to raise money from investors for such innovation. And Qualcomm’s vague and toothless promise simply “not to sue” smaller companies and component makers is no substitute for a license.

The adoption of 5G technology is expected to open unprecedented opportunities for innovation and economic growth as we move toward a world where everything from cars to tractors to buildings will connect to wireless networks. At every stage of the information technology revolution, America has been the undisputed leader because of the unparalleled entrepreneurial innovation ecosystem that we have built. If 5G SEP holders are able to arbitrarily refuse licenses to smaller firms, it would ~~cripple~~ undermine America’s innovation ecosystem at the start of the next big wave of innovation. As economic tensions continue to rise with China, Chinese-based companies could use their 5G SEPs as international economic weapons to thwart U.S. competitors.

The 5G standard is supposed to be a platform for competition, innovation, and entrepreneurship, but if the Ninth Circuit decision is allowed to stand, it will become a chokepoint for snuffing out competitors and demanding monopoly rents. Open standards and FRAND licensing commitments are fundamental to competition in the modern economy, and the idea that they aren’t a subject for antitrust enforcement is patently absurd.

### 2AC---Biden Thumper

#### Biden executive order outweighs.

Posner 21, professor at the University of Chicago Law School (Eric, 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](https://www.project-syndicate.org/commentary/new-brandeisians-antitrust-for-big-tech-by-eric-posner-2021-06), and he has backed it up by [appointing](https://www.politico.com/news/2021/07/20/biden-picks-doj-antitrust-chief-500310) 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).

### 2AC---DOJ Thumper

#### The DOJ is already prepared to engage in more antitrust litigation over SEP’s.

Love 21, \*Bruce Love, writer at the National Law Journal; (June 15th, 2021, “As DOJ Confirms a Change in Antitrust Patent   
Policy, Lawyers Prepare for Shifting Demand”, https://www.mckoolsmith.com/assets/htmldocuments/2021%2006%2016%20As%20DOJ%20Confirms%20a%20Change%20in%20Anittrust%20Patent%20Policyk%20Lawyers%20Prepare%20for%20Shifting%20Demand%20-%20The%20National%20Law%20Journal.pdf)

The Justice Department has confirmed it is looking to develop new policies surrounding how standard-essential patents might be used as tools for anticompetitive practices. The change in policy will mean big business for law firms that can combine highly technical IP advice with their antitrust and litigation practices, with one lawyer likening the demanding skill set to “three-dimensional chess.” Standard-essential patents, or SEPs, are a fundamental piece of intellectual property for business and innovation because they are used under license so frequently by manufacturing companies other than the patent owners. The policy change was hinted at during an online event in late May, when Richard Powers, the acting attorney general of DOJ’s antitrust division, gave an indication that the government might be walking back the relaxed approach implemented by the DOJ under the Trump administration. A DOJ spokesperson confirmed in an email Tuesday to Law.com that it will change its policy on SEPs and antitrust behavior, with the agency still working out the details. The new administration, said the DOJ spokesperson, is rethinking what policies at the intersection of IP and anti- trust will best serve competition and consumers. “New Department leadership is working with career staff on developing a more balanced approach,” said the DOJ spokesperson. “The department wants to develop neutral and balanced policies in this area that recognize the importance of both antitrust enforcement and JUNE 15, 2021 As DOJ Confirms a Change in Antitrust Patent Policy, Lawyers Prepare for Shifting Demand BY BRUCE LOVE U.S. law has often shied away from enforcing essential patent obligations. That’s set to change. The result could be “a significant change in the volume and nature of business for IP trial lawyers and their clients,” one lawyer said. Office of the Attorney General at the U.S. Department of Justice in Washington, D.C. June 6, 2020. THE NATIONAL LAW JOURNAL JUNE 15, 2021 intellectual property protection to our economy and that do not favor one set of interests over others.” Such policy changes could result in a swell of business for law firms with deep, technical IP benches and strong experience representing the industry in enforcement actions, lawyers said. Trump’s DOJ had “taken its foot off the gas” when it came to SEPs as the focus of anti-competitive behavior, said one Washington-based lawyer, speaking on the condition of anonym- ity because he currently has active cases that involve both SEP enforcement and defense. “It didn’t mean we weren’t busy as litigators. There was a lot of work enforcing SEPs against infringers and defending against infringement allegations,” he said. “But we weren’t busy in the antitrust arena. A greater focus on SEPs—not just by the DOJ but also other agencies—might mean more litigation, but it will also mean a more transparent field of play. It doesn’t do companies any good for there to be unfettered SEP enforcement.”

## AT: DA---FTC

### 2AC---FTC DA---TL

#### The prospect of antitrust intervention deters violations---that’s Melamed and Shapiro---no enforcement necessary.

Cheng 13, \*Thomas Cheng, B.A. (Yale), J.D. (Harvard), B.C.L. (Oxon); Attorney & Counsellor, New York State; Associate Professor, Faculty of Law, The University of Hong Kong; (2013, “Putting Innovation Incentives Back in the Patent-Antitrust Interface”, <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1195&context=njtip>), ability edited

Imposing a duty to license on opportunistic patentees may solve this problem. If these patentees know that the courts may step in and mandate licensing at a reasonable royalty rate,214 they will be induced to enter into negotiations with follow-on innovators in good faith.215 The threat of compulsory licensing may become a default background legal rule against which negotiations between initial and follow-on innovators take place. The instances in which the courts need to intervene could be few.

#### Biden’s XO solves---he’s devoting all resources on deck to prosecuting antitrust.

Posner 21, professor at the University of Chicago Law School (Eric, 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>. Accessed 7-22-21)

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).

#### Biden’s XO and future FTC rule changes thump

Ausra Delard & Brian O’Bleness 21, JD Co-Chair of the U.S. Competition and Antitrust Group and Member of Dentons' National Health Care Practice Group; Co-Chair of the U.S. Competition and Antitrust Group and Member of Dentons' White Collar and Government Investigations Practice, “A New Day, A New Deal: The Biden Administration’s Antitrust Revolution”, JD Supra, 7/19/21, https://www.jdsupra.com/legalnews/a-new-day-a-new-deal-the-biden-8824526/

The Biden administration is “supercharging” antitrust enforcement with an expansive view of what constitutes anti-competitive behavior. While much attention has been paid to antitrust scrutiny of large technology companies, also in the crosshairs of the Biden administration are labor markets, agricultural markets and healthcare markets (prescription drugs, hospital consolidation and insurance) according to President Biden’s July 9 Executive Order on Competition2. The order is one of several recent developments that signal an antitrust revolution is underway. A central theme of this revolution is that competition laws can serve as a broad panacea to solve many societal problems, including privacy concerns.3

The Federal Trade Commission (“FTC”) is now led by Lina Khan, a 32-year old academic, who believes that “the current framework in antitrust – specifically its pegging competition to ‘consumer welfare,’ defined as short-term price effects – is unequipped to capture the architecture of market power in the modern economy.”4 Within her first month as chair of the FTC, Khan has moved quickly to revise guidance and protocols that may have otherwise limited expanded enforcement against broadly defined unfair competition, including predatory, exploitative and coercive practices. Transformation of current antitrust policy is also supported by pending legislation that calls for sweeping reform to “reinvigorate America’s antitrust laws and restore competition to American markets.”5

At the heart of the revolution is a sense that antitrust enforcement has failed to address anti-competitive acts by (i) limiting competitive effects to pricing and (ii) the general acceptance that driving a hard bargain is a lawful business practice as long as it doesn’t leverage market power in another relevant market. With a focus on pricing effects, modern antitrust analysis recognizes economic efficiency and the ability to lower costs – which can be passed on to consumers through lower prices – as redeeming pro-competitive benefits. However, the Biden administration appears keen to return to historical antitrust paradigms seen in the 1960s where maintenance of fragmented industries and markets was of paramount importance, even at the cost of higher prices.6

Biden’s Executive Order on Competition

On July 9, President Biden issued an Executive Order on Competition (“EOC”) and established a White House Competition Council to monitor progress on finalizing the initiatives in the order. The EOC encouraged enforcement efforts particularly in labor markets, agricultural markets, healthcare markets (prescription drugs, hospital consolidation and insurance), and the tech sector.7 In particular, the President announced a policy of greater scrutiny of mergers, “with particular attention to the acquisition of nascent competitors, serial mergers, the accumulation of data, competition by ‘free’ products, and the effect on user privacy” and “prior bad mergers that past administrations did not previously challenge.”8

