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#### Infrastructure will pass, but it will take Biden PC

Will Marshall (opinion editor) 10/12/2021 [“Democrats need a win — now” online @ <https://thehill.com/opinion/finance/576292-democrats-desperately-need-a-win>, loghry]

In politics, success tends to beget success. That truism apparently eluded leftwing Democrats on Sept. 30 when they refused to vote for President Biden’s $1.2 trillion bipartisan infrastructure bill. Instead of basking in accolades for having passed a second landmark achievement to go with Biden’s $1.9 trillion American Rescue Plan, Democrats are treating the public to an extended exhibition of their inability to forge the internal consensus necessary to govern. Even as clogged U.S. ports and long delays in delivering goods of all kinds underscore the urgent need for upgrading the nation’s economic infrastructure, the Congressional Progressive Caucus vows to persist in blocking the bill if they don’t get their way on a follow-on reconciliation bill that would spend trillions more on new social entitlements and climate protection. That’s sewn anger and mistrust among moderate House Democrats, who were promised a vote and stood ready to pass the infrastructure bill last month. House Speaker Nancy Pelosi (D-Calif.) set a new deadline for a vote — Halloween, fittingly enough. To arrest the administration’s faltering momentum, Democrats need a big political win, and soon. Buffeted by vaccine hesitancy and the delta variant’s surge, as well as the chaotic U.S. exit from Afghanistan, the president’s approval ratings have tumbled by 10 points since June. That’s a worry for Democratic candidates, especially former Virginia Gov. Terry McAuliffe, who’s locked in a tight race for a second term in a state Biden won by 10 points in 2020. The impasse over infrastructure is odd in two respects. First, progressives claim they too want to spend big on nation-building at home. But it doesn't seem to be their top priority. Their message couldn’t be clearer: Redistributing wealth takes precedence over strengthening the economy. Is that really the message Democrats want to run on in next year’s midterm elections? Even more perplexing, the White House, and sometimes the president himself, seemed to encourage leftist obstruction as a way of pressuring two moderate Democratic senators, Joe Manchin (W.Va.) and Kyrsten Sinema (Ariz.), into supporting the $3.5 trillion reconciliation bill. The strong-arm tactics haven’t worked, and have left bruised feelings among not only the senators but also many moderate House Democrats who also don’t support the entire progressive wish list. Now the fate of both bills is uncertain as the White House belatedly struggles to broker a compromise that balances the needs of both leftwing and centrist Democrats. What we’ve witnessed is anything but a deft exercise in coalition management. Despite all the heady rhetoric about ushering in “transformative change,” it was never likely that Democrats would pass changes on a New Deal scale with razor-thin majorities in the House and Senate. What’s more, Democrats representing battleground districts and states face electorates that are skeptical of the left’s big tax and spending ambitions. Since they make the difference between their party being in the majority or out of power, their values and interests also must be accommodated. Nonetheless, it’s hard not to sympathize with President Biden’s desire to “go big” in helping Americans hit hard by the long COVID-19 pandemic and recession. That’s a tribute to his empathy, and fortunately for him and the country, it’s a goal he can still achieve. The imperative now is to get both bills unstuck by persuading progressives to compromise on a reconciliation package with a price tag between $1.9 trillion and $2.3 trillion. Democrats need to fashion a more disciplined and focused reconciliation package that aims at doing a few things right rather than throwing money at a plethora of new entitlements. A blueprint at the Progressive Policy Institute, where I serve as president, sets three core, progressive priorities: supporting working families and children, combating climate change and expanding access to affordable health care for those in need. It would cost roughly $2 trillion and could plausibly be paid for by raising taxes on the wealthy and strengthening federal tax compliance. A Build Back Better package totaling between $2 trillion and $3 trillion for both bills is within striking distance for Biden and his party. Only on the dreamscape of democratic socialism can spending of that magnitude be considered chump change. By historical standards, it’s big change. The left’s latest gambit is to pass all the programs in their original $3.5 trillion grab bag but set them to expire after a few years so they appear less expensive in the Congressional Budget Office’s official 10-year score. This is bad policy that would make it easier for a future Republican Congress to simply let programs expire rather than trying to abolish them, as Republicans failed to do with ObamaCare. “For President Biden’s legacy, it’s important to make these longer-term investments and not have short-term cliffs,” said Rep. Suzan DelBene (D-Wash.), leader of the mainstream New Democrat Coalition. The “haircut” gimmick is also dubious politics, because it’s harder to communicate to voters a clear rationale for a jumble of smallish or temporary new programs than a few big initiatives with real power to change lives. Democrats control the White House and, however tenuously, Congress. They don’t have the luxury of endless negotiations aimed at appeasing the left. To regain political momentum, Democrats need a win. The best way to get one is to pass the infrastructure bill as soon as possible and work on a pragmatic reconciliation bill that better reflects their philosophically diverse coalition.

#### Antitrust reform requires PC and trades off with other legislative priorities.

Peter C. Carstensen 21, the Fred W. & Vi Miller Chair in Law Emeritus, University of Wisconsin Law School, February 2021, “THE “OUGHT” AND “IS LIKELY” OF BIDEN ANTITRUST,” https://www.concurrences.com/en/review/issues/no-1-2021/on-topic/the-new-us-antitrust-administration-en

14. Similarly, despite bipartisan murmurs about competitive issues, the potential in a closely divided Congress that any major initiatives will survive is limited at best. In part the challenge here is how the Biden administration will rank its commitments. If it were to make reform of competition law a major and primary commitment, it would have to trade off other goals, which might include health care reform or increases in the minimum wage. It is likely in this circumstance the new administration, like the Obama administration’s abandonment of the pro-competitive rules proposed under the PSA, would elect to give up stricter competition rules in order to achieve other legislative priorities.

15. Another key to a robust commitment to workable competition is the choice of cabinet and other key administrative positions. Here as well, the early signs are not entirely encouraging. In selecting Tom Vilsack to return as secretary of agriculture, the president has embraced a friend of the large corporate interests dominating agriculture who has spent the last four years in a highly lucrative position advancing their interests. Given the desperate need for pro-competitive rules to implement the PSA and control exploitation of dairy farmers through milk-market orders, the return of Vilsack is not good news. Who will head the FTC and who will be the attorney general and assistant attorney general for antitrust is still unknown, but if those picks are also centrists with strong links to corporate America the hope for robust enforcement of competition law will further attenuate!

16. In sum, this is a pessimistic prognostication for the likely Biden antitrust enforcement agenda. There is much that ought to be done. But this requires a willingness to take major enforcement risks, to invest significant political capital in the legislative process, and to select leaders who are committed to advancing the public interest in fair, efficient and dynamically competitive markets. The early signs are that the new administration will be no more committed to robust competition policy than the Obama administration. Events may force a more vigorous policy—I will cling to that hope as the Biden administration takes shape.

#### Infrastructure bill is key to revitalize grids and cybersecurity.

Riley ’21 — Tonya, Researcher and reporter at the Washington Post. "The Cybersecurity 202: Democrats' new infrastructure bill highlights cybersecurity concerns." Washington Post. 3-12-2021. https://www.washingtonpost.com/politics/2021/03/12/cybersecurity-202-democrats-new-infrastructure-bill-highlights-cybersecurity-concerns/. accessed 3-17-2021 //ART

The House's new $312 billion infrastructure bill, as part of that push, aims to secure the country's most critical infrastructure – and increase the cybersecurity of essential services, including hospitals, broadband, and the electric grid. A recent string of high-profile cyberattacks pushed long-neglected cybersecurity issues to the center of national policy discussions. “The infrastructure in the United States is in sore need of updates and the fact that Congress is now recognizing the importance of upgrading not just physical infrastructure, but cybersecurity infrastructure is a sign of a new importance and awareness of cybersecurity,” says John Gilligan, president and CEO of the Center for Internet Security, a cybersecurity nonprofit. Key cyberse'curity-related investments in the bill include $10 billion to help hospitals guard against cyber criminals and roughly $3.5 billion for electric grid security. Mounting high-profile cybersecurity incidents have made the problem hard to ignore. “Over the last year, we’ve seen the devastating results of inaction: major power outages, water shortages, health care facilities stretched to the limit, and communities left behind due to the digital divide,” Energy and Commerce Committee Chairman Frank Pallone Jr. (D-N.J.) said in a statement introducing the bill. In February, Florida police revealed that a hacker tried to poison the water supply of the town of Oldsmar. And although not the result of a cyberattack, the fallout of a mass grid failure in Texas raised alarms from researchers and lawmakers about cybersecurity weaknesses in America's power systems that could lead to a much worse outage. During the coronavirus pandemic, hospitals have been hit with a surge of dangerous attacks in which attackers locked up data and systems in exchange for a ransom, leaving hospital services unavailable. Congress is also scrambling to respond to a Russian attack on software company SolarWinds, which resulted in the hacking of at least nine federal agencies, as well as a recent Chinese-tied campaign against a vulnerability in Microsoft software. Both are used heavily by the government and critical industries including the energy sector. Biden last month signed an executive order requiring a review of the security of America's supply chains and is expected to sign another executive order addressing cybersecurity improvements in critical software systems. A bipartisan group of members of the House Committee on Homeland Security yesterday introduced a bill that would cement the role of the Cybersecurity and Infrastructure Security Agency in protecting critical infrastructure. Incidents such as the one in Florida are a wake-up call that the U.S. government needs to do more to defend critical infrastructure, said the committee's ranking Republican, Rep. John Katko (N.Y.), who led the bill. “These systems operate many vital components of our nation’s critical infrastructure and remain under constant attack from cyber criminals and nation state actors,” he said in a statement.

#### Cyber-attacks on the electric grid are imminent recent attacks prove means and motive

Layton, Chief Intelligence Officer 16 (Tim, @SurfWatch Labs, Principal for Cisco’s Global Enterprise Cybersecurity Theatre, Principal for EMC’s Security & Risk Management, Vice President for Wells Fargo, 4/1/16, “U.S. Electric Grid - America the Vulnerable,” DOA: 8/22/16, <http://www.securityweek.com/us-electric-grid-america-vulnerable>)

In the new digital age, the **threat of** cyber attack reaches every part of modern society. Electrical power runs just about every aspect of life for most people, and most are not prepared when the power source is interrupted or goes away. A public announcement could be made one week ahead of time, and the majority of people would still be in the same vulnerable position if the power were to go away abruptly. Last year Lloyd's published a report titled "Business Blackout" where they shared their analysis and findings of an imminent cyber attack on the U.S. power grid. In their attack scenario, attackers were able to inflict physical damage on 50 of the 700 generators on the electrical grid on the east coast where there is a substantial population of people in major cities that includes New York City, Washington D.C. and Boston. In this situation, 93 million people were affected by a blackout. **There would** most certainly **be** mass chaos among the population, **and** the **total impact to the USA** in the Lloyd's report **is** estimated at $243 billion dollarsandrising to over $1 trillion in extreme cases. In an already fragile and recovering economy, an attack like this could ~~cripple~~ [devastate] the country and most certainly disrupt any momentum the economy had been able to gain. Not only is **this** scenario possible, I believe it is imminent. Based on existing intelligence, it is reasonable to assume that nation-states already possess all the information they need to launch such an attack on the U.S. power grid - they choose not to because of political implications. I also believe the USA possesses the same capabilities. It isn't just nation-states that we need to be concerned with, as radical terrorist groups are highly motivated to bring harm to the American people and economy. Current State of Affairs The U.S. power system is outdated, and it was never designed with network security in mind. Experts have described the U.S. power grid as decrepit and seriously out of date. **By** connecting U.S. electric plants to the Internet**, a** new and **bountiful** supply of attack points and back doors **have** been **opened up to attackers**. Further complicating the security challenges in the new digital frontier is hundreds of contractors create and sell software and equipment to the energy companies. This software and hardware has weaknesses that can be exploited. The companies themselves serve as a portal into the electric grid because they are connected their customers. Just three months ago, the Ukraine power grid suffered a cyber attack and the outage impacted 225,000 people. This is the first time the U.S. Government officially recognized that a blackout was caused by a malicious cyber attack. Security researchers attribute the attack to a Russian hacking group known as Sandworm. Malicious software was used in this attack to remotely switch off breakers **controlling** the **power** to the public. A coordinated attack was launched by the criminals that aimed at keeping legitimate customers from reporting their power outages. We know based on history with malware, **once the** software **is** **out** in the wild, **it** can be modified **for future attacks** and **with** a **high degree of success**. We have seen this pattern in other industry verticals such as the financial sector. Within the energy sector, here are just a few examples of reported attacks or attempted attacks: • In 2012 and 2013 Russian hackers were able to successfully send and receive encrypted commands to the U.S. power generators. • The Department of Homeland Security (DHS) announced last year that unauthorized cyber hackers were able to inject malicious software into the grid operations that allowed spying on U.S. energy companies. • In October of last year, US law enforcement officials reported a series of cyber attacks that were attempted by ISIS targeting the U.S. power grid. • In December 2015, the Associated Press reported that "security researcher Brian Wallace was on the trail of hackers who had snatched a California university's housing files when he stumbled into a larger nightmare: cyber attackers had opened a pathway into the networks running the United States power grid." Home Security Deputy Secretary Alejandro Mayorkas acknowledged in an interview, "we are not where we need to be" on cybersecurity. \*edited for ableist language

#### Risk of a nuclear cyberattack is high – nuclear terrorism, meltdowns, false flag missile strikes – breaks down national security

NTI 15 (The Nuclear Threat Initiative – THE NUCLEAR THREAT INITIATIVE PROTECTS LIVES, THE ENVIRONMENT AND OUR QUALITY OF LIFE NOW AND FOR FUTURE GENERATIONS. Every day, we work to prevent catastrophic attacks with weapons of mass destruction and disruption—nuclear, biological, radiological, chemical and cyber. – “ADDRESSING CYBER-NUCLEAR SECURITY THREATS” – Nuclear Threat Initiative – Oct 25, 2015 – http://www.nti.org/about/projects/addressing-cyber-nuclear-security-threats/)

What if a hacker shut down the security system at a highly sensitive nuclear materials storage facility, giving access to terrorists seeking highly enriched uranium to make a bomb? What if cyber-terrorists seized control of operations at a nuclear power plant--enabling a Fukushima-scale meltdown? Or, worse, what if hackers spoofed a nuclear missile attack, forcing a miscalculated retaliatory strike that could kill millions? The cyber threat affects nuclear risks in at least two ways: It can be used to undermine the security of nuclear materials and facility operations, and it can compromise nuclear command and control systems. Traditional nuclear security practices have been focused on preventing physical attacks—putting in place “guns, guards, and gates” to prevent 1) theft of materials to build a bomb, 2) sabotage of a nuclear facility, or 3) unauthorized access of nuclear command, control, and communications systems. Important progress has been made in this "traditional" nuclear security arena, but the threat of a cyber attack is escalating. All countries are vulnerable, and nuclear cybersecurity practices haven't caught up to the risk. Across the nuclear sector worldwide, the technical capacity to address the cyber threat is extremely limited, even in countries with advanced nuclear power and research programs. Measures to guard against the cyber-nuclear threat are virtually non-existent in states with new or emerging nuclear programs. Expertise in the field of nuclear cybersecurity is in short-supply, and the International Atomic Energy Agency (IAEA), which provides countries with assistance and training in this area, does not have the resources necessary to address the growing threat. The threat extends to the command, control, and communications (NC3) for nuclear weapons. Even in the United States, officials have stated that it cannot be fully confident that these systems will operate as planned if attacked by a sophisticated cyber opponent. Such attacks could jeopardize the confidence of U.S. officials of our nuclear systems, lead to false warning or even potentially allow an adversary to take control of a nuclear weapons system.

