### 1

#### ‘The’ refers to the group as a whole

Merriam-Webster’s 21 Online Dictionary, ‘the’, https://www.merriam-webster.com/dictionary/the

—used as a function word before a noun or a substantivized adjective to indicate reference to a group as a whole

*the* elite

#### “Private sector” means all non-governmental persons or entities

Senate Report 95 (Senate Report. 104-1, “UNFUNDED MANDATE REFORM ACT OF 1995,” <https://www.congress.gov/congressional-report/104th-congress/senate-report/1> , date accessed 9/10/21)

"Private sector" is defined to cover all persons or entities in the United States except for State, local or tribal governments. It includes individuals, partnerships, associations, corporations, and educational and nonprofit institutions.

#### Violation – the plan is specific to pharmaceutical patents.

#### Vote neg – limits and ground---the number of potential subsets is infinite---any industry, product, single companies, individuals---undermines clash. Only big affs have link uniqueness

### 2

#### DST won’t pass

Folley 3/21, (Aris Folley is a writer for the Hill, “Daylight saving change faces trouble in House”, The Hill, 3/21/22, https://thehill.com/homenews/house/598827-daylight-savings-change-faces-trouble-in-house)

Legislation to make daylight saving time permanent passed the Senate last week, but the House is not ready to be a rubber stamp, spelling potential trouble ahead for its passage in the lower chamber. Leaders on both sides of the aisle have made clear they are not in a rush to act on the legislation, with some citing the focus on the crisis unfolding in Ukraine, as well as the need for further review from members before taking up the proposal. And though the idea has enjoyed bipartisan support across Congress, its path in the lower chamber is uncertain, as a few members have begun to call for more research into the proposed measure before signing on to the push. Rep. Pramila Jayapal (D-Wash.) told The Hill on Friday that, while she has supported doing away with the semiannual time change in the past, she’s gotten mixed reactions from her constituents over the idea. “I've been hearing a lot about this from my constituents recently because we're in Seattle and it is so dark,” she said, “and so if we make daylight saving permanent, it's gonna be dark until like nine o'clock in the morning.” Though Jayapal said she thinks “having one time zone is just easier,” she added that she wants “to pay attention to what people are saying,” while also noting concerns that some have shared about the potential impact the proposed change could have on learning. Pressed about his stance on the proposal, Rep. Al Green (D-Texas) stressed the need for additional evidence before taking a position. “I'm going to ask my staff for some empirical studies about this,” he said. In remarks to The Hill on Friday, Rep. Hakeem Jeffries (N.Y.), head of the House Democratic Caucus, said he assumes the legislation will “be more broadly discussed both by the relevant committees and within the caucus sooner rather than later.” “Different members have articulated a different perspective. We'll have to come to some consensus. We were unexpectedly sent this bill by the Senate. Now, we’re trying to absorb it,” Jeffries said. The legislation passed by unanimous consent in the Senate on Tuesday. Any senator can use the procedure to fast-track passage of a bill without a vote, but it only takes one senator to object and block it. A staffer for Sen. Marco Rubio (R-Fla.), lead sponsor of the measure, said his office ran what’s known around Capitol Hill as a “hotline” on the legislation last week, informing all senators’ offices that the Florida Republican was seeking to ask for unanimous consent for the bill to pass. The staffer said Sen. Roger Wicker (R-Miss.) had an objection to the measure, and they expected him to object to its passage. Rubio delayed trying to pass the bill until Tuesday, the staffer noted, to give Wicker, who had a flight delay, time to get back to Washington. “But by Tuesday afternoon, when we had gotten everything scheduled, [Wicker] had sort of said he was not going through, so by the time that Sen. Rubio went down to the floor Tuesday afternoon, he felt pretty confident that it was going to pass,” the staffer said. The Hill has reached out to Wicker’s office for comment.

#### Plan creates a fierce partisan battle

Serwer 21, Staff Writer at The Atlantic covering politics (Adam, “‘Woke Capital’ Doesn’t Exist,” *The Atlantic*, <https://www.theatlantic.com/ideas/archive/2021/04/dont-buy-conservative-rebellion-against-corporations/618519/>)

As such, the Republican anti-corporate turn is entirely superficial. That’s a shame, because the concentration of corporate power has had a negative effect on American governance, leading to an age of inequality in which economic gains are mostly enjoyed by those in the highest income brackets. Since the 1970s, despite massive gains in productivity, m

ost Americans have seen their wages rise very slowly, while the wealthiest have reaped almost all the gains of economic growth. That outcome was a policy choice, not an inevitability. “Starting in the 1970s, the people in charge of designing and implementing the tax code increasingly favored those at the very top,” the political scientists Jacob Hacker and Paul Pierson wrote in Winner-Take-All Politics. “The rich are getting fabulously richer while the rest of Americans are basically holding steady or worse.” Notably, they argued, this trend “is not obviously related to either the business cycle or the shifting partisan occupancy of the White House.” Economists on the left have concluded that this is because the extremely wealthy have a stranglehold on American politics that prevents policy changes that would more fairly distribute economic gains. And that, in turn, helps explain the seemingly high stakes of the culture war over corporate-branding decisions: The concentration of corporate power means that large companies wield outsize cultural influence, and their policy priorities are more often translated into law than those with broader public support. “One thing that is clear from the emerging evidence is that economic inequality reinforces differences in political and social power, and these in turn affect market outcomes,” the economist Heather Boushey, now a member of President Joe Biden’s Council of Economic Advisers, wrote in Unbound. This diagnosis lends itself to certain solutions, some of which are apparent in the Biden administration’s agenda. Although in the past, Democratic Party policies have exacerbated the problem, in recent years, much of the party has moved left on economic issues and now appears to recognize the threat that extreme inequality represents. The obvious Republican insincerity on deficits, and the depth of the coronavirus crisis, expanded the horizon for Democrats as they contemplated policy changes. The design of generous unemployment provisions, direct-aid payments, and the recently passed child allowance, all of which disproportionately benefit the low-wage workers who have borne the brunt of the pandemic, reflected that new ambition, and Biden has already proposed modestly raising corporate tax rates in his infrastructure plan. But reducing corporate power, and with it the grip of the wealthy on government, will require more than that. Strengthening organized labor through the PRO Act, which would make it easier to unionize, would provide a needed counterbalance to corporations. The Biden administration has also indicated a willingness to use antitrust regulations against tech firms that have amassed a stunning amount of power over Americans’ daily lives in the past few decades. Proposals from the left wing of the party to reestablish postal banking and mandate worker representation on corporate boards would further diminish the influence of the extremely wealthy. Perhaps Republicans don’t like these ideas. They are, after all, liberal and left-wing ideas. But when it comes to breaking the concentration of political and economic power in the hands of the very wealthy, Republicans have no ideas of their own to speak of, beyond issuing colorful threats to employ state coercion against firms that fail to do their bidding. The GOP is unbothered by the concentration of wealth or power as such, which is not only why it opposes all of these measures, but also why the centerpiece of its agenda the last time it controlled both Congress and the White House was a massive and regressive tax cut. What vexes Republicans is the sight of corporations responding to market incentives by making public displays of support for egalitarianism and nondiscrimination, which is not the same as corporations actually supporting those things. Putting out statements supporting Black Lives Matter or adorning their logos with pride colors is very easy for big corporations, but such gestures do not signal a commitment to fair wages, safe working conditions, or a willingness to pay their share in taxes, let alone racial egalitarianism in all but the most cosmetic sense. They are merely brand management. “Woke capital” does not actually exist, only capital—and its interests remain the same as they have always been. Like the Republican turn against democracy, the newfound opposition to the market fundamentalism that conservatives once espoused and the free-speech principles they pretended to revere is superficial and contingent. Free speech, democracy, and free-market capitalism were fine as long as Republicans could expect victory in these arenas. But with public opinion shifting against them on key priorities, their focus has now turned to rigging the rules of the game to their advantage rather than winning over a larger share of the public. They do not seek to achieve a more equitable distribution of either money or power, but to ensure that the present inequities work to their political advantage. An irony is that the era with which the right is enraptured was in part a product of a set of mid-century economic arrangements—higher taxes on the wealthy, greater union density, stronger regulations—that the left is attempting to restore, in some form, while including a novel commitment to racial and gender equality. Republicans have no interest in curtailing corporate power in this fashion—not when they believe that power could be used to reimpose a diminished cultural hegemony. These so-called populist Republicans do not wish to throw the one ring into Mount Doom; they simply want to wield it on their own behalf.

#### DST passes – Dems need an easy victory lap after partisan battles

Schoen 3/20, (Douglas E. Schoen is a political consultant who served as an adviser to former President Clinton and to the 2020 presidential campaign of Michael Bloomberg, “How Biden and Democrats can stack up legislative wins before November”, 3/20/22, https://thehill.com/opinion/campaign/598880-how-biden-and-democrats-can-stack-up-legislative-wins-before-november)