In technology markets, President Biden encouraged the FTC to establish rules on (i) surveillance and the accumulation of data and (ii) barring unfair methods of competition in internet marketplaces, particularly where “large platforms’ power give them unfair opportunities to get a leg up on the small businesses that rely on them to reach customers.”9 The EOC calls for the FTC to use its rule-making authority to ban “pay for delay” and similar agreements among drugmakers and for the FDA to combat high prescription drug prices and price gouging. In agriculture, the EOC points to concentration in markets for seeds, equipment, feed and fertilizer. In labor markets, the EOC moves to prohibit non-compete clauses and unnecessary occupational licensing restrictions that impede economic mobility.10

Merger Guidelines

Also on July 9, FTC Chair Khan, within one month of being sworn in, issued a joint statement with Acting Assistant Attorney General Richard A. Powers of the Antitrust Division of the Department of Justice to consider revisions to the Merger Guidelines.11 We anticipate that federal antitrust authorities plan to significantly revamp the public guidance relating to both horizontal and vertical mergers. Chair Khan has raised concerns that current vertical merger enforcement has been over-permissive and not adequately addressed concerns regarding foreclosure and leverage.12 Khan has criticized the Reagan administration’s 1982 Merger Guidelines for its “radical departure” from an emphasis on “preserving and promoting market structures conducive to competition” to a disproportionate embrace of economic factors relating to price increases and output restrictions that has guided modern antitrust analyses to date.13 Instead, she calls on evaluating the neutrality of the competitive process and the openness of the market by examining: (i) entry barriers, (ii) conflicts of interest, (iii) the emergence of gatekeepers and bottlenecks, (iv) the use of and control over data, and (v) the dynamics of bargaining power. More emphasis would be placed on the competitive process and market structure, including what lines of business a firm is involved in and how those lines of business interact and whether the structure of the market creates or reflects dependencies. Chair Khan’s scholarly work has focused on pre-1980s antitrust analyses when courts, concerned with protecting small businesses and avoiding the adverse political consequences that may arise from the aggregation of economic power, blocked mergers with 5 percent share increases to prevent increased market concentration in its incipiency.14 President Biden’s remarks in the EOC echo this historical sentiment as he discusses “threats from growing corporate power” and the need to give “the little guy a fighting chance.”15

#### Agencies are wrecked

MFEM 8/19, Masuda, Funai, Eifert & Mitchell, Ltd., "The Implications of President Biden's ‘Executive Order on Promoting Competition in the American Economy’," Mondaq, 08/19/2021, https://www.mondaq.com/unitedstates/antitrust-eu-competition-/1103288/the-implications-of-president-biden39s-executive-order-on-promoting-competition-in-the-american-economy.

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

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

Although the implications of the Order are not limited to the area of antitrust, the Order reflects the Biden Administration's emphasis on it. For example, the Order encourages the DOJ and other agencies responsible for banking to update guidelines on banking mergers to provide heightened scrutiny of mergers. The Order also encourages the DOJ and the FTC to challenge prior “bad mergers,” meaning that mergers that went unchallenged under previous administrations may be challenged in the future. Another specific area that the Order focuses on is the right to repair; it encourages the FTC to limit equipment manufacturers from limiting consumer's rights to repair.

Other affected areas of law include, but are not limited to, labor and employment (e.g. non-compete agreements) and consumer protection (e.g. financial data portability). Corporations with any significant activity in the United States should assess the impact that the Order would have on their businesses and prepare for the materialization of the specific initiatives included in the Order.

#### No food wars

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

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

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

#### Global food supply is high and resilient

Indur Goklany 15, PhD from Michigan State, Assistant Director of Programs, Science and Technology Policy at the DOI, represented the United States at the Intergovernmental Panel on Climate Change (IPCC) and during the negotiations that led to the United Nations Framework Convention on Climate Change, “CARBON DIOXIDE: The good news”, The Global Warming Policy Foundation, GWPF Report 18

Crop yields have increased (see Figure 3) and global food production, far from declining, has actually increased in recent decades. Between 1990–92 and 2011–13, although global population increased by 31% to 7.1 billion, available food supplies increased by 44%. Consequently, the population suffering from chronic hunger declined by 173 million despite a population increase of 1.7 billion.112 This occurred despite the diversion of land and crops from production of food to the production of biofuels. According to one estimate, in 2008 such activities helped push 130–155 million people into absolute poverty, exacerbating hunger in this most marginal of populations. This may in turn have led to 190,000 premature deaths worldwide in 2010 alone.113 Thus, ironically, a policy purporting to reduce AGW in order to reduce future poverty and hunger only magnified these problems in the present day.

## AT: DA---Court

### 2AC---Bipartisan

#### Plan is bipartisan.

Contreras 18, \*Jorge L. Contreras teaches in the areas of intellectual property law, property law and genetics and the law at the University of Utah. He has recently been named one of the University of Utah's Presidential Scholars, and won the 2018-19 Faculty Scholarship Award from the S.J. Quinney College of Law. Professor Contreras has previously served on the law faculties of American University Washington College of Law and Washington University in St. Louis, and was a partner at the international law firm Wilmer Cutler Pickering Hale and Dorr LLP, where he practiced transactional and intellectual property law in Boston, London and Washington DC; (August 2018, “Taking it to the Limit: Shifting U.S. Antitrust Policy Toward Standards Development”, https://dc.law.utah.edu/cgi/viewcontent.cgi?article=1114&context=scholarship)

This being said, antitrust policy regarding standard-setting, and hold-up in particular, did not previously appear to run along party lines. In fact, many key DOJ position statements regarding hold-up, including those expressed in its 2006 and 2007 business review letters to VITA and IEEE, respectively, and the 2007 report on antitrust and IP that it produced jointly with the FTC, were developed during the Republican George W. Bush Administration. Each of these documents acknowledged the existence and potential anticompetitive effects of hold-up. At least in this area, the Obama DOJ did not appear to deviate significantly from the policies of prior administrations. As observed by FTC Commissioner Terrell McSweeny, the FTC and prior DOJ approach to combatting hold-up were based on “15 years of scholarship and bipartisan study” and should not lightly be discarded.37

### 2AC---UQ

#### Roe is as good as dead.

[Mark](https://slate.com/author/mark-joseph-stern) Stern 9/2. Professor of Social Policy and History at the University of Pennsylvania. 9/2/2021. “The Supreme Court Overturned Roe v. Wade in the Most Cowardly Manner Imaginable.” https://slate.com/news-and-politics/2021/09/supreme-court-overturn-roe-wade-texas.html

At midnight on Wednesday, in an unsigned 5–4 [decision](https://www.supremecourt.gov/opinions/20pdf/21a24_8759.pdf), the Supreme Court effectively overturned *Roe v. Wade*. The five most conservative Republican-appointed justices refused to block Texas’ abortion ban, which allows anyone to sue any individual who “aids or abets” an abortion after six weeks, which is when the vast majority of operations occur. There is no exception for rape or incest. The decision renders almost all abortions in Texas illegal for the first time since 1973. Although the majority did not say these words exactly, the upshot of Wednesday’s decision is undeniable: The Supreme Court has abandoned the constitutional right to abortion. *Roe*is no longer good law.

Texas’ ban, known as SB 8, constitutes [a uniquely insidious workaround](https://slate.com/news-and-politics/2021/05/texas-abortion-ban-lawsuit-liability.html) to *Roe*. It outlaws abortion after six weeks but does not call on state officials to enforce its restrictions.  
Instead, as Justice Sonia Sotomayor wrote in dissent, the law “deputized the State’s citizens as bounty hunters, offering them cash prizes for civilly prosecuting their neighbors’ medical procedures.” Random strangers can sue any “abettor” to an abortion anywhere in Texas and collect a minimum of $10,000, plus attorneys’ fees. The act’s language is incredibly broad, encompassing any friend, family member, clergy member, or counselor who facilitates the abortion in any way. Every employee of an abortion clinic, from front desk staff to doctors, is liable as well. And when an individual successfully sues an abortion provider, the court must permanently shut it down.