## FTC Tradeoff

#### Antitrust law enforcement has two areas of focus now: health care and big tech. Health care is under the radar.

Levine 8-25-2021, master’s degree from the Columbia University Graduate School of Journalism and a bachelor of arts in English from the University of Pennsylvania. She is also an alumna of the Fellowships at Auschwitz for the Study of Professional Ethics, a program in Germany and Poland that explores the ethics of reporting on politics, war and genocide (Alexandra, “How Biden's tech trustbuster could change health care,” *Politico*, <https://www.politico.com/newsletters/future-pulse/2021/08/25/how-bidens-tech-trustbuster-could-change-health-care-797333>)

Lina Khan’s Federal Trade Commission has its eyes on health care. The agency known for efforts to rein in Big Tech companies like Facebook and Amazon is also enmeshed in high-stakes health care and health tech battles that extend well beyond Silicon Valley. Case in point: The FTC trial that kicked off yesterday examining monopoly concerns in the market for cancer screening technology. (More on that below.) That closely watched antitrust case — involving the giant Illumina and startup Grail — predates Khan’s confirmation as FTC chair. But it underscores how health issues are looming over the agenda, particularly heading into the pandemic's second year. The way health care companies and consumer health apps handle sensitive data “is an area that I'm sure [Khan’s] very, very interested in,” said Jessica Rich, former director of the FTC’s consumer protection bureau, adding that the Biden administration's FTC will also be closely scrutinizing hospital mergers. “I expect her and the commission to take a very bold approach to what constitutes harm for both,” Rich said. “I expect her to pay close attention to algorithms and potential discrimination in health care, both denials and pricing issues which the FTC's laws can address.” The FTC’s jurisdiction touches nearly the entire health economy. While its competition bureau looks at health care mergers like the Illumina-Grail deal, its consumer protection side is focused on health privacy and data security issues, as well as fighting bogus medical claims on everything from weight loss to Covid cures. When Congress passed the Covid-19 Consumer Protection Act last year, the agency was granted new authority to police Covid scams. Although Khan hasn't spoken publicly about her health care agenda, she's likely to take issue with health apps and companies whose business models maximize, incentivize and monetize data collection. Of particular concern is how firms disclose what they’re doing with consumers’ data — and whether it may still be deceptive or unfair.

#### New enforcement priorities trigger a tradeoff from health care

Abbott 21, formerly served as general counsel of the Federal Trade Commission (Alden, “Lack of Resources and Lack of Authority Over Nonprofit Organizations Are the Biggest Hindrances to Antitrust Enforcement in Healthcare,” <https://www.mercatus.org/publications/antitrust-and-competition/lack-resources-and-lack-authority-over-nonprofit>)

Appropriate federal antitrust and consumer protection enforcement is good for the American economy. It promotes enhanced competition and consumer welfare. Regrettably, however, the effectiveness of federal enforcement in achieving these benefits is threatened by insufficient resources. As FTC Acting Chair Rebecca Kelly Slaughter explained in her April 20 testimony before the US Senate Committee on Commerce, Science, and Transportation, FTC employment has remained flat despite a growing workload, with merger filings doubling in recent years. Lauren Feiner reports on that testimony: “The absence of resources means that our enforcement decisions are harder,” [Slaughter] said. “If we think that we have a real case, a real law violation in front of us, but a settlement on the table that is maybe OK but doesn’t get the job done, we have to make difficult decisions about whether it’s worth spending a lot of taxpayer dollars to go sue the companies who are going to come in with many, many law firms worth of attorneys and expensive economic experts, versus taking that settlement.” I can attest to the accuracy of Slaughter’s observation, based on my experience as FTC general counsel in the Trump Administration. During my tenure, the FTC did indeed have to contend with resource limitations that adversely affected merger enforcement decision-making. The problem of resource constraints is particularly acute in the case of healthcare merger reviews, given the increasing consolidation of healthcare institutions. As one noted healthcare scholar stated in 2019, “The Affordable Care Act did not start the consolidation rapidly occurring with hospitals/health systems and medical groups, but it most definitely accelerated the movement to combine. In the last five years, the number and size of consolidations have been at an all-time high.”

#### Health consolidation collapses public health

Numerof 20, PhD @ Bryn Mawr, internationally recognized consultant and author with over 25 years of experience in the field of strategy development and execution, business model design, and market analysis (Rita, “Covid-Induced Hospital Consolidation: What Are The Impacts On Consumers, And Potentially The President,” *Forbes*, <https://www.forbes.com/sites/ritanumerof/2020/11/11/covid-induced-hospital-consolidation-what-are-the-impacts-on-consumers-and-potentially-the-president/?sh=692d6fc94da0>)

Covid-19 has initiated yet another wave: A wave of hospital mergers and acquisitions that will have devastating consequences for public health if industry doesn’t soon execute an about-face. Whether because they’re on the brink of bankruptcy and have subscribed to the half-truth that size is protective, or because they think they can score some good deals and believe scale and success are synonymous, the financial fallout of Covid-19 has caused many hospital executives to make consolidation a core part of their future plans. With the intent of increasing care quality and decreasing consumer costs despite these challenging times, the merger between Shannon Medical Center and Community Hospital and partnership between Intermountain and Sanford Health are just two examples. There are multiple reasons why consumers absolutely cannot afford for industry to bulk up in an effort to weather this storm. The first is that the positive efforts executives claim consolidation will help them accomplish often prove to be futile. Research shows that wherever market concentration is high, there are also higher prices for both consumers and the employers who provide their healthcare coverage. In the absence of competition, costs increase and quality deteriorates. That’s the opposite of progress. Second, generally speaking, the union of two institutions with operational shortcomings only creates one larger institution with even more operational shortcomings! That’s not progress either. Third, Covid-induced consolidation will only make future progress many times more difficult. The larger an organization is, the more it will struggle to rapidly adapt to healthcare disruptions like we’re seeing today. Retail giants like Walmart, Walgreens, Amazon and CVS are pivoting to cater to healthcare consumer demands for affordability and accessibility. Right now, they’re still a blip on the radar relative to mainstream healthcare delivery, but they are looking to eventually corner the market and drive the industry forward. And as they continue down this path, consolidated healthcare systems will be left behind, potentially at the expense of the consumers in that area. The potential impact of continued consolidation on rural patients is especially concerning. Rural communities may have a limited number of the big-box retailers mentioned above. And the unfortunate fact of the matter is that when a larger hospital or health system purchases a smaller, rural hospital, it’s usually only a matter of time before the purchasing system realizes that unless they drastically pare down and reconfigure operations, the acquired hospital will never be profitable. Many eventually decide to close up shop, in some instances reducing or even eliminating rural patients’ options for care delivery. In the absolute worst-case scenario, this is exactly the reality all consumers could face if consolidation continues at its current pace. In theory and if left unchecked, all of the hospitals in the United States could be owned by only a handful of mammoth systems that then lack incentive to continually deliver quality services at lower total cost of care.

#### Strong public health infrastructure prevents bioterror attacks

Kosal 14, Adjunct Scholar to the Modern War Institute at the US Military Academy/West Point, Ph.D. in Chemistry from the University of Illinois at Urbana Champaign, Associate Professor at The Sam Nunn School of International Affairs at Georgia Tech (Margaret E. Kosal, “A New Role For Public Health in Bioterrorism Defense,” Frontiers in Public Health, Volume 2, Article 278)

In thinking about public health infrastructure as an active or passive part of new deterrence strategies, it is useful to think about the role of missile defense. As the presence of a ballistic missile defense system is supposed to be an existential deterrent itself, so could be a strong public health system. Missile defense is both a passive deterrent and, if used, an active deterrent, as it stops something from occurring. A strong public health infrastructure is likely to be the key in reducing the vulnerability to bioterrorism attack, as well as having a potential role in deterring a foreign terrorist group from even considering such an attack. If a biological weapon launched by a terrorist group will have little or no effect on the target country because of a known robust public health sector, then a foreign terrorist may be discouraged from launching a biological weapons attack in the first place. If foreign terrorists are also aware of the weak public health infrastructure with their own borders, and the increased risks to them and their publics in the event of an accident in developing biological weapons and/or spread of an infectious disease that they might launch, this may also deter them from pursuing this work. In addition, even the accidental release of a dangerous pathogen or the spread of an infectious disease via attack will most likely cause disproportional negative effects to nations with limited public health infrastructures and affect tacit and explicit supporters in those states. The role of a robust public healthcare system for its deterrence capacity can be explored through empirically driven case study methods against predominant theories of deterrence in political science (14, 15) and in comparison to other works considering the possibility of deterring bioterrorism (16–20). For example, the re-emergence of polio offers a potentially useful example to think about the effects of a potential bioterrorist attack on the developed and the developing world. Polio is both a contagious infectious disease and transmissible from human-to-human (like smallpox and plague). The poliovirus is highly transmissible with a basic reproductive rate or secondary transmission rate (R0) exceeding most suspected biological agents, e.g., standard estimates of R0 for polio range from 5 to 7 (21, 22), whereas R0 for suspected bioterrorist agents like smallpox (1.8–3.2) (23–25); pneumonic plague (0.8–3.0) (26, 27); and even Ebola (1.34–2.0) (28, 29) are lower. It is not a likely biological terrorism agent, however, due to the low-mortality associated with infection. It is, however, a useful model for thinking about the spread of infectious disease and the importance of a robust public health infrastructure as a deterrence strategy. At the beginning of 2003, the complete eradication of polio appeared to be within the grasp of the World Health Association and its many partners. In 1998, the World Health Organization estimated there were over 365,000 new cases of polio; by early 2003, the rate of infection had declined to <1,000 new cases worldwide due to a vigilant vaccination effort (30). That trend was interrupted, however, when Nigerian citizens refused to be vaccinated after hearing unfounded allegations of contaminated vaccines that would lead to sterility or cause HIV/AIDs. Before 2003, polio had largely been confined to only a handful of countries; Nigeria, India, Pakistan, and Afghanistan accounted for 93% of the world’s cases (31). What started with the refusal of local clerics to allow vaccination led to the reestablishment or importation of the poliovirus to 14 countries that were previously disease-free. Transport of the contagious virus was not limited to neighboring African states. The poliovirus moved through Sudan to Ethiopia crossing the Red Sea to Lebanon and Yemen. The latter was been particularly severely affected, witnessing more than 500 new cases in the first half of 2005. The poliovirus spread as far as Indonesia, where it afflicted more than 150 people in a single year in 2 provinces, predominantly children (32). Prior to this outbreak, Indonesia had been polio free for nine years. Genetic fingerprinting confirmed that the strain imported to Indonesia came from northern Nigeria through Sudan, most closely resembling an isolate recovered in Saudi Arabia in December 2004. A pilgrim returning from Mecca or a returning foreign worker is suspected to have brought the virus to the island of Java, across an ocean and thousands of miles from its source. The polio virus continues to persist in a limited number of states in the developing world, specifically in Nigeria, Afghanistan, and Pakistan, where a ban on vaccination by Islamist leaders in Waziristan remains in place. Since 2013, polio (linked genetically to the strain in Pakistan) has spread from Syria to Iraq (33). Countries that have witnessed the re-emergence of poliovirus outbreaks have some crucial links: social and political challenges that have impeded the development and implementation of appropriate public health infrastructures and measures. Not unexpectedly, there is an inverse relationship between government health expenditure in health and number of polio cases. Looking at the spread of polio can provide us with a lens to think about the impacts of bioterrorism in states with developed public health infrastructures and those who do not. A bioterrorist attack, especially one with a contagious agent like smallpox or pneumonic plague, will likely impact the developing parts of the world substantially more than the US. One only has to look as far as polio’s re-emergence (or more recently the outbreak of Ebola virus disease in West Africa) to see the very real repercussions of a contagious virus and how the most dire causes and effects of infection and spread stem from poor public health infrastructures (34). Creating a new deterrence strategy for bioterrorism is needed. Credibly, communicating the differential capacities to respond and the comparative likely outcomes will require diplomacy, coordination with civil affairs, specialized knowledge of individual states, and regions of the developing world. These are fundamentally interdisciplinary efforts that should leverage small teams from diplomatic, development, public health, and defense communities. One single parochial voice will be inadequate. Further improving the US domestic public health infrastructure would be beneficial and cost effective regardless of whether an outbreak is intentional or natural. The devastating Ebola outbreaks serve as a call for urgent investment in public health infrastructures worldwide, to provide both responsive and proactive actions to deter bioterrorism and to deal with natural disease outbreaks. Public health remains a powerful and often underutilized asset for bioweapons defense through vulnerability reduction; leveraging public health may also enable new approaches to deterring bioterrorism threats. International security scholars would benefit from better understanding of and leveraging the knowledge of the public health community.

#### Extinction without early response

Farmer 17 (“Bioterrorism could kill more people than nuclear war, Bill Gates to warn world leaders” http://www.telegraph.co.uk/news/2017/02/17/biological-terrorism-could-kill-people-nuclear-attacks-bill/)

Bioterrorists could one day kill hundreds of millions of people in an attack more deadly than nuclear war, Bill Gates will warn world leaders. Rapid advances in genetic engineering have opened the door for small terrorism groups to tailor and easily turn biological viruses into weapons. A resulting disease pandemic is currently one of the most deadly threats faced by the world, he believes, yet governments are complacent about the scale of the risk. Speaking ahead of an address to the Munich Security Conference, the richest man in the world said that while governments are concerned with the proliferation of nuclear and chemical weapons, they are overlooking the threat of biological warfare. Mr Gates, whose charitable foundationis funding research into quickly spotting outbreaks and speeding up vaccine production, said the defence and security establishment “have not been following biology and I’m here to bring them a little bit of bad news”. Mr Gates will today (Saturday) tell an audience of international leaders and senior officers that the world’s next deadly pandemic “could originate on the computer screen of a terrorist”. He told the Telegraph: “Natural epidemics can be extremely large. Intentionally caused epidemics, bioterrorism, would be the largest of all. “With nuclear weapons, you’d think you would probably stop after killing 100million. Smallpox won’t stop. Because the population is naïve, and there are no real preparations. That, if it got out and spread, would be a larger number.” He said developments in genetic engineering were proceeding at a “mind-blowing rate”. Biological warfare ambitions once limited to a handful of nation states are now open to small groups with limited resources and skills. He said: “They make it much easier for a non-state person. It doesn’t take much biology expertise nowadays to assemble a smallpox virus. Biology is making it way easier to create these things.” The increasingly common use of gene editing technology would make it difficult to spot any potential terrorist conspiracy. Technologies which have made it easy to read DNA sequences and tinker with them to rewrite or tweak genes have many legitimate uses. He said: “It’s not like when someone says, ‘Hey I’d like some Plutonium’ and you start saying ‘Hmmm.. I wonder why he wants Plutonium?’” Mr Gates said the potential death toll from a disease outbreak could be higher than other threats such as climate change or nuclear war. He said: “This is like earthquakes, you should think in order of magnitudes. If you can kill 10 people that’s a one, 100 people that’s a two... Bioterrorism is the thing that can give you not just sixes, but sevens, eights and nines. “With nuclear war, once you have got a six, or a seven, or eight, you’d think it would probably stop. [With bioterrorism] it’s just unbounded if you are not there to stop the spread of it.” By tailoring the genes of a virus, it would be possible to manipulate its ability to spread and its ability to harm people. Mr Gates said one of the most potentially deadly outbreaks could involve the humble flu virus. It would be relatively easy to engineer a new flu strain combining qualities from varieties that spread like wildfire with varieties that were deadly. The last time that happened naturally was the 1918 Spanish Influenza pandemic, which went on to kill more than 50 million people – or nearly three times the death toll from the First World War. By comparison, the recent Ebola outbreak in West Africa which killed just over 11,000 was “a Richter Scale three, it’s a nothing,” he said. But despite the potential, the founder of Microsoft said that world leaders and their militaries could not see beyond the more recognised risks. He said: “Should the world be serious about this? It is somewhat serious about normal classic warfare and nuclear warfare, but today it is not very serious about bio-defence or natural epidemics.” He went on: “They do tend to say ‘How easy is it to get fissile material and how accurate are the plans out on the internet for dirty bombs, plutonium bombs and hydrogen bombs?’ “They have some people that do that. What I am suggesting is that the number of people that look at bio-defence is worth increasing.” Whether naturally occurring, or deliberately started, it is almost certain that a highly lethal global pandemic will occur within our lifetimes, he believes. But the good news for those contemplating the potential damage is that the same biotechnology can prevent epidemics spreading out of control. Mr Gates will say in his speech that most of the things needed to protect against a naturally occurring pandemic are the same things needed to prepare for an intentional biological attack. Nations must amass an arsenal of new weapons to fight such a disease outbreak, including vaccines, drugs and diagnostic techniques. Being able to develop a vaccine as soon as possible against a new outbreak is particularly important and could save huge numbers of lives, scientists working at his foundation believe.