Democrats are increasingly at risk of losing control of Congress in the 2022 midterms. Public polls consistently find that Republicans have a solid lead in the generic vote for Congress and that a majority of voters disapprove of President Biden’s job performance. In light of Democrats’ declining ratings and their failed attempts at passing both the Build Back Better Agenda and voting rights legislation, the party needs to show voters that they can deliver. Positively, the president, vice president and cabinet members have been traveling across the country to sell last year’s bipartisan infrastructure bill to the American people — a laudable effort that should undergird an effective strategy for Democrats to begin to regain their position. Looking back to this point in President Obama’s first term, the Obama-Biden administration was often criticized for not broadly selling the American Recovery Act to voters. This led to both a Republican rout in the 2010 midterms, followed by a decade of Democrats ceding ground to Republicans on economic issues. That being said, Biden and Democrats selling their accomplishments — namely, the bipartisan infrastructure bill and the American Rescue Plan — is only one piece of the broader strategy that the party should be undertaking. In order to protect against Republican insurgency in November, Democrats need to secure discreet legislative victories by coming together around a new, more practical domestic agenda that is focused on alleviating a few major problems facing everyday Americans. Put another way, the Democrats need to prove that they, the party with unified control of Washington, can and should govern. Fortunately, there are a set of effective and broadly popular policies — in the realms of job training and creation, energy independence, climate change and drug pricing — that Democrats can pursue to achieve this objective. First, an all-of-the-above energy strategy, which has significant bipartisan support, would help alleviate energy costs in the short term and protect American consumers from the types of supply shocks and price surcharges at the gas pump we are currently experiencing in the future. This week, moderate Democratic Rep. Josh Gottheimer (N.J.) proposed an all-of-the-above energy plan, which involves tapping into existing domestic oil wells, ramping up domestic oil production immediately, working with close allies to reduce America’s reliance on oil from bad actors including Russia, Iran and Venezuela, and increasing and maximizing our use of alternative energies, including wind and solar. Gottheimer’s proposal is both practically and politically viable. Democrats should work on bringing legislation like this to the floor of Congress as soon as possible, considering the financial strain of high gas prices that is currently weighing on Americans. Second, given the dramatic shifts in the workforce and labor market that occurred during the pandemic, Democrats should prioritize improving federal job training programs in public health, IT, manufacturing and clean energy, including nuclear energy. These programs have broad bipartisan support and will help close the skills gap, thus bringing our economy and workforce into the 21st century. Passing the JOBS Act — a bipartisan bill that would expand federal Pell Grant eligibility to certain high-quality job training programs — is a good starting point. If passed by the Senate, this law would help more workers afford the job training and credentials that are in demand as industries have changed during the pandemic. In addition, another fertile area where Democrats can secure a major victory is on drug pricing. Nearly two-thirds of Americans believe that reducing healthcare costs, such as drug pricing, should be a top priority for Biden and the Democrats, according to a recent Pew Research Center poll. Further, more than 80 percent of Americans believe that prescription drug costs are unreasonable — and sadly, nearly one-third of Americans haven’t taken medications as prescribed in the last 12 months due to high costs, according to an October KFF poll. The importance of such a reform could not be clearer — that being said, it is critical to consider the way in which it is undertaken. Of all people, billionaire investor Mark Cuban recently started an online pharmacy that cuts out the middlemen in drug pricing — known as pharmacy benefit managers (PBMs) — to make drugs more affordable. It seems simple that the entire pharmaceutical market should function in a similar way: Give consumers transparent information about their critical prescription drugs, continue to give them the freedom to follow treatments as prescribed without undercutting access and pass any and all savings directly to patients, never middlemen. Indeed, Democrats coming out in favor of rebates being passed directly to consumers would not just reduce drug prices for all Americans, but would also demonstrate to the most active voter base — American seniors — that the party can deliver in meaningful ways. Ultimately, these reforms are both practically and politically feasible and Democrats should begin pursuing them in earnest. The risks to the party of failing to deliver are too high, and the future control of both bodies of Congress could not be in greater jeopardy.

#### Perma-DST causes social jet lag – increased cardiovascular and mental illness

Rishi et al 20, (Muhammad Adeel Rishi, MD, Omer Ahmed, MD, Jairo H. Barrantes Perez, MD, Michael Berneking, MD, Joseph Dombrowsky, MD, Erin E. Flynn-Evans, PhD, MPH, Vicente Santiago, MD, Shannon S. Sullivan, MD, Raghu Upender, MD, Kin Yuen, MD, MS, Fariha Abbasi-Feinberg, MD, R. Nisha Aurora, MD, MHS, Kelly A. Carden, MD, MBA, Douglas B. Kirsch, MD, David A. Kristo, MD, Raman K. Malhotra, MD, Jennifer L. Martin, PhD, Eric J. Olson, MD, Kannan Ramar, MD, Carol L. Rosen, MD, James A. Rowley, MD, Anita V. Shelgikar, MD, MHPE, Indira Gurubhagavatula, MD, MPH all have medical degrees, “Daylight saving time: An American Academy of Sleep Medicine Position Statement, Journal of Clinical Sleep Medicine, October 15, 2020, https://jcsm.aasm.org/doi/full/10.5664/jcsm.8780)

The last several years have seen intense debate about the issue of transitioning between standard and daylight saving time. In the United States, the annual advance to daylight saving time in spring, and fall back to standard time in autumn, is required by law (although some exceptions are allowed under the statute). An abundance of accumulated evidence indicates that the acute transition from standard time to daylight saving time incurs significant public health and safety risks, including increased risk of adverse cardiovascular events, mood disorders, and motor vehicle crashes. Although chronic effects of remaining in daylight saving time year-round have not been well studied, daylight saving time is less aligned with human circadian biology—which, due to the impacts of the delayed natural light/dark cycle on human activity, could result in circadian misalignment, which has been associated in some studies with increased cardiovascular disease risk, metabolic syndrome and other health risks. It is, therefore, the position of the American Academy of Sleep Medicine that these seasonal time changes should be abolished in favor of a fixed, national, year-round standard time. The American Academy of Sleep Medicine (AASM) is a professional society that advances sleep care and enhances sleep health to improve lives. The AASM advocates for policies that recognize that sleep is essential to health. The period of the year between spring and fall, when clocks in most parts of the United States (U.S.) are set one hour ahead of standard time, is called daylight saving time (DST), and its beginning and ending dates and times are set by federal law (the second Sunday in March at 2:00 am and the first Sunday in November at 2:00 am, respectively), while the remaining period between fall and spring of the following year is called standard time.1 The light/dark cycle is key in circadian entrainment. The acute alterations in timing due to transitions to and from DST contribute to misalignment between the circadian biological clock and the light/dark cycle (or photoperiod), resulting in not only acute personal disruptions, but significant public health and safety risks.2 BACKGROUND Scientific, public and political debate about DST abounds. In response, the European Biological Rhythms Society (EBRS), European Sleep Research Society (ESRS), and Society for Research on Biological Rhythms (SRBR) published a joint statement, declaring that permanent standard time is the best option for public health.3 In fact, the following year the SRBR published the position paper, “Why Should We Abolish Daylight Saving Time?”2 Also, the European Parliament voted to end the mandatory DST change by 2021.4 In the U.S., the Congressional Research Service has identified dozens of states that have introduced legislation that would support changes to the observance of DST.5 While broad support exists for the elimination of the spring and fall time changes, proposed solutions are conflicting: Some states have introduced legislation proposing variations of permanent DST, and a nearly equal number of states have introduced legislation to establish permanent standard time. Although U.S. statute allows state-level exemption from DST,1 and the exemption was claimed by Hawaii and Arizona, moving to permanent DST nationwide would require legislative approval by the U.S. Congress. POSITION It is the position of the AASM that the U.S. should eliminate seasonal time changes in favor of a national, fixed, year-round time. Current evidence best supports the adoption of year-round standard time, which aligns best with human circadian biology and provides distinct benefits for public health and safety. DISCUSSION Light is the most powerful exogenous zeitgeber, or cue, to the regulation of the endogenous circadian rhythm.2 The human circadian phase responds to light in a predictable fashion, by delaying phase (with endogenous biological sleep onset and offset preferences occurring at a later clock time) in the setting of both morning darkness and evening light.6 DST, therefore, induces phase delay by increasing the exposure to both morning darkness and evening light.2 The recommendation in support of permanent standard time is based on a review of existing literature that describes the acute, adverse effects of switching between standard time and DST twice yearly, and the chronic effects of DST during the spring, summer and fall months. Acute effects of switching between standard time and DST Shifting from standard time to DST has been associated with increased cardiovascular morbidity, including risk of myocardial infarction,7,8 stroke,9 and hospital admissions due to the occurrence of acute atrial fibrillation.10 An increase in missed medical appointments and increased emergency room visits and return visits to the hospital are also seen only during the spring transition from standard time to DST.11,12 The one-hour time shift in the spring results in less exposure to light in the morning and greater exposure to evening light. In the presence of continuing social or occupational demands in early morning hours, this delay results in sleep loss and resultant sleep debt,13 in addition to circadian misalignment.2 The end result is a variety of cellular derangements, including altered myocyte gene expression,14 altered epigenetic and transcriptional profile of core clock genes,15 increased production of inflammatory markers,16 lower vagal tone resulting in higher heart rate and blood pressure, and reduced sleep.17 Although most acute health-related effects are noted only when transitioning from standard time to DST, transitions both into and out of DST have been associated with sleep disruption,13 mood disturbances and suicide.18 Traffic accidents increase in the first few days after the change from standard time to DST,19 with an increase in fatal crashes of up to 6% in the United States.20 On the Monday after the transition to DST, volatility in stock markets in the U.S. has been observed.21 While reasons for this are not entirely clear, proposed mechanisms include the impact of sleep deprivation on frontal lobe functioning, which may result in impaired judgement and decision-making capacity.22 Chronic effects of DST There is little direct evidence regarding the chronic effects of DST. Most studies have either been retrospective or have addressed the issue indirectly. DST has been associated with a decrease in crime rate,23 and it may be associated with a modest overall decrease in risk of motor vehicle crashes, possibly due to hours of daylight lasting longer in the evening when most accidents occur, along with other, less obvious reasons.5 However, when temporary, year-round DST was adopted in response to an Organization of the Petroleum Exporting Countries (OPEC) oil embargo, increased fatalities among school-aged children in the morning were noted between January and April. These findings may be due to darkness lasting longer in the morning when children are traveling to school, while other factors also may be at play.24 DST is less well-aligned with intrinsic human circadian physiology, and it disrupts the natural seasonal adjustment of the human clock due to the effect of late-evening light on the circadian rhythm.25 DST results in more darkness in the morning hours, and more light in the evening hours. Both early morning darkness and light in the evening have a similar effect on circadian phase, causing the endogenous rhythm to shift to later in the day. There is evidence that the body clock does not adjust to DST even after several months.26 Permanent DST could therefore result in permanent phase delay, a condition that can also lead to a perpetual discrepancy between the innate biological clock and the extrinsic environmental clock, as well as chronic sleep loss due to early morning social demands that truncate the opportunity to sleep. The chronic misalignment between the timing of demands of work, school, or other obligations against the innate circadian rhythm is called “social jet lag.”27 Studies show that social jet lag is associated with an increased risk of obesity,28 metabolic syndrome,29 cardiovascular disease,30 and depression.31 One study found that in the fall, during the shift from DST back to standard time, there was a reduction in the rate of cardiovascular events,7 suggesting that the risk of myocardial infarction may be elevated because of chronic effects of DST.32 Social jet lag associated with DST may be worse in the western-most areas within a given time zone, where sunset occurs at a later clock time.33 Adopting permanent DST also would undo the benefits of delaying start times for middle schools and high schools.34 During the 1973 OPEC oil embargo, minimal, if any, of the purported energy savings were actually observed in the U.S., and the policy was highly unpopular,35 especially in rural areas of the U.S. After a single winter, the policy was reversed by an overwhelming congressional majority. The unpopularity of the act was likely because, despite greater evening light, the policy resulted in a greater proportion of days that required waking up on dark mornings, particularly in the winter. FUTURE DIRECTIONS Although the acute, adverse effects of DST are well-described, few studies have evaluated the chronic effects of DST on physiology, performance, health, economics and safety. Such studies should attempt to address confounding seasonal effects, including the length of the photoperiod. In addition, more studies are needed to determine how eastward or westward position in a time zone influences health and safety outcomes. Studies that compare the impacts of permanent standard time to permanent DST are also needed.36 CONCLUSIONS Existing data support the elimination of seasonal time changes in favor of a fixed, year-round time. DST can cause misalignment between the biological clock and environmental clock, resulting in significant health and public safety-related consequences, especially in the days immediately following the annual change to DST. A change to permanent standard time is best aligned with human circadian biology and has the potential to produce beneficial effects for public health and safety.