### 2AC---Impact

#### Impact is vacuous---no one is going to war over Roe v Wade.

#### Litany of alt causes to credibility.

ABA 16, American Bar Association. (2-10-2016, “The United States and Human Rights Treaties: Can We Meet Our Commitments?”, <https://www.americanbar.org/publications/human_rights_magazine_home/2015--vol--41-/vol--41--no--2---human-rights-at-home/the-united-states-and-human-rights-treaties--can-we-meet-our-com/>)

Despite these deficiencies, the United States thinks too highly of itself to treat international human rights law—at least when applied to us—as law. We ratify few human rights treaties. We attach multiple conditions (called “reservations, understandings, and declarations”) to those we do ratify. We declare even those treaties “not self-executing,” which renders them generally unenforceable in our courts (although they can still be used as interpretive guides for U.S. laws). And we decline to accept individual complaint procedures or clauses referring disputes under the treaties to the International Court of Justice. That said, a trio of treaties ratified during the terms of the first President Bush and President Clinton commit the United States internationally to respect and protect a wide range of human rights. Two decades later, however, Washington is unwilling or unable to live up to key promises it made under those treaties, at least in the view of the committees of international experts set up to oversee them. The three treaties are the International Covenant on Civil and Political Rights (ICCPR) and the International Convention on the Elimination of All Forms of Racial Discrimination (CERD), both joined by the United States in 1992; and the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), joined by the United States in 1994. (We have ratified other human rights treaties on specific topics, such as the Genocide Convention and Protocols on child soldiers and child trafficking.) Civil and Political Covenant The ICCPR requires each of its 168 state parties “to respect and to ensure to all individuals within its territory and subject to its jurisdiction” a menu of civil and political rights, without discrimination. For example, the ICCPR protects the rights to life, liberty, humane treatment, fair trial, and privacy. States must also ensure that victims of violations have an effective remedy. In grave public emergencies, certain ICCPR rights, including liberty and due process—but not freedom from torture—may be restricted. However, both the emergency and the restrictions (called “derogations”) must be formally notified to the UN. The restrictions must also be limited to the extent and duration strictly required. The United States has never derogated from the ICCPR. Convention against Race Discrimination CERD’s 177 state parties are barred from allowing distinctions based on race, color, descent, or national or ethnic origin, whose “purpose or effect” is to nullify or impair the equal exercise of human rights. Parties undertake to pursue a policy to eliminate racial discrimination. They must ensure equal treatment with respect to a broad range of rights, such as the right to vote and the right to security against police violence. Victims of violations must have effective remedies, including “just and adequate reparation.” Affirmative action—within limits—is encouraged. CERD authorizes “special measures” for the purpose of securing “adequate advancement” of certain racial groups, so long as the measures do not lead to the “maintenance of separate rights” and do not continue after their goals are achieved. The CERD expert committee (see below) interprets this as an “obligation” to adopt special measures when warranted to eliminate “persistent” racial disparities. Convention against Torture CAT categorically prohibits torture: “No exceptional circumstances whatsoever, whether a state of war or a threat of war, internal political instability or any other public emergency, may be invoked as a justification of torture.” Each of CAT’s 158 state parties is mandated to take effective measures to prevent, punish, and redress torture. Treaty Reporting and Expert Committees All three treaties require state parties to submit periodic reports on compliance to committees of experts. The committees also receive “shadow reports” from nongovernmental groups—from scores of groups in the case of the United States. After public hearings in which committee members question and dialogue with government delegations, the committees issue “concluding observations” and ask that follow-up reports be submitted one year later. The committees have long had distinguished U.S. members. The current U.S. member of the Human Rights Committee, which oversees the ICCPR, is Professor Sarah Cleveland of Columbia Law School. The U.S. member of the CERD committee is Professor Carlos Vázquez of Georgetown Law, and of the CAT committee, Felice Gaer, director of the Jacob Blaustein Institute. CAT committee chair Claudio Grossman, the Chilean member, is dean of Washington College of Law at American University. Treaty Norms vs. U.S. Norms In 2014, all three committees issued concluding observations on U.S. reports. They began by commending positive steps taken by the United States since the previous round of reporting, such as the Supreme Court decision in Roper v. Simmons, 543 U.S. 551 (2005), ruling the juvenile death penalty unconstitutional; President Obama’s 2009 executive order prohibiting torture; his ongoing efforts to close Guantanamo; and the 2010 Fair Sentencing Act, which reduced racial sentencing disparities for crack cocaine versus powdered cocaine. Each committee then elaborated its “concerns.” From a U.S. perspective, one might group them in three broad categories: (1) U.S. rejection of treaty norms for reasons that many U.S. human rights lawyers would applaud; (2) U.S. rejection of treaty norms for reasons deeply embedded in U.S. legal and political culture; and (3) U.S. violations of treaty norms, even where they are consistent with American culture and values. In the first category—laudable U.S. departures—one might place overbroad bans on hate speech. CERD requires criminalization of “all dissemination of ideas based on racial superiority or hatred.” The ICCPR bans all “advocacy of national, racial or religious hatred that constitutes incitement to discrimination, hostility or violence.” The United States adopted reservations to these provisions on First Amendment grounds. Nonetheless the CERD committee urges the United States to consider criminalizing racist hate speech, even when it does not incite imminent violence or “true threats” of violence. Many U.S. human rights lawyers would support the U.S. position to allow hate speech that falls short of such incitement. In the second category—norms incompatible with embedded U.S. culture—one might place the Human Rights Committee’s call for the United States to consider acceding to an Optional Protocol to the ICCPR abolishing the death penalty. Another candidate might be the CERD committee’s call for the United States to redefine racial discrimination across the board in order to meet CERD’s “purpose or effect” definition. The Supreme Court has held that the test for violating constitutionally mandated equal protection of the law is a purpose test, not an effects test. While some U.S. laws use a “disproportionate impact” test, most do not. U.S. law is unlikely to move toward an “effects” test anytime soon. This reality neutralizes many CERD committee recommendations to the United States. CERD committee concerns rest on disproportionate impact in such areas as denial of voting rights to convicted felons, gun violence, aspects of criminal justice and juvenile justice, and inadequate legal aid. While there are serious racial gaps in all these areas, and CERD may help focus attention by placing them under an international spotlight, the United States is more likely to treat them as policy problems than as unlawful discrimination. On the other hand, CERD concerns about disparate racial impacts in housing—resulting from urban environmental pollution, criminalization of homelessness, and mortgage-lending practices and foreclosures—may prove to be in sync with the “disparate impact” test under the U.S. Fair Housing Act as recently interpreted by the Supreme Court in Texas Department of Housing & Community Affairs v. Inclusive Communities Project, Inc., 135 S. Ct. 2507 (2015). Fair housing may thus potentially fit within the third category of issues, where human rights treaties are consistent with both U.S. national values and our legal culture. In these areas, Washington should live up to our international commitments without delay. The following are illustrative: Torture and Accountability CAT requires the United States to: prevent torture “in any territory under its jurisdiction”; criminalize all acts of torture; make these offenses punishable by penalties that “take into account their grave nature”; establish jurisdiction over torture by U.S. nationals; ensure a “prompt and impartial investigation, wherever there is reasonable ground to believe that an act of torture has been committed in any territory under its jurisdiction”; ensure that victims of torture obtain redress and fair and adequate compensation; and refrain from sending someone to a country if there are “substantial grounds for believing that he would be in danger of being subjected to torture.” Since 2001, the United States has violated all these treaty commitments. In December 2014, the U.S. Senate Select Committee on Intelligence released a 500-page executive summary of its report on CIA detention and interrogation. In a foreword, Committee Chair Dianne Feinstein expressed her “personal conclusion that, under any common meaning of the term, CIA detainees were tortured.” She was correct. The Committee found, for example: “Sleep deprivation involved keeping detainees awake for up to 180 hours, usually standing or in stress positions, at times with their hands shackled over their heads. At least five detainees experienced disturbing hallucinations . . . .” “The waterboarding technique was physically harmful, inducing convulsions and vomiting.” One detainee “became ‘completely unresponsive, with bubbles rising through his open, full mouth.’ Internal CIA records describe the waterboarding of [another prisoner] as . . . a ‘series of near drownings.’” Techniques such as slamming detainees against a wall were used “with significant repetition for days or weeks at a time” “in combination, frequently concurrent with sleep deprivation and nudity.” One detention facility was a “dungeon,” the chief CIA interrogator said. Detainees were “in complete darkness and constantly shackled in isolated cells with loud noise or music and only a bucket to use for human waste. Lack of heat . . . likely contributed to [a detainee’s] death.” The Committee also found that the CIA repeatedly misled the Justice Department about interrogation techniques and confinement conditions. The CIA’s “inaccurate and incomplete” information impeded effective oversight by the White House and Congress. CIA misinformation “complicated, and in some cases impeded” the national security work of the FBI, Director of National Intelligence, and State Department. Against this backdrop, the United States should heed the recommendations of the CAT committee. The first set of recommendations concerns inadequate legislation. The U.S. Code criminalizes torture abroad but not in the United States. The CAT committee “regrets that the specific offense of torture has not yet been introduced at the federal level.” Even where torture is a crime, the committee “regrets” that the United States restrictively interprets CAT by narrowing the definition of “mental harm” that can qualify as torture (although the Senate Committee findings reveal that the CIA tortured even by that narrower definition). Legislation is critical. The CAT committee welcomed the United States’ “unequivocal commitment to abide by the universal prohibition of torture and ill-treatment everywhere,” as well as U.S. assurances that its personnel are legally barred from committing torture and ill-treatment “at all times and in all places.” However, this bar rests in part on executive orders overturnable at the stroke of a pen. The committee recommended that the United States amend its laws and withdraw its reservation implying a territorial limitation on CAT applicability. In November 2015, President Obama signed into law, as part of the FY 2016 defense authorization bill, the McCain-Feinstein amendment to effectively prohibit torture by U.S. government agencies. Even so, the new law does not address the CAT committee’s concern for lack of accountability and redress. No CIA or military personnel have been prosecuted for torture per se (although low-ranking military personnel have been prosecuted for lesser offenses). Nor has there been civil redress. In 2014, the D.C. Circuit ruled that Congress had barred a civil damages remedy for a detainee allegedly tortured at Guantanamo. Janko v. Gates, 741 F.3d 136 (D.C. Cir. 2014), cert. denied, 135 S. Ct. 1530 (2015). Secret Detention For at least five years after 2001, the CIA held detainees in secret “black sites” overseas. While a 2009 Executive Order directed that the CIA close its sites and not open any new ones, that order is not embodied in legislation. The CAT committee recommended that the United States “[e]nsure that no one is held in secret detention anywhere under its de facto effective control.” The committee reiterated that secret detention is a per se CAT violation. Indefinite Detention without Trial The CAT committee reminded the United States that “indefinite detention without trial constitutes, per se, a violation” of CAT. It noted that during the period under review nine deaths occurred at Guantanamo, including seven suicides, as well as repeated suicide attempts and mass hunger strike protests. In March 2015, the United States reported to the UN Human Rights Committee that of the 122 prisoners still at Guantanamo, 56 were cleared for transfer, had not yet been transferred, and had no immediate relief in sight; 10 were involved in some form of criminal justice; and the remaining 56 were “eligible for review” by the Periodic Review Board—i.e., they are still detained indefinitely without trial. The Human Rights Committee expressed concern that detainees at Guantanamo “are not dealt with through the ordinary criminal justice system after a protracted period of over a decade, in some cases.” It recommended that the United States should “ensure either their trial or their immediate release.” Military Commission Trials In March 2015, the United States reported to the Human Rights Committee that 10 Guantanamo detainees were currently facing charges, awaiting sentencing, or serving sentences imposed by military commissions. Although the United States contends that military commission trials are fair, the Committee recommended that the United States ensure that any criminal cases against detainees at Guantanamo be “dealt with through the criminal justice system rather than military commissions.” Drone Deaths As highlighted by President Obama’s recent apologies to families of two American hostages killed in drone attacks, the use of armed drones endangers innocents and raises serious questions under international law. The Human Rights Committee recommended that the United States: “revisit its position regarding legal justification”; ensure compliance with the principles of “precaution, distinction and proportionality”; disclose, subject to operational security, the criteria for drone strikes, the legal basis for specific attacks, the process of target identification, and the circumstances in which drones are used; provide “independent supervision and oversight” of drone attacks; take “all feasible measures to ensure the protection of civilians” in specific attacks; track and assess civilian casualties; investigate and bring to justice anyone responsible for violations of the right to life; and provide victims with effective remedies and compensation. Intelligence Surveillance The Human Rights Committee expressed its concern over NSA surveillance, including the bulk phone metadata surveillance program. It recommended that the United States ensure that interference with privacy comply with “principles of legality, proportionality and necessity, regardless of the nationality or location of the individuals whose communications are under direct surveillance.” While the recently enacted USA Freedom Act is a step toward that goal, more safeguards are needed. See, e.g., Neema Singh Guliani, What’s Next for Surveillance Reform after the USA Freedom Act, ACLU (June 3, 2015), https://www.aclu.org/blog/washington-markup/whats-next-surveillance-reform-after-usa-freedom-act. Police Killings The CERD committee expressed “concern at the brutality and excessive use of force by law enforcement officials against members of racial and ethnic minorities, including against unarmed individuals.” It recommended improved investigations, reporting, and redress. Criminal Justice The Human Rights Committee and CERD committee expressed a range of concerns about racial disparities in the criminal justice system, including racial profiling, stop-and-frisk arrests, and racial disparities in sentencing, including the death penalty. Voting The Human Rights Committee expressed concern over obstacles to voting, including burdensome voter identification and eligibility requirements. It recommended that voting rights be restored to felons who have completed their sentences, and that states “review automatic denial of the vote to any imprisoned felon, regardless of the nature of the offence.” Conclusion The foregoing is only a sampling of treaty committee recommendations, constrained by limitations of space. Interested readers can find the full committee reports and extensive documentation at http://www.ohchr.org/EN/HRBodies/Pages/HumanRightsBodies.aspx. For anyone concerned about human rights in the United States, the inquiry is well worth the effort.