## Court Clog

#### Restrictive federal antitrust doctrine means weak enforcement and limited litigation in the status quo – Aff reverses this

Jones and Kovacic 20 (Alison and William, Professor of Law @ King's College London + Professor @ George Washington Univ./Former Member of the Federal Trade Commission, "Antitrust’s Implementation Blind Side: Challenges to Major Expansion of U.S. Competition Policy," 3/20, https://journals.sagepub.com/doi/full/10.1177/0003603X20912884)

It also has been argued that guided by a false conception of antitrust’s goals, or how its goal (or goals) is to be achieved, the federal courts have raised procedural, evidential, and substantive bars to antitrust actions excessively and gone too far in loosening antitrust restrictions governing vertical agreements, dominant firm behavior, and mergers.41 Reflecting a deep-seated concern about the hazards of overenforcement, confidence in the ability of markets to renew themselves, and wariness of the U.S. system of private rights of action,42 the courts have systematically and incrementally diminished the likelihood that a plaintiff can prevail in antitrust litigation. Not only have these developments discouraged private litigation, but they have also made the federal agencies more risk-averse in deciding whether to challenge dominant enterprises43 or attack mergers, except in cases of unusually high concentration.

#### Antitrust litigation is uniquely complex and resource-intensive---a spike trades-off with judicial functioning in other areas

Daniel R. Warren 15, JD from the Boston University School of Law, BS from Ohio State University, “Stress Fractures: The Need to Stop and Repair the Growing Divide in Circuit Court Application of Summary Judgment in Antitrust Litigation”, Review of Banking and Financial Law, 35 Rev. Banking & Fin. L. 380, Lexis

A. Summary Judgment Can Cut Short Extreme Costs Antitrust litigation can involve enormous discovery costs, particularly when antitrust litigation overlaps with class action litigation. Due to the wide scope of many antitrust claims, discovery can implicate a broad range of documents, records, interrogatories, and depositions. In fact, "[s]trategically minded" plaintiffs can take advantage of antitrust law's "onerous discovery costs" by requiring the defendant "to respond to wide-ranging interrogatories, produce documents, and prepare for and defend depositions" with only a "facially plausible allegation" of an antitrust violation. These costs can take a very large toll on both large and small businesses. The legal hours necessary to answer and address discovery challenges can also impose extreme costs. Plaintiffs can often use discovery costs as a weapon against defendants in antitrust litigation. The Seventh Circuit Court of Appeals stated that "antitrust trials often encompass a great deal of expensive and time consuming discovery and trial work" in explaining that the "very nature" of antitrust litigation should encourage summary judgment. The court's language here supports [\*389] the idea that in antitrust litigation, summary judgment has a special value, greater even than its normal use in other areas of the law. Summary judgment can be used to cut short lengthy litigation where parties have already accrued extreme costs from discovery and one party still cannot produce a genuine issue of material fact. In antitrust litigation, the value of summary judgment to mitigate discovery costs through shortening litigation is elevated to a special importance even greater than normal for three reasons. First, antitrust litigation normally involves large organizations, which magnifies the costs of those firms going through the discovery process. Large firms have a great number of involved employees and departments, all of which would likely be subject to the broad discovery that is characteristic of antitrust litigation. Summary judgment, though normally considered after discovery, is a procedural weapon available at nearly any point in this process, as "a party may file a motion for summary judgment at any time until 30 days after the close of all discovery." The existence of a stay for extension of discovery shows that summary judgment need not automatically wait for discovery's completion, and thus can be an invaluable safeguard against otherwise incredibly costly discovery. This safeguard allows summary judgment to be a powerful tool to radically lower discovery time and costs without "railroad[ing]" the other party. Second, antitrust litigation is normally a slow process that takes a great deal of time. The amount of time necessary to process and review evidence produced by discovery leads to incredible legal costs, often disproportionately placed on the defendant firm. The plaintiff has the advantage over the defendant in deciding the scope of discovery costs, and may often tailor its claim in such a way as to avoid the discovery costs that a defendant's counterclaim may reflect [\*390] back on the plaintiff. These lengthy trials can be effectively truncated by summary judgment, and thus summary judgment's normal value is even greater in the world of antitrust litigation where protracted trials are the norm. Finally, the vast amount of evidence necessary to prove the elements of an antitrust claim contribute to the large discovery costs tied to antitrust litigation by overwhelming judges' ability to reign in discovery costs. Currently, we rely on judges to limit the range of discovery requested, but in the context of antitrust litigation, judges have difficulty dealing with the broad variety of evidence that may be called for. One analysis of the power of discovery described it as a costly and potentially abusive force, and determined judges' abilities to limit discovery costs on their own as "hollow" at best: A magistrate supervising discovery does not--cannot--know the expected productivity of a given request, because the nature of the requester's claim and the contents of the files (or head) of the adverse party are unknown. Judicial officers cannot measure the costs and benefits to the requester and so cannot isolate impositional requests. Requesters have no reason to disclose their own estimates because they gain from imposing costs on rivals (and may lose from an improvement in accuracy). The portions of the Rules of Civil Procedure calling on judges to trim back excessive demands, therefore, have been, and are doomed to be, hollow. We cannot prevent what we cannot detect; we cannot detect what we cannot define; we cannot define "abusive" discovery except in theory, because in practice we lack essential information. Even in retrospect it is hard to label requests as abusive. How can a judge distinguish a dry hole (common in litigation as well as in the oil business) from a request that was not justified at the time? [\*391] Summary judgment can also reduce costs to both parties by reducing time and discovery costs to the parties, and to the judicial system itself, by cutting short lengthy litigation. Both sides often incur costs from employing experts in various areas, researching and producing evidence necessary to prove or disprove elements of antitrust actions, and in the great many legal hours necessary for both plaintiffs and defendants--not to mention costs to the state--during lengthy litigation that is often fruitless due to an "incentive to file potentially equivocal claims." Antitrust law is structured in such a way as to have a "special temptation" for what would otherwise be frivolous litigation. As antitrust law is, by its very nature, between competitors, there is significant motivation to force costs on to other firms, perhaps even through frivolous legal claims or intentionally imposing other large legal costs. Costs can also multiply in antitrust litigation because antitrust actions are often combined with other particularly complex areas of law, such as patent law or class actions. Class actions particularly in the antitrust context can make trials "unmanageable." Combining two already complex areas of law is a recipe for large legal costs and prolonged litigation. The value of cutting costs short cannot be overstated, as antitrust litigation takes place in the arena of business competition. This means that firms are already engaged in close competition for antitrust cases to be relevant, and thus unnecessary costs can further distort the market.

#### Efficient court review underpins patent-led innovation---that stops nuclear war and a range of existential threats

Robert J. Rando 16, Founder and Lead Counsel of The Rando Law Firm P.C., Fellow of the Academy of Court-Appointed Masters, Treasurer for the New York Intellectual Property Law Association, Chair of the Federal Bar Association Intellectual Property Law Section, “America’s Need For Strong, Stable and Sound Intellectual Property Protection and Policies: Why It Really Matters”, IP Insight, June 2016, p. 12-14 [language modified] [abbreviations in brackets]

Robert F. Kennedy’s speech, which includes his reference to the oft-quoted “interesting times” curse, applies throughout history in many contexts and, indeed, with both negative and positive connotation. While he focused on the struggles for freedom and social justice, the requisite ascendancy of the individual over the state, and the institution and integration of those ideals for the greater good, he also promoted the goals of greater global unity, cooperation and communication, which were, and could be, achieved by advances in technology. And, as noted in the excerpt, he championed “the creative energy of men.” Intellectual Property in “Interesting Times” It is beyond question that starting with the last decade of the twentieth century and throughout the first two decades of the twenty-first century, when it comes to matters relating to intellectual property, we have been living in “interesting times.” Some may interpret these interesting times as defined by the curse and others may view it by the ordinary meaning of “interesting.” In either case, those of us that toil in the fields of patents, copyrights, trademarks, trade secrets, and privacy rights have experienced an unprecedented sea change in the way those rights are procured, protected and enforced. Likewise, and perhaps more importantly, even those of us that do not practice in these areas of law, as well as the general public, have been, and continue to be, impacted by the consequences of these changes (both positive and negative). The Changes In Intellectual Property Law Examples of some of the changes in intellectual property law are: the sweeping 2011 legislative changes to the patent laws under the America Invents Act (AIA), which impact is only beginning to be fully appreciated; the various proposals for patent law reform, on the heels of the AIA, beginning with the 113th and 114th Congress; the copyright laws Digital Millennium Copyright Act (DMCA) and numerous 114th Congressional proposed copyright law changes; the recently enacted federal trade secret law (Defend Trade Secrets Act of 2016 (DTSA))2; the impact of the internet, domain names and globalization on Trademark law; the intellectual property law harmonization requirements included in various global/regional trade agreements; and the proliferation of devices (both invasive and non-invasive) that defy any rational basis for believing we can still adhere to the republic’s libertarian understanding of the right to privacy. Without engaging in “chicken and egg” analysis, it is sufficient to observe that technological advancement, societal needs, globalization, existential threats, economic realities, and political imperatives (or what James Madison referred to in the Federalist Papers No. 10 as factious governance), have combined to create the “interesting times” for the United States [IP] intellectual property laws. What was said by Bobby Kennedy in 1966 remains true today. We live in dangerous and uncertain times. Many of the existential threats remain the same (nuclear war and proliferation, [genocides] ~~genocidal maniacs~~ and natural disease) and some are new ([hu]manmade disease, greater awareness of environmental changes and possibly human interrelationship factors, and the unintended consequences of genetic manipulation and robotic technologies). The danger and uncertainty that pervades changes in intellectual property laws, though not an existential threat of the same manner and kind, correlates with the threat and remains “more open to the creative energy of man than any other time in history.” Apropos the creative energy of man, there is a non-coincidental congruence and convergence of activity across and among the three branches of government, occurring almost simultaneously with the congruence and convergence of the rapid developments of technological innovation across various scientific disciplines and the information age, reflected in the transformation of the [IP] intellectual property laws in the United States. Patents The passage of the AIA was a culmination of efforts spanning several years of Congressional efforts; and the product of a push by the companies at the forefront of the twenty-first century new technology business titans. The legislation brought about monumental changes in the patent law in the way that patents are procured (first inventor to file instead of first to invent) and how they are enforced (quasi-judicial challenges to patent validity through inter-party reviews at the Patent Trial and Appeals Board (PTAB)). The 113th and 114th Congress grappled with newly proposed patent law reforms that, if enacted, may present additional tectonic shifts in the patent law. Major provisions of the proposals include: fee-shifting measures (requiring loser pays legal fees - counter to the American rule); strict detailed pleadings requirements, promulgated without the traditional Rules Enabling Act procedure, that exceed those of the Twombly/Iqbal standard applied to all other civil matters in federal courts, and the different standards applicable to patent claim interpretation in PTAB proceedings and district court litigation concerning patent validity. The Executive and administrative branch has also been active in the patent law arena. President Obama was a strong supporter of the AIA3 and in his 2014 State Of The Union Address, essentially stated that, with respect to the proposed patent law reforms aimed at patent troll issues, we must innovate rather than litigate.4 Additionally, the USPTO has embarked upon an energetic overhaul of its operations in terms of patent quality and PTO performance in granting patents, and the PTAB has expanded to almost 250 Administrative Law Judges in concert with the AIA post-grant proceedings’ strict timetable requirements. The Supreme Court, not to be outdone by the Articles I and II branches of the U.S. government, has raised the profile of patent cases to historical heights. From 1996 to the 2014-15 term there has been a steady increase in the number of patent cases decided by the SCOTUS5. The 2014-15 term occupied almost ten percent of the Court’s docket. Prior to the last two decades, the Supreme Court would rarely include more than one or two patent cases in a docket that was much larger than those we have become accustomed to from the Roberts’ Court6. While the SCOTUS activity in patent cases is viewed by some as a counter-balance to the perceived Federal Circuit’s pro-patent and bright line decisions, it can just as assuredly be viewed as decisions rendered by a Court of final resort which does not function in a vacuum devoid of the social, economic and political winds of the times. In recognition of the effect new technologies have on the patent law, the politicization of intellectual property law matters, especially patent law (through factious governing principles of the political branches of the government), and the maturation of the Federal Circuit patent law jurisprudence, the SCOTUS has rendered opinions in cases that impact, and perhaps are/were intended to mitigate the concerns regarding, some of the vexing issues confronting the patent community today (e.g., non-practicing entities or in the politicized parlance “patent trolls,” the intersection of patent and antitrust laws in Hatch-Waxman so called “pay-for-delay” settlements between Branded and Generic pharma companies, and the fundamental tenets that comprise the very heart of what is patent eligible subject matter). Copyrights The advent and ubiquity of the internet, social media and digital technologies (MP3s, Napster, Facebook, YouTube, and Twitter) represents the impetus for changes in the Copyright laws. The DMCA addressed the issues presented by these advances or changes in the differing media and forms of artistic impressions. The proliferation of digital photos, graphic designs and publishing alternatives, as well as adherence to globalization harmonization have given rise to changes in the statutory law and jurisprudence in this area of intellectual property law. Additionally, there is an overlap of patent rights and copyrights for software driven by the ebb and flow of the strength of each respective intellectual property protection. Notably, the Patent and Copyright Clause7, in addition to Author’s writings, has been viewed as discretely applying to two different types of creativity or innovation. When drafted the “sciences” referred not only to fields of modern scienctific inquiry but rather to all knowledge. And the “useful arts” does not refer to artistic endeavors, but rather to the work of artisans or people skilled in a manufacturing craft. Rather than result in ambiguity or confusion, perhaps the Framers were either quite prescient or, just coincidentally, these aspects of the Patent and Copyright Clause have converged. For example, none other than the famous Crooner, Bing Crosby, benefited from both protections. Well-known as a prolific and popular recording artist he also benefited from his investments in the, then innovative, recording technologies. Similarly, the Beatles, Beach Boys, as well as many other rock and roll artists, experimental efforts in music performance, recording and production, helped to transform the music industry in both copyrightable artistic expression and patentable inventions. Similarly, film, literary and digital arts reap benefits at the crossroads of both copyright and patent protections. Trademarks Trademark laws have been impacted by numerous changes in the business landscape. They include the internet, Domain names, international rights in a global economy, different venues and avenues for branding, marketing and merchandising, global knock-offs from nations that have a less than stellar respect for intellectual property rights, and international trade agreements. More recently, politicization (or perhaps political correctness) has creeped into the trademark law arena pitting branding rights and protections against first amendment rights. Trade Secrets As with Copyright and Trademark law, trade secrets law includes some of the same issues related to trade agreements. TRIPS required members to have trade secret protection in place. Initially, the United States compliance with this requirement has relied upon the trade secret law of the individual states. That compliance may be supplanted by the recently enacted DTSA. Similarly, the Trans Pacific Partnership (TPP) trade agreement contains intellectual property rights provisions that will trigger required changes to United States statutory Intellectual Property Laws. The proposed trade secret legislation also gives rise to several concerns. For instance, there is an absence of a specific definition for trade secret, as well as potential issues of federalism, conflict with state law precedent (despite no preemption), remedies, and the impact on employer/employee relations. There is also a real concern that the strengthening of trade secret protection in conjunction with the perceived weakening of patent protection (e.g., high rate of invalidating patents in post-grant proceedings before the PTAB and strict limitations on what is patent eligible subject matter) may very-well have the unintended consequence of contravening the purpose behind the Patent and Copyright Clause: “to promote the progress of the sciences and the useful arts.” Moreover, the incentive to innovate may very well be usurped by the advantage of withholding patent law disclosure of highly beneficial scientific advancements that directly affect the human condition, alter life expectancies and the evolution of the human species (rather than by mere “natural selection”), and what is the very essence of a human being (for better or worse). Thus, crippling innovation and the progress of the sciences and useful arts. Privacy Rights It is increasingly more difficult to function “off the grid.” The invasive and non-invasive attributes of the internet, the reliance upon the multitude of devices, social media, and information age technologies, and access to big data, all contribute to the decrease in and dilution of the right to privacy. Wittingly or otherwise, the strong libertarian roots of the republic have been replaced by dependence upon these modes of an information-age life. Commentary on the benefits and deficits of this reality are beyond the subject and purpose of this writing. Suffice to acknowledge that the right to privacy has been significantly reduced. The laws that protect these rights are in a constant struggle to maintain those rights while yielding to the demands of the lifestyle and security concerns. Laws that relate to cybersecurity in the global and domestic space create interplay with privacy rights. Legislation, trade agreements and jurisprudence all impact this area of intellectual property. Cross-border theft of trade secrets, competitor espionage, and loss of control over personal data are all implicated in the intellectual property law arena. America’s Need For Strong Intellectual Property Protection The need for strong protection of intellectual property rights is greater now than it was at the dawn of our republic. Our Forefathers and the Framers of the U.S. Constitution recognized the need to secure those rights in Article 1, Section 8, Clause 8. James Madison provides insight for its significance in the Federalist Papers No. 43 (the only reference to the clause). It is contained in the first Article section dedicated to the enumerated powers of Congress. The clause recognizes the need for: uniformity of the protection of IP rights, securing those rights for the individual rather than the state; and, incentivizing innovation and creative aspirations. Underlying this particular enumerated power of Congress is the same struggle that the Framers grappled with throughout the document for the new republic: how to promote a unified republic while protecting individual liberty. The fear of tyranny and protection of the “natural law” individual liberty is a driving theme for the Constitution and throughout the Federalist Papers. For example, in Federalist No. 10, James Madison articulated the important recognition of the “faction” impact on a democracy and a republic. In Federalist No. 51, Madison emphasized the importance of the separation of powers among the three branches of the republic. And in Federalist No. 78, Alexander Hamilton, provided his most significant essay, which described the judiciary as the weakest branch of government and sought the protection of its independence providing the underpinnings for judicial review as recognized thereafter in Marbury v. Madison. All of these related themes are relevant to the Patent and Copyright Clause and at the center of the intellectual property protections then and now. The Federalist Papers No. 10 recognition that a faction may influence the law has been playing itself out in the halls of congress in the period of time leading up to the AIA and in connection with the current patent law reform debate. The large tech companies of the past, new tech, new patent-based financial business model entities, and pharma factions have been the drivers, proponents and opponents of certain of these efforts. To be sure, some change is inevitable, and both beneficial and necessary in an environment of rapidly changing technology where the law needs to evolve or conform to new realities. However, changes not premised upon the founding principles of the Constitution and the Patent and Copyright Clause (i.e., uniformity, secured rights for the individual, incentivizing innovation and protecting individual liberty) run afoul of the intended purpose of the constitutional guarantee. Although the Sovereign does not benefit directly from the fruits of the innovator, enacting laws that empower the King, and enables the King to remain so, has the same effect as deprivation and diminishment of the individual’s rights and effectively confiscates them from him/her. Specifically, with respect to intellectual property rights, effecting change to the laws that do not adhere to these underlying principles, in favor of the faction that lobbies the most and the best in the quid pro quo of political gain to the governing body threatens to undermine the individual’s intellectual property rights and hinder the greatest economic driver and source of prosperity in the country. It is also important to recognize that the social, political and economic impact of strong protections for intellectual property cannot be overstated. In the social context, the incentive for disclosure and innovation is critical. Solutions for sustainability and climate change (whether natural, man-made or mutually/marginally intertwined) rely upon this premise. Likewise, as we are on the precipice of the ultimate convergence in technologies from the hi-tech digital world and life sciences space, capturing the ability to cure many diseases and fatal illnesses and providing the true promise of extended longevity in good health and well-being, that is meaningful, productive, and purposeful; this incentive must be preserved. In similar fashion, advancements in technologies related to the global economy and communications will enhance the possibilities for solutions to political and cultural conflicts that arise around the globe. Likewise, the United States economy has always benefited when it is at the forefront of innovation and achieves prosperity from its leadership role in technological advancements. Conclusion As was the case in 1966, how we move forward today, to solve the many problems facing our country and the broader global community in these “interesting times,” both within and without the laws affecting intellectual property rights, depends upon the “creative energy of man” which must prevail. An achievable goal, dependent on the strong, stable and sound protection of intellectual property rights.