#### Public health workers key to mitigate future pandemics

Sabow et Al 20 Matt Craven, Adam Sabow, Lieven Van der Veken, and Matt Wilson 7-13-2020 "Not the last pandemic: Investing now to reimagine public-health systems" <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/not-the-last-pandemic-investing-now-to-reimagine-public-health-systems> (Senior Partner at McKinsey - Works with pharmaceutical companies, biotechnology firms, global health institutions, and not for profits to support commercial and operational improvements in vaccines, biologics, and sterile injectables)//Elmer

The COVID-19 pandemic has exposed overlooked weaknesses in the world’s infectious-disease-surveillance and -response capabilities—weaknesses that have persisted in spite of the obvious harm they caused during prior outbreaks. Many countries, including some thought to have strong response capabilities, failed to detect or respond decisively to the early signs of SARS-CoV-2 outbreaks. That meant they started to fight the virus’s spread after transmission **was well established**. Once they did mobilize, some nations struggled to ramp up public communications, testing, contact tracing, critical-care capacity, and other systems for containing infectious diseases. Ill-defined or overlapping roles at various levels of government or between the public and private sectors resulted in further setbacks. Overall, delayed countermoves worsened the death toll and economic damage. Correcting those weaknesses won’t be easy. Government leaders remain focused on navigating the current crisis, but making smart investments now can both accelerate COVID-19 response and strengthen public-health systems to reduce the chance of **future pandemics**. Investments in public health and other public goods are sorely undervalued; investments in preventive measures, whose success is invisible, even more so. Many such investments would have to be made in countries that cannot afford them. Nevertheless, now is the moment to act. The world has seen repeated instances of what former World Bank president Jim Kim has called a cycle of “panic, neglect, panic, neglect,” whereby the terror created by a disease outbreak recedes, attention shifts, and we let our vital outbreak-fighting mechanisms atrophy.1 And while some are calling the COVID-19 crisis a 100-year event, we might come to see the current pandemic as **a test run for a pandemic that arrives soon**, with even more serious consequences. Imagine a disease that transmits as readily as COVID-19 **but kills 25 percent** of those infected and **disproportionately harms children**. The case for strengthening the world’s pandemic-response capacity at the global, national, and local levels is compelling. The economic disruption caused by the COVID-19 pandemic could cost between $9 trillion and $33 trillion—many times more than the projected cost of preventing future pandemics. We have estimated that spending $70 billion to $120 billion over the next two years and $20 billion to $40 billion annually after that could substantially reduce the likelihood of future pandemics (Exhibit 1). These are high-level estimates with wide error bars. They do not include all the costs of strengthening health systems around the world. A comprehensive program of health-system strengthening at all levels would cost substantially more and also contribute to effective outbreak management. Our preliminary findings call for further investigation, but we hope the overall message is clear: infectious diseases will continue to emerge, and a vigorous program of capacity building will prepare the world to respond better than we have so far to the COVID-19 pandemic. In this article, we describe the five areas that such a program might cover: building “always on” response systems, strengthening mechanisms for detecting infectious diseases, integrating efforts to prevent outbreaks, developing healthcare systems that can handle surges while maintaining the provision of essential services, and accelerating R&D for diagnostics, therapeutics, and vaccines (Exhibit 2). From ‘break glass in case of emergency’ response systems to always-on systems and partnerships that can scale rapidly during pandemics Responding to outbreaks of infectious diseases involves different norms, processes, and structures from those used when delivering regular healthcare services. Decision making needs to be streamlined; leaders must make no-regrets decisions in the face of uncertainty. But much of our present epidemic-management system goes unused until outbreaks happen, in a “break glass in case of emergency” model. It is difficult to switch on those latent response capabilities suddenly and unrealistic to expect them to work right away. A better system might be founded on a principle of active preparedness and constructed out of mechanisms that can be consistently used and fine-tuned so they are ready to go when outbreaks start (Exhibit 3). We see several means of instituting such an always-on system. One is to use the same mechanisms that we need for fast-moving outbreaks (such as COVID-19) to address slow-moving outbreaks (such as HIV and tuberculosis) and antimicrobial-resistant pathogens. **Case investigation and contact tracing are skills familiar** to specialists who manage HIV and tuberculosis. But few areas have deployed their experts effectively in responding to the COVID-19 pandemic.

C/A Diamandis 22 card from case

### 3

#### Anti-trust is intrinsically tied to a capitalist economic understanding- they promote competition and protect capitalism.

#### Parakkal & Bartz-Marvez 13, Raju Parakkal: Assistant Professor of International Relations, Philadelphia University. Sherry Bartz-Marvez: Visiting Assistant Professor of Economics, University of Miami (“Capitalism, democratic capitalism, and the pursuit of antitrust laws”, *The Antitrust Bulletin*, Vol. 58, No. 4, 2013)

Antitrust laws have historically been associated with countries that possess a free-market capitalist economy, which is understood as an economic system in which competition and the market forces of demand and supply determine economic outcomes. This historical association between capitalism and antitrust laws is evident from the fact that the countries that first adopted national antitrust laws, such as Canada, the United States, and the countries of Western Europe, are countries that have long embraced a market economy. On the contrary, the statist economies of the erstwhile Soviet bloc and many developing countries, for the most part, did not institute antitrust laws of the type associated with free market economies.

Notwithstanding these country examples, which indicate a positive association between a capitalist economic system and antitrust laws, there exist arguments that both support and oppose antitrust laws for a capitalist economy. Arguments in support of antitrust laws for a capitalist economy begin with the fundamental understanding that the **most important ingredient of a capitalist system is market competition**. The presence of a competitive market is vital to achieving the **efficiency** levels that a capitalist economy seeks. Therefore, competitive forces need to be protected to discipline the market players, especially the dominant ones. By preventing and punishing anticompetitive practices by market players, an antitrust law protects and promotes market **competition**. 1

In the United States, which is commonly understood to be the leading bastion of free-market capitalism and one of the first countries to enact an antitrust law, the role of antitrust legislation in **preserving the capitalist** character of its economic system is underscored by the near-constitutional status accorded to its antitrust statues by the U.S. Supreme Court. 2 The Court described these statutes as “the **Magna Carta of free enterprise**” and “as important to the preservation of economic freedom and our free enterprise system as the Bill of Rights is to the protection of our fundamental personal freedoms.”3 Such a sentiment is appropriate, given that the American antitrust law, the Sherman Act, was passed in 1890 to protect economic competition from rapidly-growing “trusts.”4

While the social and political zeitgeist has changed considerably since the passing of the Sherman Act, the fact remains that antitrust is perceived as key to “protecting consumers against anticompetitive conduct that raises prices, reduces output, and hinders innovation and economic growth.”5 Moreover, it is understood that “**competition is a public good**, and society cannot expect the victims of anticompetitive conduct to protect themselves.”6 The implication therefore is that government power, through the enforcement of antitrust statutes, is critical to reining in corporate power in order to protect economic competition and capitalism.

#### Capitalism causes endless structural violence and environmental collapse – the aff is a diversionary tactic

#### McLaren and D'Annibale 3, (Valerie Scatamburlo-D'Annibale and Peter McLaren, Cultural Studies <=> Critical Methodologies, 2003 3: 148, “The Strategic Centrality of Class in the Politics of 'Race' and ''Difference’” May 1, 2003, SAGE)

Global imperialist capitalism has paved the way for a world that is increasingly divided between those who enjoy opulent affluence and those who live in dehumanizing servitude and economic misery. In every country of the world, we are witnessing social disintegration accompanied by a rise in abject poverty, unemployment, inequality, and environmental degradation (Wallach & Sforza, 1999; World Health Organization, as cited in Canadian Centre for Policy Alternatives, 2002). Today, roughly 2.8 billion people—almost half the world’s population—are living on less than U.S. $2 a day (McQuaig, 2001, p. 27). These are the concrete realities that currently exist throughout the globe—vertiginous narratives of desperation, destitution, and despair that perversely betoken the “death of history” and the triumph of capitalism. Given this context, it seems unfathomable that many “leftists” have championed “the decentering of capitalism,” “the abandonment of revolutionary politics,” and the “emphasis on language—its priority over deeds, words or social forces” (Wray, 1998) at precisely a time when a critical and unrelenting interrogation of capitalism seems more necessary than ever. Are contemporary “leftists” serving as diversionists rather than political interventionists? Are they, as E. P. Thompson (1978) once suggested about his “radical” contemporaries, too “enclosed and imprisoned within their own dramas” (p. 4)? Has the allure of abstract theorizing (as an end in and of itself) designed to impress academic bedfellows with a command of academese become a “substitute for more difficult practical engagements” (pp. 249-251)? Have the panegyrical accounts of postmodern theory blinded progressive scholars to the possibilities offered by historical materialist critique?