### 2AC---Court Capital Theory False

#### Court capital isn’t transferrable.

Redish 95, \*Martin, Louis and Harriet Ancel Professor of Law and Public Policy at Northwestern University School of Law, teaches and writes on the subjects of federal jurisdiction, civil procedure, freedom of expression and constitutional law; (“The Constitution as Political Structure”, https://books.google.com/books?id=z3XmCwAAQBAJ&pg=PA20&lpg=PA20&dq=court+institutional+capital+transferable&source=bl&ots=0kC1kjNdWy&sig=G8dFWZ7y87qQm6ptHHdSr1X3ZgQ&hl=en&sa=X&ved=0ahUKEwjGqZHf067aAhUm4YMKHaVEB7QQ6AEIMzAC#v=onepage&q=court%20institutional%20capital%20transferable&f=false)

Choper’s assumption that the judiciary’s institutional capital is transferable from structural cases to individual rights cases is no more credible. Common sense should tell us that the public’s reaction to controversial individual rights cases—for example, cases concerning abortion, school prayer, busing, or criminal defendants’ rights—will be based largely, if not exclusively, on its feelings concerning those particular issues. There exist no grounds to believe that the public’s acceptance or rejection of these individual rights rulings would somehow be affected by anything the court says about wholly unrelated structural issues.

### 2AC---Thumper---Antitrust

#### NCAA ruling thumps.

Edelman 21, \*Marc Edelman is Professor of Law at the Zicklin School of Business (City University of New York), where he focuses on sports, antitrust, gaming, and intellectual property law; (June 21st, 2021, “Supreme Court’s Ruling Against NCAA In College Athlete Pay Case Rests On Decades Of Legal Precedent”, https://www.forbes.com/sites/marcedelman/2021/06/21/as-earlier-predicted-us-supreme-court-rules-against-ncaa-9-0/?sh=2a6bd796824b)

Back in April, I [predicted on Forbes.com](https://www.forbes.com/sites/marcedelman/2021/04/05/seven-reasons-why-the-ncaa-is-likely-to-lose-its-supreme-court-case/) that the National Collegiate Athletic Association would lose its Supreme Court antitrust case, NCAA v. Alston, in a 9-0 ruling. At the time, I explained that the most interesting question in this case would not be who would win but rather whether the U.S. Supreme Court would go even further than the U.S. Court of Appeals in reining in what the NCAA currently calls “amateurism.”