## CP

#### TEXT: The attorney generals of 50 states and relevant territories, through the National Association of Attorneys General’s Multistate Antitrust Task Force, should prohibit predatory and limit pricing.

#### A multistate AG antitrust enforcement solves the aff---causes federal follow-on

Artega 19 (Juan A. Arteaga is an experienced antitrust attorney and a former Deputy Assistant Attorney General for the U.S. Department of Justice’s Antitrust Division, The Role of US State Antitrust Enforcement, Global Competition Review, 11-19, <https://www.lexology.com/library/detail.aspx%3Fg%3Dd423301d-f4d1-4550-a99c-1880869e67e7+&cd=11&hl=en&ct=clnk&gl=us>, y2k)

In the United States, competition laws have been implemented and enforced through a dual system where the state and federal governments play distinct, yet complementary, roles in regulating the competitive process. While the Department of Justice (DOJ) Antitrust Division and Federal Trade Commission (FTC) are widely viewed as the stewards of US antitrust laws, state attorneys general have long played an important, albeit varying, role within the United States’ antitrust enforcement regime. This has been especially true during the past 30 years because state attorneys general have become much more effective at coordinating their antitrust enforcement efforts to ensure that they have a meaningful seat at the table in any actions brought jointly with their federal counterparts or are able to bring their own actions when the DOJ and FTC decide not to do so.Prior to the enactment of the first federal antitrust law – the Sherman Act – in 1890, state antitrust enforcement was quite robust in the United States because at least 26 states had already enacted some form of antitrust prohibition. In addition, state enforcers had often used general corporation law and common law restraint of trade principles to regulate anticompetitive business practices and transactions. This well-established state antitrust enforcement infrastructure – coupled with the fact that the Antitrust Division and FTC had only recently been created – permitted state attorneys general to continue playing a leading enforcement role for the first 30 years after the Sherman Act’s passage. Indeed, state attorneys general successfully prosecuted a number of the most consequential antitrust enforcement actions during this period. In the early 1920s, however, state antitrust enforcers began playing a less prominent role because ‘the national dimension of the most important trusts, . . . as well as their ability to restructure in order to evade problematic state laws’, made clear that the federal government needed to step forward in order to adequately protect consumers and the competitive process. As a result, the DOJ and FTC – whose national jurisdiction and greater resources enabled them to tackle the most pressing competition issues of the time – displaced state attorneys general as the primary source of government antitrust enforcement within the United States. This largely remained true until the mid-1970s when Congress, in response to the DOJ and FTC’s perceived inactivity, passed two laws that expanded the authority of state attorneys general to enforce the federal antitrust laws and provided them with financial resources to do so. In 1976, Congress passed the Hart-Scott-Rodino Antitrust Improvement Act, which, among other things, authorised state attorneys general to bring *parens patriae* suits (i.e., legal actions brought on behalf of natural persons residing within their states) seeking monetary (treble damages) and injunctive relief for Sherman Act violations. Congress also passed the Crime Control Act of 1976, which, among other things, provided state attorneys general with tens of millions in federal grants as ‘seed money’ for the creation of antitrust bureaus within their offices. These laws had their intended effect of reinvigorating state antitrust enforcement. During the 1980s, for example, state attorneys general once again emerged as vigorous antitrust enforcers, especially with respect to the prosecution of resale price maintenance practices and other vertical restraints. The rise in the level and prominence of state antitrust enforcement during this period was largely due to a perceived enforcement void at the federal level, where the DOJ and FTC had mostly limited their focus to ‘prohibiting cartels and large horizontal mergers’. No longer content with ceding antitrust enforcement to federal enforcers, state attorneys general expanded their antitrust dockets from prosecuting purely ‘local matters, such as bid-rigging on state contracts’, to actively investigating and litigating matters with multistate and national implications. To help ensure that they had a larger seat at the antitrust enforcement table, state attorneys general also increased the coordination of their enforcement efforts and competition advocacy through organisations such as the National Association of Attorneys General (NAAG), which created a Multistate Antitrust Task Force and issued state Vertical Restraints and Horizontal Merger Guidelines during this period. Since the reawakening of state antitrust enforcement nearly 30 years ago, state attorneys general have continued to play an important role in the enforcement of both state and federal antitrust laws. During periods of lax federal antitrust enforcement, state attorneys general have often ramped up their enforcement activity in order to protect consumers from anticompetitive transactions and business practices. During periods of vigorous federal antitrust enforcement, they have often served as strong partners for the DOJ and FTC by, among other things, offering valuable insights about competitive dynamics in local markets, assisting with obtaining information from key market participants (including state governmental entities that are direct purchasers of goods and services), and helping develop and implement litigation strategies for cases being tried before federal judges presiding in their states. Since January 2017, state attorneys general have increasingly played a leading and independent antitrust enforcement role. State antitrust enforcers have significantly increased their enforcement activity and willingness to act separately from their federal counterparts because many of them believe that there has been ‘under-enforcement’ by the DOJ and FTC. State antitrust enforcers have also been able to enhance their influence over key competition policy issues and the antitrust enforcement agenda within the United States because there appears to have been a significant decline in the coordination and relationship between the DOJ and FTC. In once again flexing their enforcement muscle, state attorneys general have shown a willingness to publicly disagree with the DOJ and FTC on both policy and enforcement decisions, and have also sought to pressure their federal counterparts into more aggressively policing certain industries. Recent examples of the increased independence and assertiveness of state antitrust enforcers include: In their joint investigation into the T-Mobile/Sprint merger, nearly 20 state attorneys general have sued to block the transaction even though the DOJ, along with seven state attorneys general, have approved the deal after securing certain structural and behavioural remedies. After the DOJ announced its proposed settlement with the companies, the Attorney General for New York, who has been leading the states’ challenge to the merger, issued a press release dismissing the adequacy of the remedies negotiated by the DOJ: ‘The promises made by [the divestiture buyer] and [the merging companies] in this deal are the kinds of promises only robust competition can guarantee. We have serious concerns that cobbling together this new fourth mobile [phone] player, with the government picking winners and losers, will not address the merger’s harm to consumers, workers, and innovation.’ The DOJ, FTC and several state attorneys general have been actively investigating and prosecuting ‘no-poach’ agreements (i.e., where competitors for employees agree not to recruit or hire each other’s employees)in recent years. However, the DOJ and state attorneys general have taken directly opposing positions in private litigation challenging the legality of ‘no-poach’ clauses in corporate franchise agreements. The DOJ has argued that courts should review these clauses under the rule of reason whereas various state attorneys general have argued that these clauses should be deemed per se unlawful. None of the more than 20 state attorney general offices that actively investigated the AT&T/Time Warner merger joined the DOJ’s unsuccessful challenge to the transaction despite the DOJ’s concerted effort to secure their support. In fact, nine state attorneys general filed an amicus brief opposing the DOJ’s appeal of the trial court’s decision. After the FTC declined to seek any Colorado-related remedies in connection with Optum’s acquisition of DaVita Medical Group, the Attorney General for Colorado required the merging companies to lift the exclusivity provisions in contracts with certain healthcare providers and to extend their existing contracts with certain health insurers. In announcing this settlement, the Colorado Attorney General stated: ‘I recognize that this case marks an important step in state antitrust enforcement . . . . I am committed to protecting all Coloradans from anticompetitive consolidation and practices, and will do so whether or not the federal government acts to protect Coloradans.’ After voicing displeasure with federal antitrust enforcement in the technology sector, numerous state attorneys general launched their independent investigations into ‘Big Tech’ companies even though the DOJ and FTC have ongoing investigations into these companies. Given that companies will increasingly have to engage with state attorneys general in a meaningful manner with respect to antitrust matters, this chapter discusses key issues related to state antitrust enforcement in the United States. Specifically, this chapter discusses: the federal and state antitrust laws under which state enforcers operate; the processes through which state enforcers coordinate with each other and their federal counterparts; the opportunity for coordination and conflict between state enforcers and private counsel during litigation; strategic and practical considerations when engaging with state attorneys general; and certain noteworthy enforcement actions that state enforcers have recently prosecuted. Statutory regime governing US state antitrust enforcement Civil enforcement of federal antitrust laws Enforcement actions on behalf of state governmental entities Under the federal antitrust laws, state attorneys general have the express authority to bring civil actions on behalf of their state, municipalities, and governmental entities for harm suffered when directly purchasing goods or services. In bringing such actions, state attorneys general can seek monetary (treble damages) and injunctive relief, as well as their costs and reasonable attorney’s fees. In actions seeking monetary relief, state attorneys general typically allege that the state plaintiffs were forced to pay higher prices by an unlawful horizontal conspiracy, such as a price-fixing or bid-rigging scheme, and seek to recover the overcharges. In some cases, state attorneys general have sought to recover damages arising out of anticompetitive unilateral conduct, such as overcharges paid by state governmental entities due to a defendant’s actual or attempted monopolisation of a specific market. In seeking injunctive relief, state attorneys general often argue that such relief is proper because the business practice or transaction in question – in addition to harming the state plaintiffs – has or will cause injury to the state’s general economy. While general harm to a state’s economy can serve as a basis for injunctive relief, stateattorneyscannot base their request for damages on such harm. Parens patriae enforcement actions A well-settled principle in the United States’ legal system is that ‘the States have a quasi sovereign interest in protecting their citizens from ongoing economic harm’. Consequently, the federal antitrust laws expressly authorise state attorneys general to file parens patriae actions in federal court that seek to redress the harm suffered by their citizens due to federal antitrust violations. In providing state attorneys general with parens patriae authority, the federal antitrust laws permit state antitrust enforcers to seek monetary (treble damages) and injunctive relief, as well as their costs and reasonable attorney’s fees. State attorneys general have been empowered to seek such broad and substantial relief on behalf of their citizens to allow them ‘to deter further economic harm and to obtain relief for the injury inflicted on their economies and their citizens’. In exercising their parens patriae authority, state attorneys general have often sought to protect their citizens and state economies from the harm caused by anticompetitive business practices. For example, in the e-Books Litigation, 33 state attorneys general alleged that Apple, Inc and various book publishers unlawfully conspired to fix the prices of electronic books, which resulted in their citizens paying higher prices and harm to their states’ general economies. Ultimately, these state attorneys general, working alongside private class counsel, secured settlements from the defendants that provided nearly US$600 million in direct refunds to their citizens. In a pending lawsuit brought against various manufacturers of generic pharmaceuticals, 44 state attorneys general have alleged that the defendants unlawfully conspired to fix the prices for numerous generic drugs, which forced their states and citizens to pay billions of dollars in overcharges, as well as significantly harmed their states’ general economies. State attorneys general have also invoked their parens patriae authority to protect their citizens and state economies from the harm caused by anticompetitive transactions. For instance, in their pending challenge to T-Mobile’s proposed acquisition of Sprint, nearly 20 state attorneys general have alleged that the transaction will result in their residents paying higher prices for lower quality mobile phone services as well as harm to their states’ general economies. Likewise, the state attorneys general that joined the DOJ’s successful challenges to the proposed Anthem/Cigna and Aetna/Humana mergers alleged that these mergers would have harmed their citizens and the general economies of their states by reducing the number of large health insurance providers from five to three. There are, however, important limitations on the parens patriae authority conferred to state attorneys general under the federal antitrust laws. For instance, the monetary relief sought by state attorneys general must: (1) arise out of a Sherman Act violation; (2) have been incurred by natural persons residing in their states (i.e., the losses suffered by business organisations cannot be included in the alleged damages); (3) exclude harm suffered by indirect purchasers of the goods and/or services in question; (4) avoid the risk of multiple recoveries by excluding amounts previously awarded for the same injuries; and (5) arise out of actual financial losses rather than general harm to their state’s economy. Moreover, state attorneys general must provide their residents with adequate notice of the lawsuit and a meaningful opportunity to opt out of the litigation. In seeking to prove the monetary harm suffered by their citizens, state attorneys general can employ many of the same methods utilised by private plaintiffs. In price-fixing cases, for example, state attorneys general can prove the claimed aggregate damages by utilising ‘statistical or sampling methods’, ‘comput[ing[ [the] illegal overcharges’, or relying on any other methodology deemed ‘reasonable’ by the court. In addition, a number of state antitrust laws authorise their state attorney general to hire private lawyers to handle parens patriae actions, which the state attorneys general challenging the T-Mobile/Sprint merger have done. Civil enforcement of state antitrust lawsMost states have enacted state antitrust laws that are comparable to Sections 1 and 2 of the Sherman Act. In addition, some states have passed antitrust laws that are similar to Sections 3 and 7 of the Clayton Act and the Robinson-Patman Act. These state antitrust laws typically contain provisions expressly requiring that ‘they be construed in conformity with comparable [f]ederal antitrust statutes’.