#### Vote neg for anti-capitalist commons – collectives should refuse commitments to competitive principle and the straitjacket of what’s “realistic”

#### Rose 21 [Nick. PhD in Political Ecology from RMIT University. Executive Director of Sustain: The Australian Food Network. From the Cancer Stage of Capitalism to the Political Principle of the Common: The Social Immune Response of “Food as Commons.” Int J Health Policy Manag 2021. 3-31-21. DOI: 10.34172/ijhpm.2021.20 //shree]

Silvia Federici provides a longer historical perspective, noting that ‘commoning is the principle by which human beings have organised their existence for thousands of years;’ and that to ‘speak of the principle of the common’ is to speak ‘not only of small-scale experiments [but] of large-scale social formations that in the past were continent-wide.’87 Hence a commons-based society is neither a utopia or reducible to fringe projects, and the commons have persisted despite the many and continuing enclosures, ‘feeding the radical imagination as well as the bodies of many commoners.’87 Federici acknowledges that commons and practices of commoning are diverse, that many are susceptible to cooptation and many are consistent with the persistence of capitalism; indeed some, such as charities providing social services (including foodbanks) during the years of austerity budgets in the United Kingdom (2010-2015), reinforce and stabilise capitalism.87 What matters to Federici is the character and intentionality of the commons as anti-capitalist, as ‘a means to the creation of an egalitarian and cooperative society…no longer built on a competitive principle, but on the principle of collective solidarity [and commitments] to the creation of collective subjects [and] fostering common interests in every aspect of our lives.’87 Federici’s analysis resonates with the political thought and proposals developed by Dardot and Laval in their 2018 work, ‘On Common: Revolution in the 21st century.’11 For Dardot and Laval, the common is likewise understood as a principle of political struggle, a demand for ‘real democracy’ and a major driving force behind the emerging articulation of a political vision and programme that transcends and overcomes the straitjacket logic of neoliberal ideological hegemony and its ‘policy grammar’ which appears to foreclose all alternatives and lock us forever into a capitalist realism in which ‘it is easier to imagine the end of the world than it is to imagine the end of capitalism.’89 Eschewing Bollier’s ‘triarchy’ of a market/state/ commons coexistence, Dardot and Laval argue for a politics of the common based on an engaged citizenry that directly participates and deliberates in all decisions which impact it, and in the process not merely transforms the institutions responsible for the management of services and allocation of resources, but creates new institutions and new ways of being in the world.11 Dardot and Laval describe this form of politics as ‘instituent praxis’: the common, they argue, is ‘not produced but instituted.’11 This acknowledges the conventional understanding of Ostrom, Bollier and others of ‘the commons’ as residing in the rules – the laws – that a community establishes for the collective management and use of shared resources, but extends it much further and in a more radical direction. The essence of the commons, they argue, is not in the goods per se such as land or a forest or a seed bank ‘held in common,’ but rather in the process of their establishment as well as the ongoing negotiation that will surround their use and governance. Hence, Dardot and Laval distinguish the commons from the ‘rights’ tradition of property, arguing that ‘the commons are above all else matters of institution and government…the use of the commons is inseparable from the right of deciding and governing. The practice that institutes the commons is the practice that maintains them and keeps them alive and takes full responsibility for their conflictuality through the coproduction of rules.’90 To ‘institute’ in this context should not be misunderstood as ‘to institutionalise [or] render official;’ rather it is ‘to recreate with, or on the basis of, what already exists.’ 90 This messy, conflictual and evolving process is what Dardot and Laval insist will ultimately bring about a revolution, not in the form of a violent uprising or insurrection, but rather through the ‘reinstitution of society’ via the transformation of politics and economy from its current state of ‘representative oligarchy’ to full participatory and deliberative democracy.11 Such a vision is premised on a mass politicisation of society; in effect a return of mass popular political contestation and a turn away from the postpolitical era of the neoliberal consumer.91-92

### 4

#### The 50 state governments and relevant sub-federal territories, in coordination through the National Association of Attorneys General, should increase prohibitions on patent thickets.

#### State action solves, won’t be preempted, and causes federal follow-on

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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.[2] In addition, state enforcers had often used general corporation law and common law restraint of trade principles to regulate anticompetitive business practices and transactions.[3] 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.[4] Indeed, state attorneys general successfully prosecuted a number of the most consequential antitrust enforcement actions during this period.[5]

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.[6] 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.[7] 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.[8]

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.[9] 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.[10] 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.[11] 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’.[12] 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.[13] 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.[14]

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.[15] 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.[16]

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.[17] 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.[18]

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:

* 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.[24]
* In their joint investigation into the T-Mobile/Sprint merger, nearly 20 state attorneys general sued to block the transaction in September 2019 even though the DOJ, along with seven state attorneys general, approved the deal after securing certain structural and behavioural remedies.[19] After the DOJ announced its proposed settlement with the companies, the Attorney General for New York, who led 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.’[20] Thereafter, the DOJ opposed the states’ enforcement action by, among other things, moving to disqualify the private counsel hired by the states to represent them[21] and filing submissions that argued against the states’ requested injunction.[22] Ultimately, the state attorneys general were unsuccessful in their bid to block the deal.[23]
* 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.[25] In fact, nine state attorneys general filed an amicus brief opposing the DOJ’s appeal of the trial court’s decision.[26]
* 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.’[27]

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.[28]

### Case

#### The plan creates a rippling, cross-industry effect that wrecks pharma innovation

Dr. Douglas Holtz-Eakin 21, Ph.D. in Economics from Princeton University, President of the American Action Forum, and B.A. in Economics and Mathematics from Denison University, “Losing Focus on Antitrust”, American Action Forum – The Daily Dish, 2/11/2021, https://www.americanactionforum.org/daily-dish/losing-focus-on-antitrust/

The point of antitrust law is to ensure that markets deliver the maximal possible benefits to Americans. Specifically, a prime tenet of competition policy is the consumer welfare standard. Vigorous market competition ensures that no firm is able to exploit consumers. Testing whether a business practice, merger, or acquisition diminishes consumer welfare is the right bottom line for checking on the quality of competition.

It is troubling, then, that Senator Amy Klobuchar introduced the Competition and Antitrust Law Enforcement Reform Act (CALERA), the first significant bill regarding potential changes to antitrust law in the 117th Congress. As AAF’s Jennifer Huddleston points out, most of the attention around competition is usually focused on Big Tech and the notion of a “kill zone” that allows Big Tech companies to gobble up competitors before they can rise to challenge the dominance of giants. Unfortunately, the kill zone is a fiction and the significant, deleterious changes in CALERA would apply economy-wide.

Among CALERA’s proposed changes are three important and troublesome aspects. The first is removing the need for enforcers to define the market in which a company is accused of acting anti-competitively. To the non-lawyer, this change is baffling. In absence of identifying the goal, how can enforcement authorities identify the impact that behavior has on competition for that goal? Competition is for something – a gold medal, a promotion, or the sale of a good or service. Identifying the market defines the goal, so leaving out any definition of the market leaves undefined the nature of the competition. This definition is often a critical point of debate in current antitrust cases, so eliminating the need for it gives enforcers a substantial advantage over firms.

The second change is to weaken the consumer welfare standard. Specifically, per Huddleston, “it would change the government’s requirement from proving that a merger would substantially lessen competition (and thereby reduce consumer options) to showing only that a merger would ‘create an appreciable risk of materially lessening competition.’” This is like changing the legal standard from “beyond reasonable doubt” to “beyond all doubt”; after all, there is always a risk of something. As a result, the regulatory cost for any merger would rise significantly, likely deterring even beneficial ones.

Finally, CALERA would change the burden of proof in analyzing the competitive impacts of mergers and acquisitions. This is literally a simple as switching from “innocent until proven guilty” to “guilty until you can prove you are innocent.” Not only does this again make beneficial mergers more difficult, but such a change flies in the face of the entire American legal tradition.

Why should one care about these changes? One can’t do the needed rigorous analysis of competitive behavior without a definition of the market; this change would allow decisions based on all sorts of ancillary considerations. The latter two are particularly harmful in markets (such as the technology or pharmaceutical sectors) where it is often difficult for anyone to predict where rapid changes may fundamentally change the market itself and where the role of mergers and acquisitions is misunderstood. This is a risk under the current standards, but under the proposed changes it could lead to a chilling effect or bureaucratic denial of mergers that would actually benefit consumers.

The current standards focus antitrust on clearly defined markets, the quality of competition in those markets, and the resulting consumer benefits. Losing focus on consumer welfare is tantamount to losing the rudder on a ship; who knows where it ends up?

#### Ideological judges will gut the plan

John Newman 19, Professor of Law at the University of Miami School of Law and Former Attorney with the U.S. Department of Justice Antitrust Division, JD from the University of Iowa College of Law, BA from the Iowa State University of Science & Technology, “What Democratic Contenders Are Missing in the Race to Revive Antitrust”, The Atlantic, 4/1/2019, https://www.theatlantic.com/ideas/archive/2019/04/what-2020-democratic-candidates-miss-about-antitrust/586135/

But the federal courts represent a massive stumbling block for any progressive antitrust movement. Reformers have identified two paths forward; both lead eventually to the court system. The first is relatively moderate: appoint regulators who will actually enforce the laws already on the books. Warren’s plan rests in part on this straightforward idea. The second, more audacious path requires congressional action to amend and strengthen our current laws. Warren’s call for a new ban on technology companies’ buying and selling via their own platforms falls into this category. Klobuchar has also proposed new antitrust legislation that would make it easier to block harmful mergers and acquisitions.

But no matter its content, enforcing a law requires persuading a judge. When it comes to U.S. antitrust laws, federal judges—not Congress, and not regulatory agencies—are the ultimate arbiters. The Department of Justice Antitrust Division, one of our two public enforcement agencies, files all its cases in federal courts. And although the Federal Trade Commission (the other) can decide cases internally, the inevitable appeals eventually end up in court as well.

No matter how strongly worded a law may be, ideologically driven judges can usually find a way around enforcing it. The cyclical history of U.S. antitrust law is proof that judges wield nearly limitless institutional power in this area.

Soon after Congress passed the Sherman Act in 1890, a conservative Supreme Court began to chip away at its effectiveness. Congress reacted in 1914 with the Clayton Act, which sought to ban anticompetitive mergers. In 1936, at the height of the New Deal era, Congress passed the Robinson-Patman Act, which prohibits price discrimination (charging different prices to different buyers for the same product). These laws were actively enforced for decades.

But starting in the late 1970s, conservative judges began to erode the Clayton Act. Today, megamergers among competitors such as Bayer and Monsanto barely raise eyebrows. So-called vertical mergers, which combine suppliers and their customers, are now all but immune from antitrust enforcement—see the DOJ’s failed challenge to AT&T and Time Warner’s recent tie-up.

Under the business-friendly Roberts Court, the Robinson-Patman Act has similarly been eviscerated. By the 2000s, the ideas of the conservative Chicago School had become mainstream in antitrust circles. Robinson-Patman, a law intended to protect small businesses, was an easy target for Chicago School critics narrowly focused on efficiency and low consumer prices. Their attacks found a receptive audience in the federal judiciary. Among insiders, Robinson-Patman is now known as “zombie law.” It remains on the books, but regulators no longer bother trying to enforce it.