Today, we [got our answer](https://www.supremecourt.gov/opinions/20pdf/20-512_gfbh.pdf). The NCAA indeed did lose its Supreme Court case, 9-0. And Justice Brett Kavanaugh, [channeling a view of the NCAA expressed earlier](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226541), took the time to write a concurring opinion that put the writing on the wall that many other NCAA rules—beyond just limits on educational-related, in-kind benefits—might also one day be found to violate Section 1 of the Sherman Act.

### 2AC---Thumper---Court Capital

#### Court is unpredictable and a multitude of cases thump.

Solomon 21, \*Aron Solomon, the senior digital strategist for NextLevel.com and an adjunct professor at the Desautels Faculty of Management at McGill University in Montreal; (July 26th, 2021, “Coming Supreme Court term could prove historic”, https://www.theday.com/article/20210726/OP03/210729694)

The most important and high-profile case the U.S. Supreme Court will hear in the upcoming 2021-2022 term that begins in October revisits Roe v. Wade. There’s no way to overstate how important Dobbs v. Jackson Women’s Health Organization is, as this case has the potential to fundamentally rewrite the law of the land regarding abortion.

Aside from Dobbs, which I examine in more detail here, there are several other key cases to watch.

In CVS Pharmacy, Inc. v. Doe, HIV-AIDS patients are suing CVS pharmacies that provide them with HIV medication. The issue here is that CVS refuses to sell their medication at their locations within the community, forcing patients to acquire their medication only via mail-order or through specialized CVS locations. The court will decide whether CVS is violating the disability portions of the Affordable Care Act.

In Gallardo v. Marstiller, a 13-year-old living in Florida in 2008 was hit by a truck. After Florida’s Medicaid program paid over $862,000 for her care, they came after the family for $300,000 of the settlement they had won. The Court needs to determine whether under Medicaid law states are allowed to seek reimbursement from legal settlements.

Aside from cases the court has already agreed to hear, given that it is still early, they are expected to agree to hear more. One case that was decided at the state court level recently that might be interesting for the Supreme Court regards Washington state’s limited license to practice law.

Its technical name is the Limited License Legal Technician and the Washington Supreme Court decided in 2020 to “sunset” the program, which allowed non-lawyers to perform some legal tasks. While the program officially ends on the last day of July, there has been word on the legal street of at least one strong upcoming challenge to ending the program. Why the court might be interested in the right case dealing with the LLLT is because ending the program tightens the legal profession’s hold on having only lawyers perform legal tasks in an environment that is re-examining fundamental industry questions, such as who is allowed to own a law firm.

There is one other case that isn’t yet a case but could very well become one fast. The Texas special legislative session legislature this month will deal with several important issues, one of which is antiabortion legislation. What makes the legislation unique, and may make it perfect for review from the highest court in the land, is how bizarre its enforcement mechanism is.

The Texas law is one of approximately 100 new restrictive abortion laws coming in across the country. What makes the Texas law unique is the fact that this heartbeat law won’t be enforced by the state but can be enforced by anyone.

That’s right, anyone.

If you’re picturing roving bands of anti-abortion activists visiting clinics and providers to stop any abortions that violate Texas’ heartbeat law (or any abortion at all) you’re probably on the right track. While this issue is far too early at the moment for Supreme Court review, one could imagine that with the right plaintiff and set of facts as to how the heartbeat bill in Texas is enforced, this could move reasonably quickly up the courts.

Adriana Gonzalez, a civil rights lawyer, points out that any abortion law that essentially invites activists to enforce it has the potential for disaster; “While each one of these state abortion ‘heartbeat laws’ poses its own difficulties, any heartbeat law where the state allows and actually encourages the general public to enforce it is an invitation to violence.“

A final thing to watch between now and October is what Justice Stephen Breyer is going to do. There is a general expectation that he plans to soon resign, and the fact that he has yet to make his decision is concerning to a lot of people who fall ideologically at or to the left of center. The longer Breyer waits to announce his retirement, the lower the percentage chance that President Joe Biden will be able to nominate a replacement who is ideologically aligned.

With a court that has been remarkably unpredictable to date, yet does indeed have a 6-3 conservative majority, any risk of losing one of those three liberal seats is a danger no liberal president or jurist should take lightly.

### 2AC---No Swing Vote

#### 6-3 majority turns swing votes into bystanders and provides political cover for inevitable landmark cases.

Stevenson 21, \*Peter W. Stevenson writes The 5-Minute Fix newsletter and covers national and state politics for The Fix. He's been at The Washington Post since 2015 and has been the senior political video producer since 2017; (May 20th, 2021, “Chief Justice John Roberts: From key swing vote to potential bystander?”, https://www.washingtonpost.com/politics/2021/05/20/chief-justice-john-roberts-key-swing-vote-potential-bystander/)

Barrett’s confirmation didn’t just give conservatives on the court a 6-3 majority; it also means Chief Justice John G. Roberts Jr. is no longer as likely to be a swing vote on the court — marking a sudden change to the amount of power Roberts has to steer the direction of the court.

When President Donald Trump made his third and final [Supreme Court](https://www.washingtonpost.com/politics/courts_law/supreme-court-abortion-roe-v-wade/2021/05/17/cdaf1dd6-b708-11eb-a6b1-81296da0339b_story.html?itid=lk_inline_manual_5) nomination, putting Barrett in the seat previously occupied by Ruth Bader Ginsburg, the court became more conservative than it had been [in more than 50 years](https://www.washingtonpost.com/politics/2020/09/22/if-trump-appoints-third-justice-supreme-court-would-be-most-conservative-its-been-since-1950/?itid=lk_inline_manual_5). With a conservative majority on the court, Republicans hope justices could make a series of landmark decisions on issues their electorate is passionate about. At the top of that list is abortion rights.

By the time Trump took office, Republicans had succeeded in making the nomination of Supreme Court justices an issue that drives voter turnout in a way Democrats couldn’t. In exit polls conducted after Trump’s election in 2016, [one-fifth of voters said court nominations](https://www.washingtonpost.com/politics/2020/09/18/where-polling-stands-supreme-court-vaults-into-top-tier-campaign-issues/?itid=lk_inline_manual_8) were the most important factor in their vote, and those voters broke for Trump by a 15-point margin.

When Ginsburg died last September, handing Trump the opportunity to make a third nomination and swing the court even further to the right, it became a more urgent issue for Democrats. About two-thirds of Joe Biden supporters said Supreme Court nominees were “very important” to their vote in an August 2020 Pew Research [poll](https://www.pewresearch.org/politics/2020/08/13/important-issues-in-the-2020-election/), while about 6 in 10 Trump supporters said the same.

But Trump was already on his way to nominating Barrett, a right-leaning justice who gave conservatives on the court what amounts to a majority. That got Republicans excited — and made Democrats nervous — about the possibility of the court making the kind of rulings conservatives have had on their wish list for decades, starting with overturning Roe v. Wade, the landmark abortion case.

The 2020 Democrats want to ‘codify’ Roe v. Wade. Here’s what that means.

The landmark 1973 Supreme Court decision established a woman’s constitutional right to have an abortion. Some Democrats want to make it into law. (Blair Guild/The Washington Post)

Now, the Mississippi law is under the court’s microscope. The law hasn’t gone into effect because of lower-court rulings that say it goes against decades of Supreme Court precedent, including Roe v. Wade. But the Supreme Court has more latitude to revisit such precedents when it is deemed warranted.

“In an unbroken line dating to Roe v. Wade, the Supreme Court’s abortion cases have established (and affirmed, and reaffirmed) a woman’s right to choose an abortion before viability,” Judge Patrick Higginbotham wrote for the U.S. Court of Appeals for the 5th Circuit.

The Supreme Court has long declined to take on such cases, often falling back on the precedent set by previous decisions. Under Roberts, even with a 5-4 conservative majority after Trump’s first two nominees, Neil M. Gorsuch and Brett M. Kavanaugh, were confirmed, the court seemed reluctant to take on big, landmark cases — and certainly to challenge precedent on politically sensitive issues. It has been suggested that Roberts aimed to make the court appear less political by avoiding those sensitive issues. Some conservatives have even said he lacks the will to address issues such as abortion at all. But such things could increasingly be out of his hands.