State antitrust statutes typically provide state attorneys general with broad authority to investigate possible violations, including the power to ‘issue civil investigative demands compelling oral testimony, the production of documents, and responses to written interrogatories to individuals and corporations’. Like the federal antitrust laws, most state antitrust laws authorise state attorneys general to file civil lawsuits on behalf of their states and state governmental entities whenever a violation has caused them to suffer harm in their capacity as direct purchasers of goods or services, as well as parens patriae actions on behalf of their citizens.

# ON

## INNOV

#### Alt causes to AWS which kills innovation- We read yellow

Second 1AC Nadler ev, Jerrold Nadler is the Chairman of the House Judiciary Committee. “Investigation of Competition in Digital Markets” House Judiciary Committee, 2020, https://fm.cnbc.com/applications/cnbc.com/resources/editorialfiles/2020/10/06/investigation\_of\_competition\_in\_digital\_markets\_majority\_staff\_report\_and\_recommendations.pdf

Amazon Web Services a. Overview Amazon Web Services (AWS) is considered the pioneer of cloud computing and has sustained a first-mover advantage for over a decade.1985 AWS officially launched in 2006, featuring two of its core IaaS offerings, Simple Storage Service (S3) and Elastic Compute Cloud (EC2).1986 While Amazon.com was AWS’s first customer, in the early 2000s AWS began creating cloud offerings for third-party merchants, who could use AWS to “build online shopping sites on top of Amazon’s ecommerce engine.” 1987 For AWS, meanwhile, this partnership with third parties gave the company experience in creating well-documented APIs for internal developers.1988 Over the next few years, AWS rolled out additional programs to expand its network of third-party software vendors and implementation partners, including AWS Marketplace1989 and the AWS Partnership Network (APN) in 2012.1990 Over the last decade, AWS has also secured significant government contracts. Most notably, in 2014, AWS signed a $600 million Commercial Cloud Services (C2S) contract to build the AWS Secret Region, a cloud offering tailored for the U.S. intelligence community.1991 The deal marked the largest cloud infrastructure contract at the time and signaled the government’s shift from investing in onpremise server capacity to cloud services.1992 Today, AWS boasts work “with over 6,500 government agencies” and states that Amazon has been “among the first to solve government compliance challenges facing cloud computing,” while also “consistently help[ing] our customers navigate procurement and policy issues related to adoption of cloud computing.” 1993 AWS contributes immense value to Amazon’s overall business. In each quarter since Amazon began publicly reporting its financials for cloud, AWS has accounted for an outsized share of Amazon’s operating profits. While AWS contributes to less than 15% of Amazon’s annual revenue, it consistently accounts for over 50% of the company’s operating income. In 2017, AWS accounted for over 100% of Amazon’s operating income, due to losses in the company’s international business.1994 In the first quarter of 2020, AWS accounted for 13.5% of Amazon’s total revenues but 77% of its operating income.1995 Profits earned through its cloud services enable Amazon to invest heavily in expanding its cloud operation, as well as to support its other lines of business. Several market participants expressed concerns to Subcommittee staff that Amazon uses its high and steady profits from AWS to subsidize these other lines of business, including its retail operation.1997 In an internal document produced in response to the Committee’s requests for information, Amazon instructs its employees to rebut this claim by referring to it as a “myth.” 1998 However, Amazon failed to produce the financial data that would have enabled Subcommittee staff to make an independent assessment. As discussed earlier in this Report, AWS is the largest provider of cloud computing services, capturing approximately 24% of the U.S. spend in 2018 on cloud computing services, including IaaS, PaaS, and SaaS.2000 AWS represents close to half of global spending on cloud infrastructure services, with three times the market share of Microsoft, its closest competitor.2001 Its growth continues to soar. In the first quarter of 2020, AWS crossed $10 billion in quarterly revenue while growing 33% on an annualized basis.2002 Amazon has a “lion’s share of the government cloud infrastructure market.” 2003 Exact data on AWS’s share of government cloud expenditure is opaque because most of AWS’s public sector revenue comes through subcontracts, which are harder to track, and contracts related to the intelligence community, which are listed as classified spending and are rarely reported. Market participants, however, emphasize that AWS is considered a major player in federal cloud contracts.2004 In its submissions to the Subcommittee, Amazon describes itself as a relatively small player representing “less than 1% of IT spending globally and less than 2% in the United States.” 2005 Amazon states that AWS competes with a large array of offerings including on-premise computing.2006 In other contexts, however, Amazon has highlighted its leading position, describing itself as the “largest cloud software marketplace” and the “only cloud provider with existing classified infrastructure.” 2007 Through a careful review of Amazon’s internal documents and other evidence during the investigation, Subcommittee staff found that Amazon has a dominant position in cloud computing. Amazon’s dominance in cloud computing traces in part to its first-mover advantage and the high fixed costs and economies of scale associated with this market.2008 But evidence suggests that Amazon has also taken steps to lock in and extend this dominance in ways that risk harming customers, businesses, and the broader public. Network effects incentivized Amazon to build out AWS offerings quickly. As with other sectors of the digital economy, the value of Amazon’s cloud offerings increases with the number of businesses and customers that use it. Introducing more services and partnership programs draws more customers, attracts more developers and implementation partners, which, in turn, draws additional customers.2009 AWS is considered to have the largest collection of cloud offerings. Its AWS Management Console and supporting technologies span many categories, including storage and computing, databases, migration services, and machine learning tools.2010 Many of these products are based on open-source software or on the technology of companies that Amazon acquired.2011 In addition to selling cloud offerings directly, AWS also runs a cloud marketplace where third-party vendors can list their products. The AWS Marketplace enjoys over 1,300 vendors as of 2018, and over 9,000 products, functioning as the largest cloud marketplace in the sector.2012 The widespread adoption of AWS’s developer certification programs, partner networks, and student programs has meant that there are far more engineers familiar with AWS technology than with any other platform.2013 Several market participants listed the availability of AWS-trained engineers as a reason for selecting AWS over other cloud vendors and as a barrier for switching platforms or attempting to multi-cloud.2014 High switching costs reinforce Amazon’s dominance in the cloud market.2015 A cloud-based application company interviewed by Subcommittee staff explained these costs: We’ve looked at other services (Google, Microsoft, Oracle) but we’ve relied on AWS for so long that we couldn’t just flip a switch, and we’ve run down a lot of engineering problems with AWS . . . There are other providers we could go to, but it would take work. We could also build some functionality internally, but that would also take a lot of work.2016 For cloud-based application developers, whose entire product is dependent on AWS, the fears of lock-in are even greater. One marketplace participant said: “[A]ny transition of the cloud services currently provided by AWS to another cloud service provider would be difficult to implement and would cause us to incur significant time and expense and could disrupt or degrade our ability to deliver our products and services. Our business relies on the availability of our services for [users] and advertisers.2017 Amazon has also taken steps to lock-in its position, including through long-term contracts, volume minimums, and the use of fees to move data to other cloud providers, which are also known as egress fees. In submissions to the Subcommittee, numerous market participants noted that AWS often seeks multi-year contracts during negotiations.2018 These contracts are also commonplace in companies’ investor statements. For example, according to Lyft’s 2020 investor filing, they agreed to pay “an aggregate of at least $300 million between January 2019 and December 2021 on AWS services.” 2019 According to Slack’s investor filling, in 2018 it committed to a five-year contract with minimum annual commitments of $50 million.2020 Subcommittee staff also uncovered evidence that Amazon sometimes requires a volume agreement when a large company seeks to negotiate lower prices. In an internal email discussion on this topic, a senior executive at AWS wrote that Amazon has “a private rate card which has a commit level for bandwidth pricing. Rates at or above the private rate card are pre-approved. Anything below that has to be first approved by me and then the price goes to service GM.” 2021 When an Amazon customer chooses to move data to another cloud provider, they are charged an egress fee. Market participants told Subcommittee staff that they view these fees less as a cost for Amazon to transport data and more as friction imposed by Amazon for switching providers, noting that Amazon charges egress fees even when data is staying locally within the same data center.2022 The COVID-19 pandemic has underscored the centrality of cloud computing to the functioning of an increasing swath of businesses—highlighting how cloud services have come to resemble critical infrastructure. Reporting by The Information in April 2020 discussed how the major cloud providers are facing requests from many customers for financial relief, while the demand for cloud computing has increased.2023 As this reporting noted, “AWS has been the least willing to offer flexible terms on customer bills, according to numerous customers. That stands in contrast to Microsoft and Google which have shown some flexibility, partners say.” 2024 c. Merger Activity Amazon has acquired a significant number of cloud computing firms over the past decade. Although a full discussion of this activity is beyond the scope of this Report, Amazon’s acquisition activity in the cloud market appears to be part of a broader trend among dominant cloud providers to make serial acquisitions, any one of which may seem insignificant but which collectively serve to solidify and expand their dominance.2025 In some instances AWS has acquired cloud technologies that previously integrated with multiple clouds, only for AWS to make it an AWS-specific product after acquisition, foreclosing competitors and increasing consumers’ switching costs.2026 d. Competitive Significance of AWS to Amazon’s Other Lines of Business Amazon’s dual role as a dominant provider of cloud infrastructure and as a dominant firm in other markets creates a conflict of interest that Amazon has the incentive and ability to exploit. Amazon’s dominance in cloud computing alongside its integration across an array of businesses—online retail, music and video, and smart home devices—creates a core conflict of interest. Cloud computing customers like Netflix and Target are in the position of competing with Amazon while also relying on AWS. Firms in their position effectively have to choose between switching to one of the alternative cloud infrastructure providers or funding their primary competitor.2027 One venture capitalist described Amazon as “useful but dangerous” because “it’s hard to predict what Amazon wants to get into . . . you can’t know.” 2028 Similarly, a business-to-business application developer told Subcommittee staff that they felt pressure to switch their entire product to Microsoft Azure because of its client’s concerns with Amazon’s anticompetitive conduct in the online retail sector.2029 Amazon acknowledges that its cloud customers which are also its competitors are wary of using AWS. One internal document had guidance on how to discuss the issue with customers. One FAQ sheet listed, “What do you say to customers who are worried that using AWS services will support Amazon's competitive growth in the retail space?” Amazon’s sample answer stated, “How can you afford to not compete with the best possible tools in such a tough market like retail?”2030 Subcommittee staff also spoke with market participants that expressed concern about how this conflict of interest shapes Amazon’s behavior in its other lines of business. For example, in 2015, Amazon kicked Google Chromecast and Apple TV—direct competitors with the Amazon Fire Stick and Fire TV cube—out of its retail store.2031 AWS is also positioned to use customer and seller data from one line of business to inform decisions in other lines of business, analogous to its conduct in Amazon Retail. At least one market participant who spoke with Subcommittee staff had evidence that AWS engaged in this cross-business data sharing.2032 In another internal document with guidance for staff on “AWS Competitive Messaging,” employees were advised to offer the following response: Q. Walmart is warning its suppliers that they don’t want them to be running on AWS because they don’t want Amazon.com, a competitor of Walmart’s, to have access to their data. How are you addressing that? A: Even though Amazon’s consumer business has no access to any customer data in AWS, I can understand why Walmart would be paranoid in making sure that their data is private. So, I think it’s a pretty reasonable expectation for them to ask their suppliers to encrypt that data in AWS.2033 Engineers and market participants have also raised concerns that AWS employees may have access to Amazon’s Key Management Services (KMS), which customers can use to store encryption keys.2034 If an employee were able to access a customer’s encryption keys, they could potentially see the contents of a customer’s application, including proprietary code, business transactions, and data on their users. In response to questions from the Subcommittee, Amazon said that the company’s “policies prohibit employees from accessing and reading customer keys in KMS. KMS is designed such that customer keys in the service cannot be retrieved in plain text (unencrypted) form by anybody, including AWS employees.” 2035 Even if AWS employees can never access the content of their customers applications, AWS tracks a host of commercially sensitive metrics, including any changes in demand for storage and compute services, the components of their application’s architecture, the requests to a specific database per second, database size, and the types of requests.2036 One industry expert told Subcommittee staff: They don’t need to see the encrypted content of a movie to see that there are a ton of requests to particular data. If Netflix announced five new movies this weekend and there’s a ton of data to five new objects. So, you don’t need all the information to know what’s happening.2037 Finally, AWS provides Amazon with unparalleled insights into the trajectory of startups using its services, information that it can use to guide acquisitions and replicate promising technology. Data that AWS collects on cloud computing customers can provide unique business intelligence, information that investors, other firms, and entrepreneurs lack. A report from 2011 published in Reuters, profiling the AWS Start-up Challenge, describes cases where AWS has used insights gleaned from its cloud computing service to inform its venture capital investment decisions.2038 Adam Selipsky, then Vice President of AWS, told Reuters, “AWS has great relationships with many young companies and there have been cases where we’ve been able to help with investment opportunities.” 2039 Today, one way Amazon leverages AWS is through relationships with startups. The AWS Activate program provides startups with free credits, technical support, and training.2040 Subcommittee staff interviewed a startup and beneficiary of AWS Activate that had engaged in partnership conversations with Amazon. During these discussions, the startup shared information about how its product was built with AWS. Within a few years, the startup learned that Amazon had introduced a replica product. This company said that Amazon “had so many incentives. Rate cuts, and free services. Not having a lot of resources, it’s hard to turn that down. But fast forward, we basically helped them build their offering that they copied from us.” 2041 As part of its investigation, the Subcommittee asked Amazon whether it uses or has ever used AWS usage patterns or data to inform its investment decisions. Amazon responded: AWS uses data on individual customers’ use of AWS to provide or improve the AWS services and grow the business relationship with that customer. This data may inform AWS’s decisions about how AWS invests in infrastructure, such as data centers, edge networks, hardware, and related software solutions in order improve the customer experience.2042 Amazon’s response leaves unclear whether it would view it appropriate to use a firm’s AWS data to develop products competing with that firm, so long as Amazon could identify some benefit to the broader “customer experience.” Prior to 2017, Amazon also required that AWS customers agree “not to assert any intellectual property claim against any AWS service used by that customer.” 2043 Amazon removed that condition from the AWS online customer agreement on June 28, 2017.2044 In addition to creating a significant information advantage for Amazon, AWS may also reinforce its market power in other ways. Because startups often rely heavily on AWS, Amazon is a natural choice when pursuing a sale or seeking investment. In an internal email produced to the Subcommittee, Peter Krawiec, Amazon’s Vice President of Worldwide Corporate Development, recapped a meeting with a recently acquired company, noting that the company was, “[s]uper excited about Amazon and relieved that Walmart will not be the buyer. Engineering team thrilled that they won’t have to unplug from AWS under a Walmart world.” 2045 e. Conduct The leading position AWS enjoys in the market traces in part to its first-mover advantage, network effects, and steep investments that the company made in building out the physical infrastructure on which cloud resides. However, AWS has also engaged in a series of business practices designed to maintain its market dominance at the expense of choice and innovation. Through a combination of self-preferencing, misappropriation, and degradation of interoperability, Amazon has sought to eliminate cross-platform products with Amazon-only products. Amazon’s conduct has already led several open-source projects to become more closed, a move driven by a need for protection from Amazon’s misappropriation. If unchecked, Amazon’s tactics over the long-term risk solidifying lock-in and diminishing the incentive to invest. Because cloud is the core infrastructure on which the digital economy runs, ensuring its openness and competitiveness is paramount. i. Misappropriation of Data As described earlier in this Report, cloud platform vendors compete by expanding their firstparty cloud offerings, such as those offered through the AWS Management Console.2046 Market participants note that one way AWS has expanded its offerings is by creating proprietary versions of products that have been developed under open-source licenses.2047 Open-source licenses allow software to be freely used, modified, and shared.2048 Open-source software can run on any infrastructure, local machine, server room, or on the cloud, reducing lock-in to a specific hardware vendor.2049 Companies based on open-source software bring in revenue by selling additional features under proprietary licenses or services.2050 In recent years, open-source development has been a leading model for software development, attracting significant venture capital investment.2051 Market participants note that the rise of cloud computing services has led to a shift in the way open-source software is delivered and used. Many open-source software companies allowed engineers to download free versions of their software from their website, often without collecting any personal data about their users. As engineers outgrew the functionality of the free version, they would purchase more powerful versions.2052 As cloud computing grew in popularity, open-source software vendors began offering versions of their software on the AWS Marketplace, where application developers could easily integrate the software. Market participants explain that AWS was able to use the data collected on their customers, including usage metrics, to learn which third-party software was performing well and ultimately to create their own proprietary version offered as a managed service. Creating a “knock-off” version of software was particularly easy when the product was using an opensource license, which provides more visibility to the underlying code.2053 In interviews with Subcommittee staff, market participants repeatedly said that AWS relied on innovations from open-source software communities to gain dominance. A venture capitalist told Subcommittee staff that “open-source is critical for AWS getting market power. They’re standing on the shoulders of giants and they’re not paying the giants.” 2054 A long-time cloud vendor likewise said that “Amazon never built a database, never built cloud services, never built any of their AWS offerings. They took open source and offered it out on cloud. At the time that was innovative.” 2055 AWS has developed many of its offerings using this practice and has created products that are only accessible as first-party offerings through the AWS Management Console.2056 An example frequently cited by market participants is Amazon Elasticsearch Service (AESS), a tool for searching and analyzing data, and a first-party product listed on the AWS Management Console.2057 According to public reporting and interviews with market participants, this product is a copy of Elastic’s, Elasticsearch open-source product that was available for purchase on the AWS Marketplace.2058 According to public reporting, within a year of introducing the product, Amazon was generating more money from its replica of Elasticsearch than Elasticsearch itself was generating. One key advantage that Amazon’s “knock-off” had was that Amazon had given it superior placement in AWS Management Console.2059 Additionally, as described in the Elasticsearch vs Amazon case, AWS can name their open-source “knock-off” products in a way that can mislead customers into believing that the “knock-off” product is sponsored by the open-source software vendor.2060 The Subcommittee’s investigation uncovered evidence relating to numerous instances in which Amazon has offered proprietary managed services based on knock-offs of open-source code. One open-source market participant interviewed by Subcommittee staff said that because of this conduct, the benefits of open source “weren’t accruing to [the] open-source community. People were feeling, we develop all this work and then some large company comes and monetizes that.” 2061 MongoDB, a document-based database, has similarly commented that “once an open source project becomes interesting, it is too easy for large cloud vendors to capture all the value but contribute nothing back to the community.” 2062 When the Subcommittee inquired about this practice, Amazon responded, that “Projects where AWS has developed distributions on top of OSS [open-source software], like Open Distro for Elasticsearch and Amazon Corretto, add to, not supplant, the set of capabilities provided by the upstream open-source projects… it allows them to move between deploying OSS themselves and using managed services for open-source.” 2063 Market participants told Subcommittee staff, however, that in the instances when AWS creates a “knock-off” version of an open-source software by adding “additional developments,” those additional developments often only work with AWS infrastructure and are no-longer cross-platform—heightening the risk of lock-in.2064 As one third-party explains, “So, the earlier benefits of open-source go out the window as Amazon takes over each of these product areas.” 2065 For example, while MongoDB is an open-source document-based database project, Amazon offers a proprietary product called Amazon DocumentDB. According to AWS, DocumentDB implements the open-source MongoDB API and is designed to “emulate the responses that a MongoDB client expects from a MongoDB server.” 2066 When a cloud customer chooses to build an application using DocumentDB they are tied to AWS’s infrastructure. If they ever wanted to switch to another provider they would have to extensively re-engineer their product in another software, whereas, had they built their application using MongoDB—on AWS or any other cloud provider’s infrastructure—their applications could move to other platforms.2067 ii. Harms to Innovation Amazon’s practice of offering managed service versions of open-source software has prompted open-source software companies to make defensive changes, such as closing off advanced features and changing their open-source license to be less permissive.2068 One open-source vendor that recently started offering premium closed-sourced features said they were “paranoid” in light of Amazon cloning Elastic’s features, noting that if this had happened to them they “would not have a business.” 2069 Amazon’s conduct has also reduced the availability of features in open-source software. Confluent,2070 Redis Labs,2071 and CochroachDB,2072 along with several other open-source software vendors, have made similar license and business model changes, reducing the level of access to their software.2073 Market participants believe these changes significantly undermine innovation. Several noted that more closed-off licenses will result in fewer free, open-source features available to startups building prototypes and research labs that cannot afford access to paid features.2074 Subcommittee staff also spoke with cloud computing customers in the public sector who worry about the changes and ambiguity in open-source licenses. One cloud computing customer told Subcommittee staff that three pieces of open-source software that they use underwent license changes in the last year and that, due to strict “open source only” policies, they are “now stuck using older versions of the software [from] before the license change which requires additional work to improve the code base, implement the same functionality in-house or switch to a competitive product.” 2075 iii. Self-Preferencing According to market participants, once a product—based on open source or otherwise—is available in the AWS Management Console, it becomes an easier choice for existing AWS customers relative to purchasing a managed service from a third-party vendor or self-managing open-source software. In an interview with Subcommittee staff, one startup said they purchased software services through the AWS Management Console as opposed to identical or nearly identical software from a third-party vendor because they were a small company and “instead of us managing everything, it was hit a button . . . they are all in one, it was easier.” 2076 As with all cloud services offered through the AWS Management Console, customers benefit from a single sign-on with billing information already in place.2077 Market participants also note that Amazon makes certain functionality available to its firstparty products that it doesn’t make available to the companies managing the original version of the open-source software.2078 For example, AWS services can run inside Amazon’s Virtual Private Could (Amazon VPC) offering, which allows users to provision an “isolated section of the AWS Cloud,” but third-party services cannot do so. 2079 While Amazon failed to provide the Subcommittee with financial data identifying what AWS makes in revenue from individual cloud offerings, many marketplace participants believe that AWS makes more from managed versions of open-source software than the third-party vendors and managers of the software. In 2019, The New York Times reported that the Chief Executive of MariaDB, an open-source relational database company, estimated that “Amazon made five times more revenue from running MariaDB software than his company generated from all of its businesses.” 2080 Market participants suggest this multiple of difference in income is likely for other AWS products based on open-source projects.2081