If Democrats want to change antitrust law, they will first and foremost need to change the judges who apply it. Yet none of the 2020 contenders championing antitrust reform have even mentioned the possibility of appointing progressive antitrust thinkers to the bench.

Conservatives, on the other hand, have long recognized the centrality of antitrust to broader questions about the apportionment of power in society. In his seminal work, The Antitrust Paradox, Robert Bork called antitrust a “microcosm in which larger movements of our society are reflected.” Battles fought in this arena, Bork wrote, “are likely to affect the outcome of parallel struggles in others.” Strong antitrust enforcement keeps powerful monopolies in check. Toothless antitrust allows the unlimited accumulation of corporate power.

Recognizing the high stakes, the Republican Party has gone to great lengths to appoint conservative antitrust experts to the federal judiciary. Bork was an antitrust professor at Yale Law School before becoming an appellate judge in 1982.\* Frank Easterbrook practiced and taught antitrust before donning the black robe in 1985. Douglas Ginsburg served as the head of the Justice Department’s Antitrust Division before he became a federal judge in 1986. None of the three managed to join the Supreme Court, but not for lack of trying. Reagan nominated both Bork and Ginsburg to serve as justices, though Ginsburg withdrew and Bork was famously rejected after a contentious Senate hearing.

And whom did the GOP select as its very first U.S. Supreme Court nominee during the Trump Administration? None other than Neil Gorsuch, who practiced antitrust law for more than a decade before joining the Tenth Circuit. Even as a judge, Gorsuch continued to teach a law-school course on antitrust until his confirmation to the Supreme Court in 2017.

Once upon a time, progressives demonstrated similar concern about judicial treatment of antitrust laws. Justice Stephen Breyer, for example, served as special assistant to the head of the DOJ Antitrust Division before his judicial appointment by President Jimmy Carter. Earlier still, Justice John Paul Stevens was an antitrust lawyer, scholar, and professor before his appointment to the bench.

Today’s Democratic 2020 hopefuls seem to have forgotten the lessons of history. Their antitrust proposals focus exclusively on appointing the right regulators and amending our current statutes. These are right-minded ideas, but they overlook the central role judges play in our political system.

There is an old saying in the legal community: “Hard cases make bad law.” That may be true, but it is just as often the case that bad judges make bad law. Real antitrust reform will require more than regulatory and legislative tweaks; it will require the right judges.

#### Antitrust is developed by adjudication---that creates an unpredictable and unenforceable patchwork

Rohit Chopra 20, Commissioner of the Federal Trade Commission, and Lina M. Khan, Academic Fellow at Columbia Law School, Counsel to the Subcommittee on Antitrust, Commercial, and Administrative Law, US House Committee on the Judiciary and Former Legal Fellow at the Federal Trade Commission, “The Case for "Unfair Methods of Competition" Rulemaking”, University of Chicago Law Review, 87 U. Chi. L. Rev. 357, March 2020, Lexis

I. THE STATUS QUO: AMBIGUOUS, BURDENSOME, AND UNDEMOCRATIC?

Antitrust law today is developed exclusively through adjudication. In theory, this case-by-case approach facilitates nuanced and fact-specific analysis of liability and well-tailored remedies. But in practice, the reliance on case-by-case adjudication yields a system of enforcement that generates ambiguity, unduly drains resources from enforcers, and deprives individuals and firms of any real opportunity to democratically participate in the process.

One reason that antitrust adjudication suffers from these shortcomings is that courts analyze most forms of conduct under the "rule of reason" standard. The "rule of reason" involves a broad and open-ended inquiry into the overall competitive effects of particular conduct and asks judges to weigh the circumstances to decide whether the practice at issue violates the antitrust laws. Balancing short-term losses against future predicted gains calls for "speculative, possibly labyrinthine, and unnecessary" analysis and appears to exceed the abilities of even the most capable institutional actors. 1 Generalist judges struggle to identify anticompetitive behavior 2 and to apply complex economic criteria in consistent ways. 3 Indeed, judges themselves have criticized antitrust standards for being highly difficult to administer. 4 And if a standard isn't administrable, it won't yield predictable results. The dearth of clear standards and rules in antitrust means that market actors face uncertainty and cannot internalize legal norms [\*360] into their business decisions. 5Moreover, ambiguity deprives market participants and the public of notice about what the law is, thereby undermining due process--a fundamental principle in our legal system. 6

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

#### Courts lack expertise to make correct decisions. That allows continued market distortion.

Dr. Herbert Hovenkamp 18, PhD in American Civilization from the University of Texas, JD from the University of Texas School of Law, BA from Calvin College, MA in American Literature from the University of Texas, James G. Dinan University Professor at Penn Law and Wharton School of Business at the University of Pennsylvania, Fellow of the American Academy of Arts and Sciences, “The Rule of Reason”, Florida Law Review, 70 Fla. L. Rev. 81, January 2018, Lexis

II. BURDENS OF PROOF, QUALITY OF EVIDENCE, AND THE "QUICK LOOK"

A. Cost Savings from the Per Se Rule?

Antitrust policy should strive to reduce the social costs of anticompetitive behavior, which has two distinct components. One is the net social costs of anticompetitive price increasing or output reducing conduct and the private measures taken to defend against it, offset by any economic benefits. Second are administrative costs, including error costs, of operating the enforcement system.

One must assume that a full-blown rule of reason inquiry is much costlier than analysis under the per se rule. Applying the rule of reason typically requires expert testimony identifying a relevant market or alternative mechanisms for estimating market power, as well as some evidence that purports to measure actual anticompetitive effects. 103 By contrast, the per se rule requires only proof that a particular type of conduct has occurred. Thus, the rule of reason is justifiable only to the extent that it provides superior outcomes.

Administrative costs include not only the costs of litigation, whether terminated by settlement, dispositive motion, or trial, including appeals, but also the cost of detecting violations, of determining whether to sue, as well as of antitrust compliance with whatever the rule happens to be. Error costs are particularly relevant to compliance costs. For example, an unduly harsh tying rule may influence firms to avoid socially beneficial tying. By contrast, an overly lenient predatory-pricing rule may yield excessive anticompetitive predation. 104

[\*99] Excessive complexity can increase error costs just as much as excessive simplicity. Antitrust cases in the United States are decided by generalist judges, many of whom lack economics training. Further, facts are often determined by juries, who frequently lack any relevant training whatsoever. In such cases increased complexity can produce poorer rather than better outcomes. 105 As a result, a per se rule that is easily administered but right only 80 percent of the time may actually be preferable to an open-ended rule of reason query with an arbitrary and indeterminate error rate.

#### No impact to patent trolls---the problem is structural.

Mark A. Lemley & A. Douglas Melamed 13, Director of the Program in Law, Science & Technology and William H. Neukom Professor of Law at Stanford Law School, J.D. from the University of California, Berkeley School of Law; Senior Vice President and General Counsel of Intel Corporation, J.D. from Harvard Law School, “Missing the Forest for the Trolls,” Columbia Law Review, Vol. 113, December 2013, accessed via Lexis

Nonetheless, we think the focus on patent trolls obscures a more complex set of challenges confronting the patent system. In this Article, we make three points about the problems commonly associated with trolls. First, patent trolls are not a unitary phenomenon. We see at least three different troll business models developing, and those models have different effects on the patent system. Second, patent assertions by practicing entities can create just as many problems as assertions by patent trolls. The nature of many industries obscures some of the costs of those assertions, but that does not mean they are cost-free. In addition, practicing entities are increasingly engaging in "patent privateering," in which product-producing companies take on many of the attributes of [\*2121] trolls. Put differently, while trolls exploit problems with the patent system, they are not the only ones that do so. Third, many of the problems associated with trolls are in fact problems that stem from the disaggregation of complementary patents (patents that cover technologies used together in the same products) into too many different hands. That in turn suggests that aggregators might be reducing, not worsening, these problems (though, as we will see, the overall effects are ambiguous) and that "patent privateers" that spin off patents in order for others to assert them might make things worse. For this reason, patent reformers and antitrust authorities should worry less about aggregation of patent rights and more about disaggregation of those rights, sometimes accomplished by spinning them out to others.

Understanding the economics of patent assertions by both trolls and practicing entities allows us to move beyond labels and the search for "bad actors" and to focus instead on aspects of the patent system itself that give rise to the problems and on specific, objectionable conduct in which both trolls and practicing entities sometimes engage. Patent trolls alone are not the problem; they are a symptom of larger problems with the patent system. Treating the symptom will not solve the problems. In a very real sense, critics have been missing the forest for the trolls. Exposing the larger problems allows us to contemplate changes in patent law that will actually tackle the underlying pathologies of the patent system and the abusive conduct they enable.

#### Litigation against patent trolls isn’t burdensome.

Jean Xiao 16, J.D. and Ph.D. candidate in Law and Economics from the Vanderbilt University Law School, Senior Articles Editor for the Vanderbilt Law Review, B.A. in Economics from Vanderbilt University, “In Defense of Patent Trolls: Patent Assertion Entities as Commercial Litigation Funders,” Chicago-Kent Journal of Intellectual Property, Vol. 16, 11-22-2016, accessed via Lexis

Second, critics gripe about the costs of troll lawsuits. 42 Bessen and Meurer (2014) estimated the sum of direct costs on defendants of nonpracticing entity (including troll) litigation to be approximately twenty-nine billion dollars. 43 Beyond direct lawsuit expenses, opponents argue that troll patent assertions also impose indirect costs, such as the disruption of business operations and loss of market share. 44 When examining the time period from January 2007 to October 2011, Bessen et al. (2011) found that defendants' total loss of wealth resulting from non-practicing entity litigation was eighty-three billion dollars per year. 45

[\*43] While patent cases financially burden defendants, they also necessitate large capital investments from plaintiffs including trolls--a point that critics have failed to recognize. 46 For a median-value patent lawsuit between one and twenty-five million dollars, a plaintiff pays about two million dollars in litigation costs. 47 Unless a troll believes that the expected value of the case exceeds the expenses, it will not initiate the legal action. 48 Further, there is no empirical evidence that suggests troll litigation imposes higher costs on defendants than that of practicing entities. In fact, patent assertions by practicing entities are likely more burdensome for defendants due to the discovery needed to investigate these entities' products or services. 49

#### Antitrust over patents fails.

Matthew G. Sipe 16, Law Clerk for Judge Kathleen M. O’Malley on the United States Court of Appeals for the Federal Circuit, J.D. from Yale Law School, “Patents v. Antitrust: Preempting Conflict,” American University Law Review, Vol. 66, December 2016, accessed via Lexis