Roberts’s status as a key swing vote was solidified by the [2012 decision he wrote](https://www.washingtonpost.com/politics/supreme-court-to-rule-thursday-on-health-care-law/2012/06/28/gJQAarRm8V_story.html?itid=lk_inline_manual_17) upholding the Affordable Care Act’s constitutionality, in which the individual care mandate was preserved as a tax, a decision that infuriated conservatives.

But his supposed efforts to depoliticize the court were blunted by Barrett’s appointment. In a 6-3 court, Roberts is no longer a swing vote. Even if he were to side with the liberal-leaning justices, they could be outvoted 5-4.

This [isn’t the first case](https://www.washingtonpost.com/politics/courts_law/supreme-court-guns-second-amendment-national-rifle-association/2021/04/26/83e865c8-a690-11eb-8c1a-56f0cb4ff3b5_story.html?itid=lk_inline_manual_21) that has seemingly made Roberts’s vote potentially less potent — but it has the potential to be the most high-profile (though we have no idea what the court will do with it).

# 1AR

## Cyber

#### NC3 isn’t invulnerable---hacking is definitely possible.

Gartzke et al. 17, \*Erik Gartzke is Professor of Political Science and Director of the Center for Peace and Security Studies (cPASS) at the University of California, San Diego, where he has been a member of the research faculty since 2007; \*Jon R. Lindsay is Assistant Professor of Digital Media and Global Affairs at the Munk School of Global Affairs and Public Policy and the Department of Political Science at the University of Toronto. He is the co-editor of Cross-Domain Deterrence and China and Cybersecurity; (March 2017, “Thermonuclear cyberwar”, https://academic.oup.com/cybersecurity/article/3/1/37/2996537#64534849)

Canopy Wing underscores the potential and limitations of NC3 subversion. Modern cyber methods can potentially perform many of the missions Canopy Wing addressed with electronic warfare and other means, but with even greater stealth and precision. Cyber operations might, in principle, compromise any part of the NC3 system (early warning, command centers, data transport, operational forces, etc.) by blinding sensors, injecting bogus commands or suppressing legitimate ones, monitoring or corrupting data transmissions, or interfering with the reliable launch and guidance of missiles. In practice, the operational feasibility of cyber attack against NC3 or any other target depends on the software and hardware configuration and organizational processes of the target, the intelligence and planning capacity of the attacker, and the ability and willingness to take advantage of the effects created by cyber attack [[52](javascript:;), [53](javascript:;)]. Cyber compromise of NC3 is technically plausible though operationally difficult, a point to which we return in a later section.

## Patent Holdup

#### Patent holdup is overwhelmingly empirically supported---prefer thousands of peer-reviewed studies.

Shapiro & Lemley 20, \*Carl Shapiro is the Transamerica Professor of Business Strategy Emeritus at the Haas School of Business, University of California at Berkeley; \*Lemley is the William H. Neukom Professor at Stanford Law School and a partner at Durie Tangri LLP; (2020, “THE ROLE OF ANTITRUST IN PREVENTING PATENT HOLDUP”, https://faculty.haas.berkeley.edu/shapiro/patentholdup.pdf)

D. Empirical Support for the General Theory of Holdup

An impressive body of empirical work supports the general theory of holdup described above. Literally hundreds of papers have been published in peer-reviewed journals developing and testing the general theory of holdup. As Robert Gibbons, one of the editors of the Handbook of Organizational Economics, stated in his article on transaction cost economics, “the huge body of TCE literature is overwhelmingly empirical.”28

One extensive line of research uses transaction cost economics to explain the scope and incidence of vertical integration.29 Put differently, these papers use transaction cost economics to explain the “make vs. buy” decisions of firms. A closely related line of research uses transaction cost economics to explain how firms structure their contractual relationships. Shelanski and Klein provide an early survey of this literature.30 As they conclude, “Studies that examine the make-or-buy decision and the structure of long-term contracts, in particular, overwhelmingly confirm transaction cost economic predictions.”31 Masten assembles some of the best early empirical articles on vertical integration and vertical contracting.32 Whinston notes that “TCE predicts that any increase in quasi-rents will increase the likelihood of vertical integration (a finding that is so far consistent with nearly all of the existing empirical literature).”33 Macher and Richtman reviewed “over 3,500 abstracts from which [they] obtained approximately 900 articles that empirically test some aspect of TCE theory.”34 After recognizing considerable variability in the quality of the empirical work that they surveyed, they concluded, “[e]ven so, the volume of our findings lend considerable support overall for the main predictions of TCE.”35

In addition, there is an enormous amount of anecdotal evidence based on long-term contracts between sophisticated parties in situations where substantial specific investments are involved and the parties come to rely on each other. It is safe to say that anyone who has seen a good number of such contracts will confirm that they normally contain provisions by which one party obtains price and performance protections to limit opportunism by the other party.

#### Their ev comes is funded by SEP holders with vested interests in falsely debasing the patent holdup theory.

Shapiro & Lemley 20, \*Carl Shapiro is the Transamerica Professor of Business Strategy Emeritus at the Haas School of Business, University of California at Berkeley; \*Lemley is the William H. Neukom Professor at Stanford Law School and a partner at Durie Tangri LLP; (2020, “THE ROLE OF ANTITRUST IN PREVENTING PATENT HOLDUP”, https://faculty.haas.berkeley.edu/shapiro/patentholdup.pdf)

Patent holdup has proven one of the most controversial topics in innovation policy, in part because companies with a vested interest in denying its existence have spent tens of millions of dollars trying to debunk it. Notwithstanding a barrage of political and academic attacks, both the general theory of holdup and its practical application in patent law remain valid and pose significant concerns for patent policy. Patent and antitrust law have made significant strides in the past fifteen years in limiting the problem of patent holdup. But those advances are currently under threat from the Antitrust Division of the Department of Justice, which has reversed prior policies and broken with the Federal Trade Commission to downplay the significance of patent holdup while undermining private efforts to prevent it. Ironically, the effect of the Antitrust Division’s actions is to create a greater role for antitrust law in stopping patent holdup. We offer some suggestions for moving in the right direction.

#### Royalty stacking is real, and court intervention is needed to make them economically sustainable.

Armstrong et al. 14, \*Ann K. Armstrong is a Vice President in the Law and Policy Group at Intel Corporation. Armstrong joined Intel in 1997 as an attorney supporting multiple business groups. Before assuming her role at Intel, Armstrong was an attorney at Foster Pepper PLLC in Seattle, where she practiced IP and business law; \*Joseph Mueller is a partner in the WilmerHale firm’s Litigation/Controversy Department, and a member of the Intellectual Property Litigation and Appellate and Supreme Court Litigation Practice Groups; \* Tim Syrett is an intellectual property and antitrust litigator, also a partner for WilmerHale; (May 29th, 2014, “The Smartphone Royalty Stack: Surveying Royalty Demands for the Components Within Modern Smartphones”, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2443848)

But even with these gaps in the data—and the limitations of the available data, as described at the outset—the magnitude of the potential royalty burdens on a smartphone become apparent. Totaling the figures described above for particular components or technologies leads to potential royalties of $121 to $124 (for smartphones using either Microsoft Windows Phone or Android or some other open source operating system), as shown below:

Indeed, the royalty data shows that the potential royalties demands on a smartphone could equal or even exceed the cost of the device’s components.434 To be sure, for the reasons described above, many of the so-called “headline” rates on which these royalty figures are based may not withstand negotiation or litigation, but they have nonetheless been sought (and received) from some licensees. With the addition of royalties for the components/technologies for which we did not have sufficient data to include royalty figures, the total potential royalties would increase. Without access to the actual royalty figures paid by smartphone suppliers it is impossible to know for certain their magnitude. But our research demonstrates that they are likely significant. Indeed, the available data suggest that the smartphone royalty stack may be one important reason why selling smartphones is currently a profitable endeavor for only a small number of suppliers.

Further, the available data demonstrate a need for licensees to advocate and courts to rigorously apply methodologies for calculating royalties that focus on the actual value of a claimed invention put in context of the myriad other technologies in a smartphone and the components in which the technologies are implemented. Our research shows a common thread where many of the largest royalty demands rely on the methodology of seeking a royalty based on a percentage of the sales price of the entire smartphone, as opposed to the modest price of the component in which the accused functionality is implemented. That methodology often stems from licensing practices that conflict with the Federal Circuit’s more recent apportionment jurisprudence and it is increasingly being rejected by the courts.