#### Killer Acquisitions are inevitable

Joe Kennedy 20. Senior fellow at ITIF, Previous positions include chief economist with the U.S. Department of Commerce and general counsel for the U.S. Senate Permanent Subcommittee on Investigations. 11-9-2020. “Monopoly Myths: Is Big Tech Creating “Kill Zones”?” <https://itif.org/publications/2020/11/09/monopoly-myths-big-tech-creating-kill-zones>

Acquisitions Provide a Needed Exit Route The knowledge of possibly being acquired can also spur entrepreneurial activity and investment. As the report for the European Commission notes: Simultaneously, the chance for start-ups to be acquired by larger companies is an important element of **v**enture **c**apital markets: it is among the main exit routes for investors and it provides an incentive for the private financing of high-risk innovation.43 This argument was echoed by James Pethokoukis of the American Enterprise Institute: Not every founder starts a company intending for it become Amazon. Often future acquisition is the goal. Then the entrepreneur can go on to start another firm or become an investor in other aspirational startups working on risky new ideas. Same goes for the investors in the acquired firm. What’s more, these purchases are often “acquisition-by-hire” situations where the prize is talent rather than the Next Big Thing. And when an upstart firm has a valuable idea, acquisition can be the fastest way to get it to users.44

#### No climate impact---bad studies and we’ll adapt

Nils P. Gleditsch 21, Research Professor at the Peace Research Institute Oslo, “This time is different! Or is it? NeoMalthusians and environmental optimists in the age of climate change,” Journal of Peace Research, pg. 5-6, 2021, SAGE. clarification denoted with brackets.

The most extreme contrarian position is, of course, to deny one or both key conclusions of the IPCC: the reality of global warming or the human contribution to it. However, most environmental optimists accept these two key conclusions but raise other problems with the panel’s discussion of the social effects of climate change and even more so with popular interpretations of the panel reports. For instance, Hausfather & Peters (2020), by no means ‘climate deniers’, decry the common use of choosing the high-risk [scenario] RCP8.59 to illustrate ‘business as usual’ as misleading. The causal chains from climate change to the proposed effects on human beings are long and complex, and the uncertainty increases every step of the way. In the literature on the social effects of climate change, including the IPCC reports, statements abound that something ‘may’ lead to something else, or that a variable ‘is sensitive to’ another, without any guidelines for how to translate this into probabilities (Gleditsch & Nordås, 2014: 87f). Uncritical use of the precautionary principle, where any remotely possible calamity unwittingly becomes a probable event, is not helpful. Gleditsch & Nordås (2014: 85) note that while AR5 (IPCC, 2014) did not find strong evidence for a direct link between climate change and conflict, it argued that climate change is likely to impact known conflict-inducing factors like poverty and inconsistent political institutions and therefore might have an indirect effect on conflict. But this assumes that correlations are transitive, which is not generally the case. If A correlates with B and B with C, we know nothing about how A relates to C unless both correlations are extremely high. The strongest case for the climate–conflict link is the effect of interaction between climate change and factors like poverty, state failure, or ethnic polarization. It may be more cost-effective to try to deal with these other risk factors than with global warming itself if the goal is to reduce the ‘risk multiplier’ effect of climate change on armed conflict. The articles in this special issue do not generally see scarcity by itself as necessarily resulting in strongly negative outcomes. Factors like development, state failure, and previous overload on ecosystems continue to play an important role in that they interact with climate change to produce conflict and other social outcomes. For instance, Ide, Kristensen & Bartusevicˆius (2021) conclude that the impact of floods on political conflict are contingent on other factors such as population size and regime type. Moreover, most of the articles do not assume that scarcities are likely to arise at the global level. They may be regional (mostly in Africa), national, or local. Urban and rural areas may be affected by different scarcities. Climate change may also affect particularly strongly groups that are already at an economic or political disadvantage. The effects can be alleviated and adaptations constructed at these levels. The argument about how climate change may indirectly impact conflict leans heavily on the negative economic consequences of climate change, but with little or no reference to the research that explicitly deals with this topic. In fact, the relevant chapter in AR5 concluded that for most sectors of the economy, the impact of climate change was likely to be dwarfed by other factors. Tol (2018) finds that the long-term global economic effects are likely to be negative, but that a century of climate change will have about the same impact on the economy as the loss of one year of economic growth. Other economists are more cautious, but the dean of climate change economics, William Nordhaus (2018: 345, 359), estimates that ‘damages are 2.1 percent of global income at 3C warming and 8.5 percent of income at 6C’, while also warning that the longer the delay in taking decisive action, the harsher the necessary countermeasures. Stern (2006) is more pessimistic, based mainly on a lower discount rate (the interest rate used to calculate the present value of future cash flows) as are Wagner & Weitzman (2015). Heal (2017) argues that the Integrated Assessment Models generally used in the assessment of the economics of climate change are not accurate enough to provide quantitative insights and should not be taken as serious forecasts. Yet, all these economists take the basically optimistic view that climate change is manageable with appropriate policies for raising the price on the emission of greenhouse gases. With a chapter heading from Wagner & Weitzman (2015: 17): ‘We can do this’. This more optimistic assessment of climate change does not assume that the challenge will go away by itself or can be left to the market. A plausible approach, favored by most economists,10 is the imposition of a robust and increasing price on carbon emissions (whether as a carbon tax or through a cap and trade scheme) high enough to reduce the use of fossil fuels and encourage the search for their replacement. More than 25 countries had such taxes by early 2018 (Metcalf, 2019), but generally not at a level seen as necessary for limiting global warming to, say, 2C. This approach relies on the use of the market mechanism, but with targets fixed by public policy. Income from a carbon tax can be channeled back to the citizens to avoid increasing overall taxation. To speed up the transition, funds can also be allocated to the research and development of cheaper and more efficient production of various forms of fossil-free energy, including nuclear power (Goldstein & Qvist, 2019). The response of the environmental optimists continues to emphasize the role of innovations; technological innovations, such as improvements in battery technology, the key element in the 2019 Nobel Prize in chemistry,11 but also social innovations, as exemplified by the experimental approach to the alleviation of poverty, rewarded in the same year by the Nobel Prize in economics.12 While the most important countermeasures will be directed at the mitigation of climate change, there is also a strong case for adaptation. If sea-level rise cannot be totally prevented, dikes and flood barriers will be cost-effective and necessary, at least in high-value urban areas. If parts of Africa suffer from drought, there will be increased use for new crops that are more suitable for a dry climate, possibly developed in part by GMO technology. Industrialization in Africa can decrease the one-sided reliance on rain-fed agriculture, as it has in other parts of the world, which have moved human resources from the primary sector to industry (and then to services). Continuing urbanization will move millions out of the most vulnerable communities (Collier, 2010). While structural change failed to produce economic growth in Latin America and Africa after 1990, Africa has experienced a turnaround in the new millennium (McMillan & Rodrik, 2014) and there are also potentials for increasing productivity by structural change within agriculture in Africa (McCullough, 2017).