Paradoxically, antitrust involvement in the patent sphere itself occasionally generates anticompetitive problems. A key example of this occurrence comes from the standard-setting context. As noted in Section III.A, SSOs are concerned with the potential for a patent owner to charge an exorbitant royalty rate after its technology has been incorporated into a standard and implementers are thereby effectively "locked-in." 316 As a result, before incorporating a known patented technology into a standard, SSOs will frequently require patent owners to agree in advance to license its technology on certain favorable terms. 317

However, SSOs are constrained in their ability to engage in such ex ante negotiations due to antitrust interference. An SSO requiring all standard-implicating patent owners to license at a given rate may be characterized as a price-fixing cartel--a serious Sherman Act violation. 318 As a result, SSOs use [\*471] "licensing obligations [that] are left intentionally vague to avert price-fixing liability." 319 Typically, these obligations take the form of nebulous "FRAND" terms: the patentee is asked to agree to license on "fair, reasonable, and non-discriminatory terms." 320

This intentional ambiguity unfortunately comes at the cost of enforceability: Despite the appeal of FRAND commitments, a

consistent, practical, and readily enforceable definition of FRAND has proven difficult to achieve. Virtually no [SSO] defines what this elusive phrase means, and many [SSOs] affirmatively disclaim any role in establishing, interpreting, or adjudicating the reasonableness of FRAND licensing terms. In fact, some [SSOs] go so far as to prohibit discussions of royalties and other licensing terms at [SSO] meetings, making the development of any consensus view unlikely. 321

As a result, there has been considerable litigation between patentees and SSOs over the meaning of their FRAND obligations--leaving courts to the thankless task of determining, for example, what a "reasonable" price for a given patent license is. 322 Scholars and policymakers have already proposed antitrust intervention as a solution to these attempts to "exploit the ambiguities" of FRAND commitments. 323 But these proposals consistently fail to observe the role that antitrust played in creating and perpetuating these ambiguities in the first place.

In other words, antitrust law has created an anticompetitive problem in the patent sphere, and the existence of that anticompetitive problem is now being used as a justification for greater antitrust intervention. In cases such as this, [\*472] preemption offers an out. Antitrust intervention, on the other hand, merely ensures its own necessity.

#### The patent system is resilient.

Mark A. Lemley 16, Director of the Program in Law, Science & Technology and William H. Neukom Professor of Law at Stanford Law School, J.D. from the University of California, Berkeley School of Law, “The Surprising Resilience of the Patent System,” Texas Law Review, Vol. 95, No. 1, November 2016, accessed via HeinOnline

1. Good: The Sky Isn't Falling.-First, the good news: we are unlikely to break the patent system, whether by passing patent reform legislation or by failing to pass it. Much of the academic and policy debate over patent law in the past twenty years has focused on the relative dangers of overprotection and underprotection. Both sides have worried that changes to the patent system will kill the goose that laid the golden egg, retarding, rather than promoting, innovation. Those who worry about overprotection fear that patent trolls will impose a tax on true innovators and that too many strong patent rights will make cumulative innovation and bringing products to market harder.23 8 Those who (more recently) worry about underprotection tout the U.S. patent system as the primary reason for our national lead in innovation, and fear that weakening that system will discourage invention and prevent good ideas from getting to market.239

The evidence, however, suggests that both of these concerns are overblown. Radical changes in both patent substance and procedure that strengthened the hand of patent owners during the 1980s and 1990s and brought us a deluge of patent trolls didn't break the patent system, worries about the patent crisis notwithstanding. Indeed, they didn't seem to have a significant causal effect on patent applications, patent grants, patent lawsuits, or patent judgments.

By the same token, the more recent reforms to the patent system weakening patent rights will also not break the patent system. Indeed, those reforms too don't seem to have much changed the ever-increasing number of patent applications, patent grants, or patent lawsuits. Nor have they reduced patentees' win rate in court or the damage awards they receive when they do win. We don't, of course, know whether the courts and Congress will continue to cut back on the power of patent owners. There is some reason to think the pendulum is slowing down.240 But previous changes to the substance of patent law haven't derailed the patent system. Indeed, they haven't even changed its momentum very much. The same is likely to be true for the foreseeable future. The good news, then, is that the sky isn't falling. We aren't about to destroy the patent system or halt innovation.

#### The risk of existential disease is .01%

Dr. Ilan Noy 22, Chair in the Economics of Disasters and Climate Change at the Victoria University of Wellington, PhD from the University of California, Santa Cruz, and Dr. Tomáš Uher, PhD, Professor at Masaryk University, “Four New Horsemen of an Apocalypse? Solar Flares, Super-volcanoes, Pandemics, and Artificial Intelligence”, Economics of Disasters and Climate Change, 1/15/2022, SpringerLink

High-Mortality Pandemics

A naturally occurring pandemic (i.e., not from an engineered pathogen) that would threaten human extinction is a very small probability event. However, historical accounts point to several instances where disease spread played an important role in causing very significant decline of specific populations. For example, the introduction of novel diseases to the Native American population during the European colonization of the Americas had deadly consequences. It is difficult to distinguish the effects of the diseases that came with the Europeans from the war and conflict they also brought with them. Nevertheless, during the first hundred years of the colonization period, the American population may have been reduced by as much as 90% (Ord 2020).

Moreover, two major pandemic events, the Justinian Plague in the sixth century and the Black Death in the fourteenth century appear to have been severe enough to cause a significant population decline of tens of percent in the populations they affected. Both events are believed to have been caused by plague, an infectious disease caused by the bacteria Yersinia Pestis (Christakos et al. 2005; Allen 1979). While there is a certain degree of uncertainty involved in studying these events’ societal impacts, historical accounts in combination with modern scientific methods provide us with some valuable insights into the effects they may have had on the societies of the time.

With respect to the possibility of a future catastrophic global pandemic, it appears that this risk is increasing significantly along with the advances in the field of synthetic biology and the rising possibility of an accidental or intentional release of an engineered pathogen. While some of the scientific efforts in the field of synthetic biology are directed towards increasing our understanding and our ability to prevent future catastrophic epidemic threats, the risk stemming from these activities is non-trivial, and may outweigh their benefits.

The Justinian Plague

The Justinian Plague severely affected the people of Europe and East Asia, though estimates of its overall mortality vary. Focusing exclusively on the first wave of the pandemic (AD 541–544), Muehlhauser (2017) suggests the pandemic was associated with a 20% mortality in the Byzantine empire. This estimate is based on the mortality rate estimated for the empire’s capital, Constantinople, by Stathakopoulos (2007) to produce a death toll of roughly 5.6 million. For a longer time span, AD 541 to 600, which included subsequent waves of the plague, scholars estimate a higher mortality rate of 33–50% (Allen 1979; Meier 2016).

The demographic changes associated with this high mortality led to a significant disruption of economic activity in the Byzantine empire (Gârdan 2020). A decline in the labour force caused a decline in agricultural production which led to food shortages and famine (Meier 2016). Trade also collapsed. Decreased tax revenues caused by the population decline initiated a major fiscal contraction and consequently a military crisis for the empire (Sarris 2002; Meier 2016). In the longer run, however, the massive reduction of the labour force appears to have had a positive economic effect for the surviving laborers, as the increased marginal value of labour caused a rise in real wages and per capita incomes. These beneficial effects for the survivors were also observed after the Black Death (Pamuk and Shatzmiller 2014; Findlay and Lundahl 2017).

The mortality and the disruption of activity the plague caused in the Byzantine empire also led to further direct and indirect cultural and religious consequences. Meier (2016) particularly highlights the plague’s indirect effect of an increase in liturgification (a process of religious permeation and internalization throughout society as defined by Meier 2020), the rise of the Marian cult, and the sacralization of the emperor.

The direct and indirect effects of the plague also appear to have had far-reaching and long-term political repercussions. The societal disruptions caused by the plague are believed to have significantly weakened the position of the Byzantine empire and arguably led to the decline of the Sasanian empire (Sabbatani et al. 2012). Interestingly, the pandemic indirectly favoured the nomadic Arab tribes who were less vulnerable to the contagion while traveling through desert and semi-desert environments during the initial expansion of Islam (Sabbatani et al. 2012).

Of note is the absence of a scientific consensus on the severity of the Justinian Plague’s impacts. For example, Mordechai and Eisenberg (2019) and Mordechai et al. (2019) argue against the maximalist interpretation of the historical evidence described above. They suggest that the estimated mortality rate of the plague is exaggerated, and that the pandemic was not a primary cause of the transformational demographic, political and economic changes in the Mediterranean region between the sixth and eighth century. Recently, White and Mordechai (2020) highlighted the high likelihood of the plague having different impacts in the urban areas of the Mediterranean outside of Constantinople.

The Black Death

The Black Death which ravaged Europe, North Africa, and parts of Asia in the middle of the fourteenth century is considered the deadliest pandemic in human history and potentially the most severe global catastrophe to have ever struck mankind. With respect to its mortality, Ord (2020) argues that the best estimate of its global mortality rate is 5–14% of the global population, largely based on Muehlhauser (2017).

The plague created a large demographic shock in the affected regions. It reduced the European population by approximately 30–50% during the 6 years of its initial outbreak (Ord 2020). It took approximately two centuries for the population levels to recover (Livi-Bacci 2017; Jedwab et al. 2019b). As the mortality rates appear to have been the highest among the working-age population, the effects on the labour force were acute (Pamuk 2007).

The plague's mortality, morbidity and the associated societal disruption led to a major decline in economic output both in Europe (Pamuk 2007) and the Middle East (Dols 2019). In Europe, however, this decline in economic output was smaller than the decline in population; output per capita began to increase within a few years of the initial outbreak (Pamuk 2007).

The large demographic shock caused by the plague led to a shift in the relative price of labour which, similarly to the Justinian Plague, had a positive impact on wages. With a reduced labour force, real wages and per capita incomes in many European countries increased and were sustained at higher levels for several centuries (Voigtländer and Voth 2013a; Jedwab et al. 2020; Pamuk and Shatzmiller 2014). Scott and Duncan (2001) point out that real wages approximately doubled in most countries of Europe in the century following the plague.