The need for apportionment and rigorous valuation of claimed inventions when calculating royalties is especially acute for standardized technologies, where a patent holder may have just a small slice of the declared essential patents for a particular standard and where that standard may be just one of many supported by the device. Indeed, when courts have rigorously applied methodologies that account for royalty stacking concerns and make a meaningful assessment of the value of the patented technology to the accused devices, the results have been royalties that appear far more economically sustainable for device suppliers. That is the case in both the Innovatio and Microsoft v. Motorola decisions, where the court set RAND royalties at a fraction of what the patent holders had sought. Data such as that presented herein may further crystallize the need for such nuanced analyses of rate-setting.

#### Systemic holdup has occurred, and quality-adjusted price studies should be rejected

McSweeny 18, \*Terrell McSweeny, a former Commissioner of the Federal Trade Commission; (March 21st, 2018, “Holding the Line on Patent Holdup: Why Antitrust Enforcement Matters”, https://www.ftc.gov/system/files/documents/public\_statements/1350033/mcsweeny\_-\_the\_reality\_of\_patent\_hold-up\_3-21-18.pdf)

The Evidence on Patent Holdup

There is ample evidence that patent holdup exists. The FTC has brought a number of enforcement actions challenging opportunistic behavior by patent holders designed to hold up implementers of a standard. Panelists at the FTC/DOJ hearings reported having experienced patent holdup.15 There is also strong anecdotal support for the theory that patent holders are willing to seek considerably more than the FRAND value of their patents, consistent with the added market power conferred by inclusion within a standard. When courts have been asked to rule on the reasonableness of purported “FRAND” offers by patent holders, they have found patent holders demanding far more than that to which they were entitled – a finding consistent with holdup. Below are two recent examples:

Microsoft Corp. v. Motorola, Inc. (W.D. Wash. Apr. 25, 2013): Motorola sought to exclude Microsoft’s gaming consoles from the United States and demanded that Microsoft pay royalties of between $6–8 per console for the use of patents reading on the 802.11 and H.264 standards. The court determined that the F/RAND rate was less than four cents per unit for the 802.11 standard, and less than one cent per unit for the H.264 standard. The cumulative RAND royalty found appropriate by the court was approximately 1/150ththe royalty sought by Motorola.16

Realtek Semiconductor Corp. v. LSI Corp., (N.D. Cal. June 16, 2014):LSI filed an action with the U.S. International Trade Commission (ITC) seeking an exclusion order and then offered to license Realtek the underlying SEPs in exchange for a royalty that exceeded the selling price of Realtek’s standard-compliant products. The federal district court determined that the cumulative F/RAND royalty to which LSI was entitled was 0.19% of the selling price – less than 1/500th the amount that LSI had demanded17

In both cases, the F/RAND royalty rates offered by SEP-holders were orders of magnitude higher than what a neutral arbitrator found to be fair and reasonable. It is also worth noting that the SEP holders sought exclusion orders, which would have operated in much the same way as an injunction by limiting the sale of the implementing products in the United States.

Critics of antitrust enforcement in the holdup context sometimes point to studies showing that quality-adjusted prices have decreased in high-tech industries where standard-setting is common.18 These studies do not actually “contradict” the theory of patent holdup. The question is not whether quality-adjusted prices will decrease at all, but whether holdup slows the pace of this trajectory for new technologies.

## Link Turn

### 1AR---Link Turn---Overclaiming

#### Ex post, patentees are motivated to overclaim patents---creating a thicket of nonessential patents that overburden implementers.

Hovenkamp 20, \*Herbert J. Hovenkamp is James G. Dinan University Professor at the University of Pennsylvania Law School and the Wharton School of the University of Pennsylvania; (2020, “FRAND and Antitrust”, <https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=3095&context=faculty_scholarship>)

Having a patent declared standard essential can increase its value considerably, mainly because the promise of a license at a reasonable rate steers developmental decision making in favor of that particular technology. When a firm makes a commitment to develop its products under a particular standard, it wants assurance that it will have a durable right to operate under that standard at reasonable royalty rates. This process naturally leads to the creation of considerable path dependence in standards. It encourages firms to develop their own technology in ways that ensure interoperability but that can be costly to reverse after the fact.30

This phenomenon of increased value for SEPs also motivates patent owning firms to “over-claim”—that is, to assert that patents are standard essential when subsequent litigation or evaluation determines that they are not. While FRAND agreements require participants to declare relevant patents thought to be essential, the rate of actual declaration far exceeds any rational boundary. As many as one-third to more than half of declared SEPs are very likely not essential to the standard for which they were declared,31 and allegations about the practice of over-declaring are currently being litigated as potential antitrust violations.32 In fact, overall infringement rates for SEP patents are not materially different from those for non-SEP patents.33 A declaration of non-infringement means that, although the patent might be valid, it does not in fact read on the defendant’s particular device or process. In effect, the patent is not a part of the defendant’s technology, and thus cannot be essential. The problem is exacerbated by the fact that, for the most part, SSOs have no process up front for reviewing or questioning individual participants’ declarations that a patent they are offering is in fact both valid and standard essential.34

Ex ante, a patent may offer one of many alternative technological paths to a certain goal. However, ex post, after a standard has been adopted and others have developed their technologies in reliance, the range of acceptable alternatives can decrease dramatically. As a result, the patent whose path is adopted becomes much more valuable.35 In that case, a firm’s ability to evade the FRAND obligation by charging selectively higher royalties to some licensees or conditioning licenses on the purchase of other technology can be extremely lucrative for the patentee but costly to implementers of the standard and disruptive of the SSO’s developmental goals.36 In its Qualcomm decision noted above, the Ninth Circuit did not indicate any awareness of these motivations or their potential for harm.37

#### Majority of the time, SEP’s are not necessary for standard implementation.

Gilbert 20, \*Richard J. Gilbert is an [American Economist](https://en.wikipedia.org/w/index.php?title=American_Economist&action=edit&redlink=1), professor at [UC Berkeley](https://en.wikipedia.org/wiki/University_of_California,_Berkeley) from 1976 to 2000, and founder of [LECG](https://en.wikipedia.org/wiki/LECG_Corporation) Corp. ([Law and Economics Consulting Group](https://en.wikipedia.org/wiki/LECG_Corporation)). Richard ('Rich') Gilbert served as Deputy Assistant General in the [Antitrust Division](https://en.wikipedia.org/wiki/United_States_Department_of_Justice_Antitrust_Division) of the [U.S. Department of Justice](https://en.wikipedia.org/wiki/United_States_Department_of_Justice) in the White House from 1993 to 1995. He led the development of Joint Department of [Justice and Federal Trade Commission](https://en.wikipedia.org/w/index.php?title=Justice_and_Federal_Trade_Commission&action=edit&redlink=1) [Antitrust](https://en.wikipedia.org/wiki/Competition_law) Guidelines for the Licensing of [Intellectual Property](https://en.wikipedia.org/wiki/Intellectual_property) and is currently [Emeritus Professor](https://en.wikipedia.org/wiki/Emeritus_Professor) of Economics at the [University of California at Berkeley](https://en.wikipedia.org/wiki/University_of_California,_Berkeley); (2020, “Innovation Matters: Competition Policy for the High-Technology Economy”, https://mitpress.mit.edu/books/innovation-matters)

Unfortunately, SDOs have not defined the limits on FRAND terms. Furthermore, they do not have uniform disclosure requirements or uniform definitions of “essential.” Studies show that many patents declared essential to common standards are not technically nor economically necessary to implement the standard.[17](javascript:void(0))

### 1AR---LD---Innovation Incentives

#### Ex post royalties are not necessary to motivate innovation.

Bosworth et al. 17, \*D. Scott Bosworth is a Principal Economist at Nathan Associates; \*Russell W. Mangum is Executive Vice President at the American Antitrust Institute and Associate Professor of Economics in the School of Business and Economics at Concordia University Irvine; \* Eric Matolo is the Vice President of Cirque Analytics; (October 28th, 2017, “FRAND Commitments and Royalties for Standard Essential Patents”, https://link.springer.com/chapter/10.1007/978-981-10-6011-3\_2#Sec10)

The common justification for intellectual property law is that inventions must be properly protected to allow inventors to be rewarded for inventions, thereby stimulating innovation. However, promoting inventions and innovation does not justify, nor does it require, rewarding patent owners beyond the value of the technology the intellectual property is meant to protect. Allowing patent holders to extract the value of the network effect created from a standard rewards the patentees based on value beyond the patented technology. Without FRAND terms the network effects value will flow to SEP holders. Proper FRAND terms that keep SEP holders from extracting the value of network effects can still leave the efficient level of return for innovators—that based on the technology itself. In other words, extracting the value of network effects by SEP holders is not necessary to appropriately motivate innovation. Any value of the standardization resulting from collaborative efforts during the SSO process may ultimately be available in the public domain.