#### OI Cooperation is increasing now, antitrust price law slows it down and alt causes

“Pharma Collaborations in the Covid-19 Era Come With Legal Risks” Valerie Bauman (reporter for Bloomberg) June 5, 2020, 4:16 AM; Updated: June 5, 2020, 1:16 PM 6/5/20 https://news.bloomberglaw.com/pharma-and-life-sciences/pharma-collaborations-in-the-covid-19-era-come-with-legal-risks

Competitors are teaming up to solve the pandemic Drugmakers must consider IP, antitrust implications of partnerships Major pharmaceutical and biotech companies will have to navigate a host of legal issues related to patents, trade secrets, and competition as they collaborate to find viable coronavirus vaccines and treatments. The race to address the pandemic has brought together strange bedfellows as big-name companies partner with their rivals. Roche Holding AG and Gilead Sciences Inc. teamed up on trials for a drug combination to treat Covid-19, and GlaxoSmithKline plc struck a deal with Sanofi to produce 1 billion doses of a coronavirus vaccine booster. Companies seeking to ensure their partnerships succeed will need to negotiate who owns each slice of intellectual property that is forged together and who will have the right to use any new inventions for non-Covid uses—all while avoiding anti-competitive pitfalls, health-care attorneys said. “Two companies will come together, ideally because they can do something better and faster together than they could alone,” said Robert Underwood, a partner in the Boston office of Hogan Lovells. “Each company is bringing some expertise and intellectual property to the table,” he said, noting that he can’t comment on any specific partnerships. “As they work together they’re going to create more, so you have the ‘yours,’ the ‘mine,’ and the ‘ours’ of collaboration.” In the meantime, the companies pursuing new partnerships are confident about the steps they’re taking. “Collaboration is a fundamental principle in biotech, and conducting clinical trials in partnership with companies like Gilead is an important example of how the biotechnology industry and healthcare communities are successfully working together,” Roche officials said in a statement. “Due to the global shared interest in curbing this public health crisis, we are confident that industry will reach reasonable agreements on partnerships.” Accelerated Environment While partnerships in the biopharma industry are fairly common, right now “what we’re seeing is quite different” because there are more deals between larger competitive companies, Underwood said. “Fueling this wave of collaboration is nothing more than everybody’s desire to find a solution as quickly as possible to the pandemic,” he said. More traditional deals are still being struck between pharmaceutical giants and smaller biotech firms, such as Eli Lilly and Co. partnering with Vancouver-based biotech AbCellera on a Covid-19 antibody treatment and AstraZeneca plc teaming up with Oxford Biomedica to produce a coronavirus vaccine. Large and small companies alike will need to navigate partnerships carefully to ensure their interests are protected—even as those deals are being struck at breakneck speed, attorneys say. “Traditionally, deals can take a lot more time to negotiate and the innovator company can be a lot more reluctant to share their technology,” said Mark Wicker, chair of Perkins Coie LLP’s biotechnology and pharmaceutical group. “In light of the Covid-19 world, there is an increased willingness to do this that didn’t necessarily exist before.” But sharing technology brings intellectual property challenges to the forefront, meaning companies will need to work through who brings what to the table and who owns any new inventions before moving forward with a deal.“The more you collaborate, the more you transfer technology, the more those issues come up,” Wicker said. “Those are things companies are or should be focusing on in this accelerated environment.” Protecting Inventions Many new partnerships use what is known as single application technologies— inventions with one pharmaceutical ingredient, one mechanism, or one particular disease that the new invention applies to, Wicker said. “Those are the easier ones to do because the innovative company is willing to give more control over to Big Pharma or the Big Medtech company,” he said Things get trickier when drugmakers are partnering on platform technologies, or inventions that can be applied across a whole array of applications. For instance, a novel ingredient that can be added to a vaccine to boost its effectiveness could hypothetically later be used for a swath of non-coronavirus vaccines. Collaborating companies need to make sure they clearly define how their partners are able to use the technologies they’ve come up with and what limitations will be placed on using those inventions for future applications, Wicker said. “This happens all the time,” he said. “It’s a real issue that people need to consider.” Companies will also need to decide whether and how to share trade secrets around technologies and manufacturing processes, said Chad Landmon, chair of the intellectual property and Food and Drug Administration practice at Axinn Veltrop & Harkrider LLP. “Those issues get tricky from a contractual basis,” he said. Division of Labor Drugmakers will also have to figure out how to divvy up which company does what and who pays for what going forward, said Andrew Solomon, of counsel in Polsinelli’s St. Louis office who focuses on IP issues in the pharmaceutical space. For example, companies will have to decide who drafts and files the patents, how to structure ownership of that intellectual property, and who is funding each segment of research, development, and drug trials. “if you’re in patent litigation down the road, who is going to take the lead?” Solomon said. “Or if it’s a shared representation, how do you do that?” Answering those questions can be a little easier when there’s already a developed molecule that may have a new use in treating Covid-19, but with something more complicated, like a blending of two different types of therapies or regulated products—that can get complicated, Solomon said. That’s why it’s important that companies have an “understanding of who has what role at the outset, and trying to stick to it as the collaboration develops,” he said. Antitrust Issues It is “vital” that drugmakers avoid anti-competitive conduct as they negotiate and work through their partnerships, said Edith Ramirez, a partner with Hogan Lovells, and former chairwoman of the Federal Trade Commission. That means those deals must benefit the public and that communication between the different parties stays away from several critical areas, such as pricing policies, she said. “What we counsel companies to avoid is what is referred to as ‘competitively sensitive topics,’ including discussions about companies’ current or future prices,” Ramirez said. “You don’t want competitors to ever be talking about pricing,” she added. “That is considered to be a hardcore violation of antitrust law.” Companies must also beware of sharing confidential business plans, sales information, or research in connection with particular customers or market areas—including strategy around their product advertising and promotion, she said. Avoiding those situations can be challenging, so drugmakers should have a lawyer specializing in antitrust present during all negotiations for planned collaborations, Ramirez said. “Things are moving quickly, but it’s critical they be aware of these issues because the last thing they would want is the Federal Trade Commission or the Department of Justice Antitrust Division to knock on their door to initiate an investigation,” she said.

#### No impact – public funding solves and impact exaggerated

Kesselheim 16 – Aaron S. Kesselheim, Associate Professor of Medicine at Harvard Medical School and a faculty member in the Division of Pharmacoepidemiology and Pharmacoeconomics in the Department of Medicine at Brigham and Women’s Hospital, M.D. and J.D. from University of Pennsylvania School of Medicine and Law School, MPH from Harvard School of Public Health, primary care physician at the Phyllis Jen Center for Primary Care at Brigham & Women’s Hospital, Jerry Avorn, Professor of Medicine at Harvard Medical School and Chief of the Division of Pharmacoepidemiology and Pharmacoeconomics in the Department of Medicine at Brigham and Women’s Hospital, M.D. from Harvard Medical School in 1974, and completed a residency in internal medicine at the Beth Israel Hospital in Boston, Ameet Sarpatwari, PhD in epidemiology at the University of Cambridge, Instructor in Medicine at Harvard Medical School, an Associate Epidemiologist at Brigham and Women’s Hospital, and Assistant Director of the Program On Regulation, Therapeutics, And Law (PORTAL) within the Division of Pharmacoepidemiology and Pharmacoeconomics, JD at the University of Maryland as a John L. Thomas Leadership Scholar, Principal Investigator on a Greenwall Foundation Making a Difference in Real-World Bioethics Dilemmas grant and a Faculty Affiliate with the Petrie-Flom Center for Health Law Policy, Biotechnology, and Bioethics at Harvard Law School and the Behavioral Insights Group at the Harvard Kennedy School (“The High Cost of Prescription Drugs in the United States: Origins and Prospects for Reform,” Journal of the American Medical Association, Vol. 316, No. 8, pgs. 858–871, August 23rd, Available to Subscribing Institutions)

Justifications for High Drug Prices The pharmaceutical industry has maintained that high drug prices reflect the research and development costs a company incurred to develop the drug, are necessary to pay for future research costs to develop new drugs, or both. It is true that industry often makes expensive investments in drug development and commercialization, particularly through late-stage clinical trials, which can be costly.84 These assertions have been used to justify high prices on the grounds that if drug prices are constrained, the pipeline of new medications will be adversely affected. Some economic analyses favored by the pharmaceutical industry contend that it costs $2.6 billion to develop a new drug that makes it to market.85 However, the rigor of this widely cited number has been disputed.86,87 A number of factors weigh against these rationales for high drug prices. First, important innovation that leads to new drug products is often performed in academic institutions and supported by investment from public sources such as the National Institutes of Health. A recent analysis of the most transformative drugs of the last 25 years found that more than half of the 26 products or product classes identified had their origins in publicly funded research in such nonprofit centers.88 Other analyses have highlighted the importance of small companies, many funded by venture capital.89,90 These biotech startups frequently take early-stage drug development research that may have its origins in academic laboratories and continue it until the product and the company can be acquired by a large manufacturer, as occurred with sofosbuvir. Arguments in defense of maintaining high drug prices to protect the strength of the drug industry misstate its vulnerability. The biotechnology and pharmaceutical sectors have for years been among the very best-performing sectors in the US economy. The proportion of revenue of large pharmaceutical companies that is invested in research and development is just 10% to 20% (Table 4); if only innovative product development is considered, that proportion is considerably lower.91 The contention that high prescription drug spending in the United States is required to spur domestic innovation has not been borne out in several analyses.92 A more relevant policy opportunity would be to address the stringency of congressional funding for the National Institutes of Health, such that its budget has barely kept up with inflation for most of the last decade. Given the evidence of the central role played by publicly funded research in generating discoveries that lead to new therapeutic approaches, this is one obvious area of potential intervention to address concerns about threats to innovation in drug discovery.

## (S)

#### The plan ONLY “prohibits” predatory and limit pricing, but Clayton already prohibits that

Troy Segal (editor and writer) 9/30/2021 [“Clayton Antitrust Act” online @ <https://www.investopedia.com/terms/c/clayton-antitrust-act.asp>, loghry]

KEY TAKEAWAYS The Clayton Antitrust Act, passed in 1914, continues to regulate U.S. business practices today. Intended to strengthen earlier antitrust legislation, the act prohibits anticompetitive mergers, predatory and discriminatory pricing, and other forms of unethical corporate behavior. The Clayton Antitrust Act also protects individuals by allowing lawsuits against companies and upholding the rights of labor to organize and protest peacefully. There have been several amendments to the act, expanding its provisions. Understanding the Clayton Antitrust Act At the turn of the 20th century, a handful of large U.S. corporations began to dominate entire industry segments by engaging in predatory pricing, exclusive dealings, and mergers designed to destroy competitors.1 In 1914, Rep. Henry De Lamar Clayton of Alabama introduced legislation to regulate the behavior of massive entities. The bill passed the House of Representatives with a vast majority on June 5, 1914. President Woodrow Wilson then signed the initiative into law on Oct. 15, 1914.1 The act is enforced by the FTC and prohibits exclusive sales contracts, certain types of rebates, discriminatory freight agreements, and local price-cutting maneuvers. It also forbids certain types of holding companies. According to the FTC, the Clayton Act also allows private parties to take legal action against companies and seek triple damages when they have been harmed by conduct that violates the Clayton Act. They may also seek and get a court order against any future anticompetitive practice.2 In addition, the Clayton Act specifies that labor is not an economic commodity. It upholds issues conducive to organized labor, declaring peaceful strikes, picketing, boycotts, agricultural cooperatives, and labor unions as legal under federal law.1 There are 27 sections to the Clayton Act.3 Among them, the most notable include: The second section, which deals with the unlawfulness of price discrimination, price-cutting, and predatory pricing.

## CHINA

#### They have no internal link argument- they say that china is revisionist and that if US-China war happens it would escalate. NOWHERE does it say that war is sparked between the US and china.

#### The construction of China as a threat attempts to sustain American exceptionalism at the expense of casting China as a racialized other – they cannot sever their reps, only breaking free of the framework of analysis used in the 1AC can solve

Pan 4 (Chengxin, Associate Professor of International Relations at Deakin University, a good follow on Twitter, Alternatives: Global, Local, Political Vol. 29, No. 3, pg. 314-18, “The ‘China Threat’ in American Self-Imagination: The Discursive Construction of Other as Power Politics”, <https://www.jstor.org/stable/40645119>, June-July 2004, 7-26-2018) DG