An additional insight into the long-run relationship between the Black Death’s mortality and per capita incomes in Europe is offered by Voigtländer and Voth (2013a). Using a Malthusian model, they suggest that over time, the rise in income caused by the plague’s mortality led to an increase in urbanization and trade. Furthermore, the increased tax burden (per capita), combined with the contemporary political climate, increased the frequency of wars. Consequently, higher urbanization and trade led to an increase in disease spread which along with a more frequent war occurrence caused a long-term increase in mortality and a further positive effect on per capita incomes. In this way, the Black Death appears to have created a long-lasting environment of high-mortality and high-income specifically in Western Europe, functioning as an important contributing factor to its economic growth in the next centuries (Alfani 2020). However, while in Western Europe incomes remained elevated over the next centuries, in Southern Europe they began to decline as the Southern European population started recovering after AD 1500 (Jedwab et al. 2020).

Apart from the positive effects on wages, the increased marginal value of labour combined with other factors had further economic and social implications. A decreased relative value of land and the lack of workforce to use it effectively caused land prices and land rents to decrease (Jedwab et al. 2020; Pamuk 2007). A decreased marginal value of capital assets in general led to a lapse in the enforcement of property rights (Haddock and Kiesling 2002). Interest rates and real rates of return on assets also decreased (Pamuk 2007; Jedwab et al. 2020; Pamuk and Shatzmiller 2014; Jordà et al. 2021; Clark 2016).

Higher wages in combination with a relative abundance of land increased people’s access to land/home ownership, likely reducing social inequality (Alfani 2020). On the other end of the income distribution, decreased incomes for landowners led to an overall decrease in income inequality (Jedwab et al. 2020; Alfani and Murphy 2017).

With respect to the effects on agriculture, the structure of agricultural output moved away from cereals to other crops following the plague. Furthermore, the workforce shortages and the incentives to increase the labour supply are believed to have caused a shift from male-labour intensive arable farming towards pastoral farming, consequently raising the demand for female labour (Voigtländer and Voth 2013b). However, while the Black Death appears to have caused certain structural agricultural changes, Clark (2016) finds no effect of the plague on agricultural productivity in the long run.

In terms of other social consequences, the evidence suggests that the plague's mortality reduced labour coercion, particularly throughout Western Europe (Jedwab et al. 2020; Haddock and Kiesling 2002; Gingerich and Vogler 2021). The increased bargaining power of labour caused by the plague’s demographic shock contributed to and accelerated the decline in serfdom and development of a free labour regime. Gingerich and Voler (2021) further argue that these effects may have had long-lasting political implications and that a decline of repressive labour practices (such as serfdom) permitted the development of more inclusive political institutions. They find that the regions with the highest mortality were more likely to develop participatory political institutions and more equitable land ownership systems. They find that centuries later, In Germany, the populations in these high-mortality regions were less likely to vote for Hitler’s National Socialist (Nazi) Party in the 1930 and 1932 elections in Germany.

However, the positive effects on the emergence of freer labour did not take place in Eastern Europe, where serfdom was sustained and even intensified. Robinson and Torvik (2011) attempt to explain this asymmetry arguing that these differential outcomes may have been caused by the varying power and quality of institutions. The authors suggest that opportunities generated by the increased bargaining power of labour, in an environment of weak institutions, were less likely to lead to a positive effect than in the case of regions with stronger institutions (with more robust rule-of-law or less corrupt or predatory practices).

Apart from causing a negative demographic shock to the affected populations, the Black Death appears to have caused further indirect demographic changes, particularly in Western Europe. The increased employment opportunities for females caused by worker shortages and a higher female labour demand led to a decline in fertility rates and an increased age of marriage (Voigtländer and Voth 2013b). This demographic transition to a population characterized by lower birth rates likely helped to preserve the high levels of per capita incomes and contributed to further economic development of certain parts of Europe, enabling it to escape the “Malthusian trap” in the following centuries (Pamuk 2007). Siuda and Sunde (2021) confirm the pandemic’s effect on the accelerated demographic transition empirically, as they find that greater pandemic mortality was associated with an earlier onset of the demographic transition across the various regions of Germany.

Unfortunately, the Black Death also led to an increase in the persecution of Jews (Finley and Koyama 2018; Jedwab et al. 2019a). Interestingly, Jedwab et al. (2019a) were able to estimate that in the case of regions with the highest mortality rates, the probability of persecution decreased if the Jewish minority was believed to benefit the local economy.

It is important to highlight that the long-term repercussions of the Black Death were highly asymmetrical. While in Western Europe the pandemic appears to have led to some long-term dynamic shifts associated with increased wages, decreased inequality and a decrease in labour coercion, this was not the case for other regions. A decrease in wages was observed for example in Spain (Alfani 2020) and Egypt. In Spain, the plague's demographic impact on an already scarce population caused a long-lasting negative disruption to the local trade-oriented economy. The workforce disruption in Egypt led to a collapse of the labour-intensive irrigation system for growing crops in the Nile valley, with consequent disastrous effects on the rural economy (Alfani 2020). Borsch (2005) argues that the economic decline in Egypt caused by the Black Death “put an end to the power in the heartland of the Arab world” (p. 114) and to the impressive scientific and technological developments that came out of this region.

A consensus for an explanation of the Black Death’s varied impacts across regions, and their determinants, does not appear to exist. However, several researchers attempt to provide partial insights. For example, Alfani (2020) considers the differential outcomes to be broadly dependent upon the initial conditions in each region. More specifically, both Robinson and Torvik (2011) and Pamuk (2007) propose that the asymmetry of impacts can largely be explained by the differences in the institutional environments of the affected societies.

It is argued that the Black Death defined the threshold between the medieval and the modern ages, similarly to the way the Justinian Plague did for antiquity and the Middle Ages (Horden 2021). Furthermore, the differential long-term outcomes of the Black Death likely provided a significant contribution to the so-called “Great Divergence” between Europe and the rest of the world and the “Little Divergence” between North-western and Southern and Eastern Europe (Jedwab et al. 2020; Pamuk 2007).

From this perspective, it would seem rational to conclude that apart from causing substantial and long-term demographic, economic, political, and cultural changes, both the Justinian Plague and the Black Death likely significantly altered the course of human history.

Considering the above, it is not unreasonable to expect that a pandemic of a similar magnitude to these past catastrophes would do the same in the present day. However, what societal impacts a pandemic of similar or higher mortality would inflict in the twenty-first century has not really been the subject of any study, as far as we were able to identify. A possibility exists, given the newly developed capacity of humanity to create new pathogens, that the outcomes of a future catastrophic pandemic will be even more adverse than those of the Justinian Plague and the Black Death.

Probability

In terms of the probability of naturally occurring pandemics, an informal survey of participants of the Global Catastrophic Risk Conference in Oxford in 2008 shows that the median estimate for a probability of a natural pandemic killing more than 1 billion people before the year 2100 was surveyed to be 5%, and the probability of such pandemic to cause human extinction was 0.05%. Ord (2020) uses a slightly broader definition of existential risk, which apart from human extinction also includes a permanent reduction of human potential. He estimates the probability of an existential risk stemming from a natural pandemic in the next 100 years to be 0.01%.

#### ABR is slow and gradual --- reject their alarmism

Smith 16 [Drew Smith 16, former R&D director at MicroPhage and SomaLogic, 6/14/16, “The Myth Of The Post-Antibiotic Era,” <https://www.forbes.com/sites/quora/2016/06/14/the-myth-of-the-post-antibiotic-era/#db027696fa83>]

Right now, drug resistant infections are mainly a threat to those that are already sick and/or in medical facilities. But, if we continue down this path, mundane infections in the otherwise healthy could someday morph into life-threatening ordeals, and simple medical procedures and surgeries may be skipped to avoid risk of infection. However, while this threat is real, it’s important to keep in mind that this is an ongoing, gradual challenge; it’s extremely unlikely that a single event will herald with complete certainty the abrupt end of modern medicine as we know it. In this context, those scary headlines are inappropriate, if not numbing and counterproductive. In May, Ars wrote about some alarmist and inaccurate news stories dealing with a newly identified type of drug resistance—one that makes bacteria resistant to a last-resort antibiotic called colistin and can spread between bacteria easily. The headlines blared that it was the “first” time such a dastardly microbe had seeped into the US—which is not true. And they suggested that it would certainly mark the end of antibiotics—also not true. This week, scientists provided updates on tracking that type of resistance, and of course some alarmist headlines followed. Yet, the new data actually suggests that a tempering of concerns about this particular resistance may be in order. It turns out that this “dreaded,” "scary," “nightmare” of a drug-resistant microbe has been in the US for more than a year and elsewhere in the world since as far back as 2005—it’s just that nobody noticed it. And nobody noticed it because so far it hasn’t been the dreaded, scary nightmare some have feared. “It’s not a huge cause for concern,” Mariana Castanheira, lead author of one of this week's resistance updates, told Ars. Castanheira is the director for Molecular and Microbiology at JMI Laboratories, a private company that monitors drug resistance microbes in hospitals and medical settings. They and others are finding this new type of resistance now simply because they’re looking for it, she said. Castanheira explains that people initially started digging for this new type of drug resistance—a gene called mcr-1—out of concern that it makes bacteria resistant to the antibiotic colistin, which is a relatively toxic drug used only when nearly all others have failed against a multi-drug resistant infection. Bacteria have shown up with colistin resistance before—in fact, many times in the US and elsewhere around the world. But in those cases, the genes were embedded in the bacteria’s chromosomes and generally passed down through generations. The mcr-1 resistance gene, on the other hand, seems to always sit on a plasmid, a small loop of DNA that bacteria can readily pass around to neighbors. If colistin-resistant bacteria shared their mcr-1 plasmid with others that are already resistant to lots of antibiotics, they could create a long-feared invincible germ—a “pan-resistant” bacteria. "Doesn't scare me" So far that doesn’t seem to be happening, though, Castanheira said. In more than a decade of skulking around, mcr-1 has made its way into bacteria in animals, people, and soil all over the world. Yet, all of the mcr-1 carrying microbes examined have been susceptible to at least one antibiotic—and often several.