### 2AC---LD---Qualcomm Specific

#### Turn---competition sharpens Qualcomm’s incentives to innovate, and royalties aren’t key.

Kattan 19, \*Joseph Kattan is a partner in Gibson, Dunn & Crutcher’s Washington, DC office.  His practice focuses on antitrust litigation, counseling, and enforcement agency matters; (February 7th, 2019, “The Qualcomm Case and U.S. National Security”, http://actonline.org/wp-content/uploads/The-Qualcomm-Case-and-National-Security\_Final.pdf)

Qualcomm goes further and claims that an FTC victory will undermine its incentive to invest in 5G technology and cede the next generation of wireless telecommunications technology to Huawei. According to Qualcomm, requiring it to comply with U.S. antitrust laws will result in a national security calamity. One of its serial defenders goes so far as to say that the FTC case poses an “existential harm” to Qualcomm and that an FTC victory would bring about “a monumental calamity for the U.S. economy (consumers and businesses) and national security.”26 The evidence that he offers in support of these claims? None, which is understandable given that Qualcomm has plenty of incentive to invest in 5G technology and will continue to have that incentive if the FTC prevails. Let’s examine the evidence.

In 2018, Qualcomm’s modem chip business earned $3 billion in pre-tax profits on sales of $17.3 billion. The modem chip business achieved this enviable level of profitability even though Qualcomm directs its massive licensing royalty revenues and income to a separate licensing subsidiary. In other words, any effect of the FTC case on Qualcomm’s royalties will not bear on the company’s modem chip business. And Qualcomm expects its chip business to become even more profitable as 5G technology takes hold. Qualcomm’s CEO, Steve Mollenkopf, recently told securities analysts that 5G “represent[s] a significant opportunity for Qualcomm to expand revenue and earnings.”27 Its president, Cristiano Amon, said that “we expect 5G to be a significant expansion, even on existing units, both in revenue and earnings for QCT [Qualcomm’s modem chip business].”28 As is now well known, 5G is expected to transform a host of industries beyond the mobile phone market to create a myriad of new always-connected products and services. These new business opportunities will justify a high level of investment in 5G regardless of what happens in the FTC case.

Given the opportunity for profit expansion in what is already a highly profitable modem chip business, it is implausible that Qualcomm will scale back investments in 5G technology if it is required to play by the same rules as all other companies and stop forcing customers to take licenses to extinguished patents. Qualcomm’s modem chip business alone will generate sufficient profits to maintain the incentive to invest in R&D even if Qualcomm earns zero licensing revenues, and no one is contemplating a world in which Qualcomm’s licensing business will go away. In the past three fiscal years, this business has averaged over $5 billion per year in pre-tax profits.29

One need look no further than at the other leading U.S. 5G innovator to see the specious nature of Qualcomm’s claims. Intel has invested in 5G for a number of years even though it earns no royalty revenues whatsoever and its modem chip sales have been, and are expected to remain, a small fraction of Qualcomm’s. Intel has achieved a number of firsts in the 5G race, including the first 5G interoperable device, the first live 5G public network, the first global 5G modem, and the first 5G mm-wave call.

Rather than impairing Qualcomm’s incentives to innovate, having to compete on the merits will sharpen them. Indeed, it was competition from Intel that led to the adoption of the most innovative aspect of 5G technology. Over Qualcomm’s objections, Intel successfully promoted the adoption of millimeter-wave technology in 5G. Millimeter-wave technology is what makes 5G revolutionary. It is this technology that is bringing about the phenomenal speeds and low latency of 5G communications that will proliferate 5G technology beyond the mobile phone space. We would not be enjoying the benefits of this technology had Qualcomm had its way, either when it tried to expel Intel from the market or when it fought to exclude millimeter wave technology from the 5G standards.

The notion that Qualcomm needs to rake in 25% of all intellectual property royalties on all of the products on the planet to justify investing in 5G or even merely to survive, as its more overwrought advocates allege, is self-evidently absurd. It is no wonder then that its claims of threats to the national security of the United States, or even merely to Qualcomm’s own incentives to invest in R&D, are not accompanied by any relevant financial facts or analysis. Similarly, the claim that Qualcomm is all that stands between U.S. leadership and Chinese domination in 5G is equally bereft of factual support.

### 1AR---LD---Qualcomm Specific

#### The plan in no way diminishes Qualcomm’s incentives to innovate.

Durkin-Rixley 20, \*Ashley Durkin-Rixley is Director of Communications at ACT, (January 30th, 2020, “Qualcomm Wants You to Think the FTC’s Antitrust Case is About Patents; It’s Not”, https://actonline.org/2020/01/30/qualcomm-wants-you-to-think-the-ftcs-antitrust-case-is-about-patents-its-not/)

The amicus from the 40 legal and economic scholars demonstrates “the policy concerns that drove the Supreme Court’s reluctance to hold refusals to deal unlawful do not apply here.” They argue requiring Qualcomm to honor its voluntary FRAND commitments does not trigger the previously identified policy concerns because:

The “free-rider” problem is not an issue with SEPs. “Industry standards like those at issue here are intended to be available to all firms—competitors and non-competitors alike—to spur widespread adoption of, and facilitate competition in the development and sale of products implementing, the standards.”

Courts will not be in the role of “central planner.” “A court need only order licensing on FRAND terms, leaving Qualcomm and its competitors to negotiate rates in the shadow of the law.”

There is no undue risk of collusion. “The parties need only discuss the royalty. Unlike Aspen Skiing . . . the resulting interactions here would not require joint marketing or sale of consumer-facing products…nor would they require coordination regarding the introduction of a new competitor-facing service…or any discussion of output levels or chipset design.”

It will not compromise Qualcomm’s incentives to innovate. Qualcomm “will continue to earn royalties and chipset profits in return for its investments in developing patented technology…Condemning a refusal to deal in this context merely holds Qualcomm to a bargain that it willingly struck in exchange for SSOs’ adoption of its technology into industry standards, and in no way diminishes its right to obtain a reasonable royalty for others’ use of its SEPs.”

### 2AC---LD---Government Chips

#### Every other company besides Qualcomm doesn’t need anticompetitive conduct to sustain government contracts.

Contreras 20, \*Jorge Contreras, Professor, University of Utah S.J. Quinney College of Law; (January 2020, “Brief of Amicus Curiae Professor Jorge L. Contreras In Support Of Appellee and Affirmance in FTC v. Qualcomm Appellee and Affirmance in FTC v. Qualcomm”, https://dc.law.utah.edu/cgi/viewcontent.cgi?article=1188&context=scholarship)

The District Court’s Injunction Will Not Eliminate Qualcomm’s Ability to Develop, Manufacture and Sell Modem Chips to Government Agencies

The district court’s injunction requires Qualcomm, among other things, to grant SEP licenses to rival modem chip suppliers (a practice that Qualcomm engaged in until it realized that licensing only to device manufacturers was “humongously more lucrative,” ER1395), and to renegotiate existing license agreements so that royalty levels are not “unreasonably high.” ER1391. As an initial matter, these remedial measures, while serious, are not likely to put an end to Qualcomm’s ability to design, manufacture and sell chips to governmental and non-governmental customers.

There are many suppliers of critical technologies and components to government agencies that do not engage in the kind of anticompetitive practices of which Qualcomm has been accused. And the failure of these suppliers (i.e., virtually every supplier other than Qualcomm) to engage in such practices does not appear to have hampered their ability to supply the DOE, DOD and other agencies with a wide range of secure and reliable technology products. Thus, it is unclear why the DOD and DOE feel that the cessation of such anticompetitive practices by Qualcomm will materially affect its ongoing ability to supply them with modem chips. Certainly, no evidence to that effect has been adduced in this case.