Having examined how the "China threat" literature is enabled by and serves the purpose of a particular U.S. self-construction, I want to turn now to the issue of how this literature represents a discursive construction of other, instead of an "objective" account of Chinese reality. This, I argue, has less to do with its portrayal of China as a threat per se than with its essentialization and totalization of China as an externally knowable object, independent of historically contingent contexts or dynamic international interactions. In this sense, the discursive construction of China as a threatening other cannot be detached from (neo) realism, a positivist ahistorical framework of analysis within which global life is reduced to endless interstate rivalry for power and survival. As many critical IR scholars have noted, (neo) realism is not a transcendent description of global reality but is predicated on the modernist Western identity, which, in the quest for scientific certainty, has come to define itself essentially as the sovereign territorial nation-state. This realist self-identity of Western states leads to the constitution of anarchy as the sphere of insecurity, disorder, and war. In an anarchical system, as (neo) realists argue, "the gain of one side is often considered to be the loss of the other,"45 and "All other states are potential threats."46 In order to survive in such a system, states inevitably pursue power or capability. In doing so, these realist claims represent what R. B. J. Walker calls "a specific historical articulation of relations of universality/ particularity and self/ Other."47 The (neo) realist paradigm has dominated the U.S. IR discipline in general and the U.S. China studies field in particular. As Kurt Campbell notes, after the end of the Cold War, a whole new crop of China experts "are much more likely to have a background in strategic studies or international relations than China itself."48 As a result, for those experts to know China is nothing more or less than to undertake a geopolitical analysis of it, often by asking only a few questions such as how China will "behave" in a strategic sense and how it may affect the regional or global balance of power, with a particular emphasis on China's military power or capabilities. As Thomas J. Christensen notes, "Although many have focused on intentions as well as capabilities, the most prevalent component of the [China threat] debate is the assessment of China's overall future military power compared with that of the United States and other East Asian regional powers."49 Consequently, almost by default, China emerges as an absolute other and a threat thanks to this (neo) realist prism. The (neo) realist emphasis on survival and security in inter- national relations dovetails perfectly with the U.S. self-imagination, because for the United States to define itself as the indispensable nation in a world of anarchy is often to demand absolute security. As James Chace and Caleb Carr note, "for over two centuries the aspiration toward an eventual condition of absolute security has been viewed as central to an effective American foreign policy."50 And this self-identification in turn leads to the definition of not only "tangible" foreign powers but global contingency and uncertainty per se as threats. For example, former U.S. President George H. W. Bush repeatedly said that "the enemy [of America] is unpredictability. The enemy is instability."51 Similarly, arguing for the continuation of U.S. Cold War alliances, a high-ranking Pentagon official asked, "if we pull out, who knows what nervousness will result?"52 Thus understood, by its very uncertain character, China would now automatically constitute a threat to the United States. For example, Bernstein and Munro believe that "China's political unpredictability, the always-present possibility that it will fall into a state of domestic disunion and factional fighting," constitutes a source of danger.53 In like manner, Richard Betts and Thomas Christensen write: If the PLA [People's Liberation Army] remains second-rate, should the world breathe a sigh of relief? Not entirely. . . . Drawing China into the web of global interdependence may do more to encourage peace than war, but it cannot guarantee that the pursuit of heartfelt political interests will be blocked by a fear of economic consequences. . . . U.S. efforts to create a stable balance across the Taiwan Strait might deter the use of force under certain circumstances, but certainly not all.54 The upshot, therefore, is that since China displays no absolute certainty for peace, it must be, by definition, an uncertainty, and hence, a threat. In the same way, a multitude of other unpredictable factors (such as ethnic rivalry, local insurgencies, overpopulation, drug trafficking, environmental degradation, rogue states, the spread of weapons of mass destruction, and international terrorism) have also been labeled as "threats" to U.S. security. Yet, it seems that in the post-Cold War environment, China represents a kind of uncertainty par excellence. "Whatever the prospects for a more peaceful, more democratic, and more just world order, nothing seems more uncertain today than the future of post-Deng China,"55 argues Samuel Kim. And such an archetypical uncertainty is crucial to the enterprise of U.S. self-construction, because it seems that only an uncertainty with potentially global consequences such as China could justify U.S. indispensability or its continued world dominance. In this sense, Bruce Cumings aptly suggested in 1996 that China (as a threat) was basically "a metaphor for an enormously expensive Pentagon that has lost its bearings and that requires a formidable 'renegade state' to define its mission (Islam is rather vague, and Iran lacks necessary weights)."56 It is mainly on the basis of this self-fashioning that many U.S. scholars have for long claimed their "expertise" on China. For example, from his observation (presumably on Western TV net- works) of the Chinese protest against the U.S. bombing of their embassy in Belgrade in May 1999, Robert Kagan is confident enough to speak on behalf of the whole Chinese people, claiming that he knows "the fact" of "what [China] really thinks about the United States." That is, "they consider the United States an enemy - or, more precisely, the enemy. . . . How else can one interpret the Chinese government's response to the bombing?" he asks, rhetorically.57 For Kagan, because the Chinese "have no other information" than their government's propaganda, the protesters cannot rationally "know" the whole event as "we" do. Thus, their anger must have been orchestrated, unreal, and hence need not be taken seriously.58 Given that Kagan heads the U.S. Leadership Project at the Carnegie Endowment for International Peace and is very much at the heart of redefining the United States as the benevolent global hegemon, his confidence in speaking for the Chinese "other" is perhaps not surprising. In a similar vein, without producing in-depth analysis, Bern- stein and Munro invoke with great ease such all-encompassing notions as "the Chinese tradition" and its "entire three-thousand- year history."59 In particular, they repeatedly speak of what China's "real" goal is: "China is an unsatisfied and ambitious power whose goal is to dominate Asia. . . . China aims at achieving a kind of hegemony. . . . China is so big and so naturally powerful that [we know] it will tend to dominate its region even if it does not intend to do so as a matter of national policy "m Likewise, with the goal of ab- solute security for the United States in mind, Richard Betts and Thomas Christensen argue: The truth is that China can pose a grave problem even if it does not become a military power on the American model, does not intend to commit aggression, integrates into a global economy, and liberalizes politically. Similarly, the United States could face a dangerous conflict over Taiwan even if it turns out that Beijing lacks the capacity to conquer the island. . . . This is true because of geography; because of America's reliance on alliances to project power; and because of China's capacity to harm U.S. forces, U.S. regional allies, and the American homeland, even while los- ing a war in the technical, military sense.61 By now, it seems clear that neither China's capabilities nor intentions really matter. Rather, almost by its mere geographical existence, China has been qualified as an absolute strategic "other," a discursive construct from which it cannot escape. Because of this, "China" in U.S. IR discourse has been objectified and deprived of its own subjectivity and exists mainly in and for the U.S. self. Little wonder that for many U.S. China specialists, China becomes merely a "national security concern" for the United States, with the "severe disproportion between the keen attention to China as a security concern and the intractable neglect of China's [own] security concerns in the current debate."62 At this point, at issue here is no longer whether the "China threat" argument is true or false, but is rather its reflection of a shared positivist mentality among mainstream China experts that they know China better than do the Chinese themselves.63 "We" alone can know for sure that they consider "us" their enemy and thus pose a menace to "us." Such an account of China, in many ways, strongly seems to resemble Orientalists' problematic distinction between the West and the Orient. Like orientalism, the U.S. construction of the Chinese "other" does not require that China acknowledge the validity of that dichotomous construction. Indeed, as Edward Said point out, "It is enough for 'us' to set up these distinctions in our own minds; [and] 'they' become 'they' accordingly."64 It may be the case that there is nothing inherently wrong with perceiving others through one's own subjective lens. Yet, what is problematic with mainstream U.S. China watchers is that they refuse to acknowledge the legitimacy of the inherent fluidity of Chinese identity and subjectivity and try instead to fix its ambiguity as absolute difference from "us," a kind of certainty that denotes nothing but otherness and threats. As a result, it becomes difficult to find a legitimate space for alternative ways of understanding an inherently volatile, amorphous China 65 or to recognize that China's future trajectory in global politics is contingent essentially on how "we" in the United States and the West in general want to see it as well as on how the Chinese choose to shape it.66 Indeed, discourses of "us" and "them" are always closely linked to how "we" as "what we are" deal with "them" as "what they are" in the practical realm. This is exactly how the discursive strategy of perceiving China as a threatening other should be understood, a point addressed in the following section, which explores some of the practical dimension of this discursive strategy in the containment perspectives and hegemonic ambitions of U.S. foreign policy.

#### No China war

Walt 20 – [Stephen M. Walt is an American professor of international affairs at Harvard University's John F. Kennedy School of Government, 5/13/2020, “Will a Global Depression Trigger Another World War?” <https://foreignpolicy.com/2020/05/13/coronavirus-pandemic-depression-economy-world-war/>] GBN-PK

By many measures, 2020 is looking to be the worst year that humankind has faced in many decades. We’re in the midst of a pandemic that has already claimed more than 280,000 lives, sickened millions of people, and is certain to afflict millions more before it ends. The world economy is in free fall, with unemployment rising dramatically, trade and output plummeting, and no hopeful end in sight. A plague of locusts is back for a second time in Africa, and last week we learned about murderous killer wasps threatening the bee population in the United States. Americans have a head-in-the-sand president who prescribes potentially lethal nostrums and ignores the advice of his scientific advisors. Even if all those things magically disappeared tomorrow—and they won’t—we still face the looming long-term danger from climate change. Given all that, what could possibly make things worse? Here’s one possibility: war. It is therefore worth asking whether the combination of a pandemic and a major economic depression is making war more or less likely. What does history and theory tell us about that question? For starters, we know neither plague nor depression make war impossible. World War I ended just as the 1918-1919 influenza was beginning to devastate the world, but that pandemic didn’t stop the Russian Civil War, the Russo-Polish War, or several other serious conflicts. The Great Depression that began in 1929 didn’t prevent Japan from invading Manchuria in 1931, and it helped fuel the rise of fascism in the 1930s and made World War II more likely. So if you think major war simply can’t happen during COVID-19 and the accompanying global recession, think again. But war could still be much less likely. The Massachusetts Institute of Technology’s Barry Posen has already considered the likely impact of the current pandemic on the probability of war, and he believes COVID-19 is more likely to promote peace instead. He argues that the current pandemic is affecting all the major powers adversely, which means it isn’t creating tempting windows of opportunity for unaffected states while leaving others weaker and therefore vulnerable. Instead, it is making all governments more pessimistic about their short- to medium-term prospects. Because states often go to war out of sense of overconfidence (however misplaced it sometimes turns out to be), pandemic-induced pessimism should be conducive to peace. Moreover, by its very nature war requires states to assemble lots of people in close proximity—at training camps, military bases, mobilization areas, ships at sea, etc.—and that’s not something you want to do in the middle of a pandemic. For the moment at least, beleaguered governments of all types are focusing on convincing their citizens they are doing everything in their power to protect the public from the disease. Taken together, these considerations might explain why even an impulsive and headstrong warmaker like Saudi Arabia’s Mohammed bin Salman has gotten more interested in winding down his brutal and unsuccessful military campaign in Yemen. Posen adds that COVID-19 is also likely to reduce international trade in the short to medium term. Those who believe economic interdependence is a powerful barrier to war might be alarmed by this development, but he points out that trade issues have been a source of considerable friction in recent years—especially between the United States and China—and a degree of decoupling might reduce tensions somewhat and cause the odds of war to recede. For these reasons, the pandemic itself may be conducive to peace. But what about the relationship between broader economic conditions and the likelihood of war? Might a few leaders still convince themselves that provoking a crisis and going to war could still advance either long-term national interests or their own political fortunes? Are the other paths by which a deep and sustained economic downturn might make serious global conflict more likely? One familiar argument is the so-called diversionary (or “scapegoat”) theory of war. It suggests that leaders who are worried about their popularity at home will try to divert attention from their failures by provoking a crisis with a foreign power and maybe even using force against it. Drawing on this logic, some Americans now worry that President Donald Trump will decide to attack a country like Iran or Venezuela in the run-up to the presidential election and especially if he thinks he’s likely to lose. This outcome strikes me as unlikely, even if one ignores the logical and empirical flaws in the theory itself. War is always a gamble, and should things go badly—even a little bit—it would hammer the last nail in the coffin of Trump’s declining fortunes. Moreover, none of the countries Trump might consider going after pose an imminent threat to U.S. security, and even his staunchest supporters may wonder why he is wasting time and money going after Iran or Venezuela at a moment when thousands of Americans are dying preventable deaths at home. Even a successful military action won’t put Americans back to work, create the sort of testing-and-tracing regime that competent governments around the world have been able to implement already, or hasten the development of a vaccine. The same logic is likely to guide the decisions of other world leaders too. Another familiar folk theory is “military Keynesianism.” War generates a lot of economic demand, and it can sometimes lift depressed economies out of the doldrums and back toward prosperity and full employment. The obvious case in point here is World War II, which did help the U.S economy finally escape the quicksand of the Great Depression. Those who are convinced that great powers go to war primarily to keep Big Business (or the arms industry) happy are naturally drawn to this sort of argument, and they might worry that governments looking at bleak economic forecasts will try to restart their economies through some sort of military adventure. I doubt it. It takes a really big war to generate a significant stimulus, and it is hard to imagine any country launching a large-scale war—with all its attendant risks—at a moment when debt levels are already soaring. More importantly, there are lots of easier and more direct ways to stimulate the economy—infrastructure spending, unemployment insurance, even “helicopter payments”—and launching a war has to be one of the least efficient methods available. The threat of war usually spooks investors too, which any politician with their eye on the stock market would be loath to do. Economic downturns can encourage war in some special circumstances, especially when a war would enable a country facing severe hardships to capture something of immediate and significant value. Saddam Hussein’s decision to seize Kuwait in 1990 fits this model perfectly: The Iraqi economy was in terrible shape after its long war with Iran; unemployment was threatening Saddam’s domestic position; Kuwait’s vast oil riches were a considerable prize; and seizing the lightly armed emirate was exceedingly easy to do. Iraq also owed Kuwait a lot of money, and a hostile takeover by Baghdad would wipe those debts off the books overnight. In this case, Iraq’s parlous economic condition clearly made war more likely. Yet I cannot think of any country in similar circumstances today. Now is hardly the time for Russia to try to grab more of Ukraine—if it even wanted to—or for China to make a play for Taiwan, because the costs of doing so would clearly outweigh the economic benefits. Even conquering an oil-rich country—the sort of greedy acquisitiveness that Trump occasionally hints at—doesn’t look attractive when there’s a vast glut on the market. I might be worried if some weak and defenseless country somehow came to possess the entire global stock of a successful coronavirus vaccine, but that scenario is not even remotely possible. If one takes a longer-term perspective, however, a sustained economic depression could make war more likely by strengthening fascist or xenophobic political movements, fueling protectionism and hypernationalism, and making it more difficult for countries to reach mutually acceptable bargains with each other. The history of the 1930s shows where such trends can lead, although the economic effects of the Depression are hardly the only reason world politics took such a deadly turn in the 1930s. Nationalism, xenophobia, and authoritarian rule were making a comeback well before COVID-19 struck, but the economic misery now occurring in every corner of the world could intensify these trends and leave us in a more war-prone condition when fear of the virus has diminished. On balance, however, I do not think that even the extraordinary economic conditions we are witnessing today are going to have much impact on the likelihood of war. Why? First of all, if depressions were a powerful cause of war, there would be a lot more of the latter. To take one example, the United States has suffered 40 or more recessions since the country was founded, yet it has fought perhaps 20 interstate wars, most of them unrelated to the state of the economy. To paraphrase the economist Paul Samuelson’s famous quip about the stock market, if recessions were a powerful cause of war, they would have predicted “nine out of the last five (or fewer).” Second, states do not start wars unless they believe they will win a quick and relatively cheap victory. As John Mearsheimer showed in his classic book Conventional Deterrence, national leaders avoid war when they are convinced it will be long, bloody, costly, and uncertain. To choose war, political leaders have to convince themselves they can either win a quick, cheap, and decisive victory or achieve some limited objective at low cost. Europe went to war in 1914 with each side believing it would win a rapid and easy victory, and Nazi Germany developed the strategy of blitzkrieg in order to subdue its foes as quickly and cheaply as possible. Iraq attacked Iran in 1980 because Saddam believed the Islamic Republic was in disarray and would be easy to defeat, and George W. Bush invaded Iraq in 2003 convinced the war would be short, successful, and pay for itself. The fact that each of these leaders miscalculated badly does not alter the main point: No matter what a country’s economic condition might be, its leaders will not go to war unless they think they can do so quickly, cheaply, and with a reasonable probability of success. Third, and most important, the primary motivation for most wars is the desire for security, not economic gain. For this reason, the odds of war increase when states believe the long-term balance of power may be shifting against them, when they are convinced that adversaries are unalterably hostile and cannot be accommodated, and when they are confident they can reverse the unfavorable trends and establish a secure position if they act now. The historian A.J.P. Taylor once observed that “every war between Great Powers [between 1848 and 1918] … started as a preventive war, not as a war of conquest,” and that remains true of most wars fought since then. The bottom line: Economic conditions (i.e., a depression) may affect the broader political environment in which decisions for war or peace are made, but they are only one factor among many and rarely the most significant. Even if the COVID-19 pandemic has large, lasting, and negative effects on the world economy—as seems quite likely—it is not likely to affect the probability of war very much, especially in the short term.