#### ABR won’t get close to extinction, intervening actors solve it, their internal link can’t

Ed Cara 17, Science Writer for The Atlantic, Newsweek, and Vocativ, 1/27/17, “The Attack Of The Superbugs,” http://www.vocativ.com/394419/attack-of-the-superbugs/

Antibiotic-resistant infections kill at least 700,000 people worldwide a year right now, according to an exhaustive report commissioned by the UK in 2014, and without any substantial medical breakthroughs or policy changes that slow down resistance, they may claim some 10 million deaths annually by 2050 — eclipsing cancer in general as a leading cause. These deaths largely won’t come from pan-resistant infections, just tougher ones. A preventable death there, a preventable death here. Leaving that aside, antibiotics, along with proper sanitation and nutrition, gird our entire way of living. Most every invasive surgery, pregnancy, organ transplant and chemotherapy session we go through will become riskier. Other diseases like HIV, malaria or influenza will become deadlier, since bacteria often exploit the opening in our immune system they leave behind. And already precarious populations like those living with cystic fibrosis, prisoners, and the poor will lose years off their lives. For all the warranted gloom, though, Farewell does think there are reasons to be hopeful. “I don’t think we are doing enough, but the scientific community along with many governmental and private foundations are very actively involved in finding not only new antibiotics, but new solutions to this problem,” she said. There’s been a noticeable change in attitude and increased urgency surrounding antibiotic resistance, she said, one that she hadn’t seen even five years ago, let alone twenty. Until recently, that attitude change could be seen from places as high up as the U.S. federal government. In 2014, former President Obama issued an executive order aimed at addressing antibiotic resistance, the first real acknowledgement of the problem from an administration, devoting funding and outlining a national action for combatting resistance. Through its federal agencies, the administration pushed to reduce antibiotic use on farms and encouraged doctors to stop using them in excess. “There has been a lot of work done the last couple of years, much of it spurned by [Obama’s] National Action Plan,” said Dr. David Hyun, a senior officer for Pew Charitable Trusts’ Antibiotic Resistance Project. The CDC, in particular, has used its funding to open up regional labs that allow them to better detect and respond to antibiotic-resistant outbreaks like the Nevada case, he said. They ultimately hope to create an expansive surveillance system that can easily keep track of resistance rates on a national, state and regional level. A parallel system also exists for monitoring resistance in the food chain, shepherded by the CDC and the U.S. Department of Agriculture. In fact, it was this sort of cooperation between national and local health agencies that enabled Nevada doctors to stop the worst from happening, said Dr. Lei Chen. The swift identification of a possible CRE strain by the hospital, coupled with the woman’s medical history, led to a precautionary quarantine, while also prompting Chen’s public health department and eventually the CDC into action. And it may help prevent future cases from spilling into the public. According to Chen, the CDC has allocated funding this year to all of Nevada’s state public health departments so they can better detect CRE and other dangerous resistant strains. Under the Trump administration, there’s no telling how these small victories will hold up or whether they will advance. All references to antibiotics once found on the Whitehouse.gov site have been removed, including a link to the Obama administration’s national action plan, and the fact that they’re already tried to bar USDA scientists from discussing their work with the public while stripping funding from other public health agencies isn’t encouraging. Even with the best public policy, however, there’s no clear light at the end of the tunnel. Antibiotic resistance has gradually been worsening, even within the last 15 to 20 years, when superbugs like methicillin-resistant Staphylococcus aureus (MRSA) first became widely known, said Hyun. The effort needed to develop new drugs has been in short supply, hamstrung by pharmaceutical companies’ inability to recoup the costs of bringing new antibiotics to market. That’s because, unlike the latest heart medication, any new antibiotics will have to be treated like the last drops of water during a drought, used as little as possible — the exact opposite way to make money off a new product. Yet, much like climate change, the financial toll of not doing anything will total in the trillions years down the road. And it already numbers in the billions now, according to the CDC. Of course, we need bacteria to survive. And most need or pay no mind to us in return. Even pan-resistant bacteria don’t really mean harm. Some have been found in perfectly healthy people, a fact that’ll either comfort you or keep you awake at night, only causing problems when our immune system wavers. There’s no army of sentient E. coli that will rise up and someday overthrow the human race. But barring the calvary showing up, a new fear of ours will learn to settle in, almost unnoticed. It’ll creep in when we pick our heads up from a nasty fall that scrapes our skin open or breaks our bones; when we wave goodbye to our loved ones before they enter an operating room, or when we cradle our newborns into a world teeming with the living infinitesimal, wishing there was still a way to shield them from it as our parents once could for us. A fear of naked vulnerability. The antibiotic apocalypse will be gentle, if it fully arrives, but it won’t be any less devastating to the human spirit.

#### Highly contagious diseases tend to burn out

York 14 (Ian, head of the Influenza Molecular Virology and Vaccines team in the Immunology and Pathogenesis Branch of the Influenza Division at the CDC, PhD in Molecular Virology and Immunology from McMaster University, M.Sc. in Veterinary Microbiology and Immunology from the University of Guelph, former Assistant Prof of Microbiology & Molecular Genetics at Michigan State, “Why Don't Diseases Completely Wipe Out Species?” 6/4/2014, http://www.quora.com/Why-dont-diseases-completely-wipe-out-species)

But mostly diseases don't drive species extinct. There are several reasons for that. For one, the most dangerous diseases are those that spread from one individual to another. If the disease is highly lethal, then the population drops, and it becomes less likely that individuals will contact each other during the infectious phase. Highly contagious diseases tend to burn themselves out that way.¶ Probably the main reason is variation. Within the host and the pathogen population there will be a wide range of variants. Some hosts may be naturally resistant. Some pathogens will be less virulent. And either alone or in combination, you end up with infected individuals who survive.¶ We see this in HIV, for example. There is a small fraction of humans who are naturally resistant or altogether immune to HIV, either because of their CCR5 allele or their MHC Class I type. And there are a handful of people who were infected with defective versions of HIV that didn't progress to disease. ¶ We can see indications of this sort of thing happening in the past, because our genomes contain many instances of pathogen resistance genes that have spread through the whole population. Those all started off as rare mutations that conferred a strong selection advantage to the carriers, meaning that the specific infectious diseases were serious threats to the species.

#### No bioterror impact---it assumes every warrant.

Glenn Cross 21, PhD, Former Deputy National Intelligence Officer, Weapons of Mass Destruction, "Biological Weapons in The ‘Shadow War’," War on the Rocks, 11/09/2021, https://warontherocks.com/2021/11/biological-weapons-in-the-shadow-war/.

The threat of terrorists using biological agents exists but is very limited. The fear of nonstate actors using biological agents rose with Aum Shinrikyo’s 1995 failed efforts to spread botulinum and anthrax in Japan. Fears of bioterror reached its most recent crescendo with the 2001 anthrax letter mailings, coming as they did within weeks after the 9/11 attacks. The threat of further bioterror attacks, however, never materialized.

Despite the fact that terrorist biological weapons attacks have not materialized since the Amerithrax scare, some continue to argue that the supposed ease and lower cost of biological weapons development, production, and use along with the societal disruption of COVID-19 has incentivized bad actors to adopt biological weapons. These concerns have been echoed by others who assume that misuse is inevitable and following the COVID-19 example will result in mass casualties and crippling political, societal, and economic repercussions.

However, the bioterror threat seems to have diminished — not grown — since the 2001 Amerithrax letter mailings. The core al-Qaeda biological weapons efforts were first envisioned in the late 1990s and began in earnest shortly afterward. Yet the U.S. invasion of Afghanistan and the fall of the Taliban in late 2001 effectively disrupted al-Qaeda’s biological weapons work which largely centered on anthrax. Left without a suitable safe haven, al-Qaeda was never able to reconstitute its biological weapons efforts. The Taliban’s return to power in Afghanistan, however, may result in a reemergence of al-Qaeda and its biological weapons ambitions. Time will tell whether the Taliban now will grant safe haven to al-Qaeda that could be used for biological weapons work. What is undoubted is that the Taliban and al-Qaeda have a shared history and have continued to work closely together. Without a presence in Afghanistan, U.S. intelligence will have a more difficult time detecting any resurgent al-Qaeda biological weapons efforts.

The threat of a biological weapons effort by the Islamic State in Iraq never materialized, although the group did manage to produce and use chemical weapons agents until that program was effectively disrupted. Other terrorist groups’ interest in biological weapons has been rudimentary with a focus predominately on toxins such as ricin and botulinum. U.S. domestic extremists, self-radicalized individuals, and lone actors also have gravitated toward ricin, but no known casualties have resulted from the decades-long interest in ricin.

Some analysts, however, argue that the life science revolution and global proliferation of related scientific and technical capabilities has opened a Pandora’s Box of biothreats. The argument goes that the rapid revolution in genetic engineering — including synthetic biology — the DIY bio movement, and the advent of technologies like CRISPR (acronym for “clustered regularly interspaced short palindromic repeats”) makes their misuse likely. However, as noted in the 2018 National Academies of Science report, Biodefense in the Age of Synthetic Biology, the large-scale production and delivery of biological weapons agents is inherently difficult, with biological weapons use favoring small-scale, highly targeted attacks.

#### Innovation is high.

Thomas A. Lambert 20, Wall Chair in Corporate Law and Governance and Professor of Law at the University of Missouri School of Law, J.D. from the University of Chicago, “The Case Against Legislative Reform of U.S. Antitrust Doctrine,” University of Missouri School of Law Legal Studies Research Paper No. 2020-13, 05-12-2020, https://ssrn.com/abstract=3598601

Reduced Investment in Innovation? Proponents of reforming the antitrust laws have also pointed to reductions in the level of venture capital investment as indicative of a market power crisis in the U.S. Such investment slowed somewhat after 2015 (though it appears to have rebounded),27 and some venture capitalists have referred to a “kill zone” around dominant technology firms.28 The claim is that big technology firms either usurp small firms’ innovations or use their power over platforms to force smaller firms that need access to those platforms to sell out at a bargain price. Venture capitalists are less inclined to invest if such outcomes are likely, and innovation therefore suffers.

The evidence, however, does not support the view that lax U.S. antitrust is reducing innovation. Eleven of the top sixteen global spenders on research and development are U.S. firms,29 and six of those—Amazon, Alphabet, Intel, Microsoft, Apple, and Facebook—are “Big Tech” firms that have been accused of acting like monopolists. Moreover, the U.S. is home to half (178 of 356) of the world’s so-called “unicorn” companies—i.e., private companies valued at greater than $1 billion. China ranks second with 90, and all of Europe contains a fraction of that number. The U.S. also far outpaces Europe in terms of venture capital spending, with 10,777 investments in 2019 worth $136.5 billion compared to Europe’s 5,017 deals worth $36.3 billion. Finally, the fact that large American technology firms are purchasing smaller producers of complementary products or technologies in no way implies that the incentive to innovate is thereby reduced. Many start-ups are organized with the goal of being bought out by a larger firm; a buy-out option allows the initial investors in a company to enjoy a return on their investment without the company’s having to incur the significant cost of a public offering.