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### Advantage One is DERS

#### Runaway warming causes extinction

Sears 21 [Nathan Alexander Sears, PhD Candidate in Political Science at The University of Toronto, Former Professor of International Relations at the Universidad de Las Américas, Trudeau Fellow in Peace, Conflict and Justice at the Munk School of Global Affairs, “Great Powers, Polarity, and Existential Threats to Humanity: An Analysis of the Distribution of the Forces of Total Destruction in International Security”, Conference Paper: International Studies Association, 2021 Annual Conference, March/April 2021, https://tinyurl.com/bfbfspzx]

*Climate Change*

Humanity faces existential risks from the large-scale destruction of Earth’s natural environment making the planet less hospitable for humankind (Wallace-Wells 2019). The decline of some of Earth’s natural systems may already exceed the “planetary boundaries” that represent a “safe operating space for humanity” (Rockstrom et al. 2009). Humanity has become one of the driving forces behind Earth’s climate system (Crutzen 2002). The major anthropogenic drivers of climate change are the burning of fossil fuels (e.g., coal, oil, and gas), combined with the degradation of Earth’s natural systems for absorbing carbon dioxide, such as deforestation for agriculture (e.g., livestock and monocultures) and resource extraction (e.g., mining and oil), and the warming of the oceans (Kump et al. 2003). While humanity has influenced Earth’s climate since at least the Industrial Revolution, the dramatic increase in greenhouse gas emissions since the mid-twentieth century—the “Great Acceleration” (Steffen et al. 2007; 2015; McNeill & Engelke 2016)— is responsible for contemporary climate change, which has reached approximately 1°C above preindustrial levels (IPCC 2018).

Climate change could become an existential threat to humanity if the planet’s climate reaches a “Hothouse Earth” state (Ripple et al. 2020). What are the dangers? There are two mechanisms of climate change that threaten humankind. The direct threat is extreme heat. While human societies possesses some capacity for adaptation and resilience to climate change, the physiological response of humans to heat stress imposes physical limits—with a hard limit at roughly 35°C wet-bulb temperature (Sherwood et al. 2010). A rise in global average temperatures by 3–4°C would increase the risk of heat stress, while 7°C could render some regions uninhabitable, and 11–12°C would leave much of the planet too hot for human habitation (Sherwood et al. 2010). The indirect effects of climate change could include, inter alia, rising sea levels affecting coastal regions (e.g., Miami and Shanghai), or even swallowing entire countries (e.g., Bangladesh and the Maldives); extreme and unpredictable weather and natural disasters (e.g., hurricanes and forest fires); environmental pressures on water and food scarcity (e.g., droughts from less-dispersed rainfall, and lower wheat-yields at higher temperatures); the possible inception of new bacteria and viruses; and, of course, large-scale human migration (World Bank 2012; Wallace-Well 2019; Richards, Lupton & Allywood 2001). While it is difficult to determine the existential implications of extreme environmental conditions, there are historic precedents for the collapse of human societies under environmental pressures (Diamond 2005). Earth’s “big five” mass extinction events have been linked to dramatic shifts in Earth’s climate (Ward 2008; Payne & Clapham 2012; Kolbert 2014; Brannen 2017), and a Hothouse Earth climate would represent terra incognita for humanity.

Thus, the assumption here is that a Hothouse Earth climate could pose an existential threat to the habitability of the planet for humanity (Steffen et al. 2018., 5). At what point could climate change cross the threshold of an existential threat to humankind? The complexity of Earth’s natural systems makes it extremely difficult to give a precise figure (Rockstrom et al. 2009; ). However, much of the concern about climate change is over the danger of crossing “tipping points,” whereby positive feedback loops in Earth’s climate system could lead to potentially irreversible and self-reinforcing “runaway” climate change. For example, the melting of Arctic “permafrost” could produce additional warming, as glacial retreat reduces the refractory effect of the ice and releases huge quantities of methane currently trapped beneath it. A recent study suggests that a “planetary threshold” could exist at global average temperature of 2°C above preindustrial levels (Steffen et al. 2018; also IPCC 2018). Therefore, the analysis here takes the 2°C rise in global average temperatures as representing the lower-boundary of an existential threat to humanity, with higher temperatures increasing the risk of runaway climate change leading to a Hothouse Earth.

The Paris Agreement on Climate Change set the goal of limiting the increase in global average temperatures to “well below” 2°C and to pursue efforts to limit the increase to 1.5°C. If the Paris Agreement goals are met, then nations would likely keep climate change below the threshold of an existential threat to humanity. According to Climate Action Tracker (2020), however, current policies of states are expected to produce global average temperatures of 2.9°C above preindustrial levels by 2100 (range between +2.1 and +3.9°C), while if states succeed in meeting their pledges and targets, global average temperatures are still projected to increase by 2.6°C (range between +2.1 and +3.3°C). Thus, while the Paris Agreements sets a goal 6 that would reduce the existential risk of climate change, the actual policies of states could easily cross the threshold that would constitute an existential threat to humanity (CAT 2020).

#### And, triggers multiple nuclear hotspots in Southeast Asia, Siberia, and the Arctic.

Klare 20 [Michael, The Nation’s defense correspondent, is professor emeritus of peace and world-security studies at Hampshire College and senior visiting fellow at the Arms Control Association in Washington, D.C. “How Rising Temperatures Increase the Likelihood of Nuclear War”. 1/13/20. https://www.thenation.com/article/archive/nuclear-defense-climate-change/]

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

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

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

Harry Reid Understood Power

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

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

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

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

Runaway warming: Expanses of ice are melting at unprecedented rates, with potentially grim geopolitical repercussions. (David Silverman / Getty Images)

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

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

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

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

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

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

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

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

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

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

#### Utilities are the largest driver. Their emissions cause extinction. Only antitrust solves through competition.

Murray 18 [Michael, President of Mission:Data, has over fifteen years of experience with building automation, energy management, metering and public utility regulation. “IS IT TIME TO ENFORCE ANTI-TRUST LAWS AGAINST UTILITIES?”. 10/18/18. http://www.missiondata.io/news/2018/10/18/is-it-time-to-enforce-anti-trust-laws-against-utilities]

Since the electric utility industry’s inception over a century ago, utilities have acted in -- or meddled with, depending upon your point of view -- markets adjacent to the traditional power business. APS, in Arizona, sold energy-hogging washing machines and dryers in retail locations as late as the 1970s in order to increase demand for power. The founder of Commonwealth Edison, Samuel Insull, who was once Thomas Edison’s personal secretary, realized that peak demand occurred in the evening due to “illumination,” and so he built and purchased streetcar lines, sold electric irons and stimulated demand from various appliances usable during the daytime in order to improve power plant utilization around the clock. Even the Tennessee Valley Authority, a federal agency, offered substantial rebates for appliances in order to induce demand for electrons.

Despite all the talk of “natural monopoly,” electric utilities have played well outside the poles-and-wires sandbox for decades. Even today, utilities are in the news for building their own electric vehicle charging infrastructure. Some would say these actions, which are outside of the state statutory mandate to provide “safe and reliable” electric service, are sometimes thought to be sensible, or even desirable, evolutions of a maturing industry. But anti-trust enforcement is an often-ignored tool in the toolbox that deserves reexamination for at least three reasons.

First, the pace of climate change is frightening enough that scientists and world leaders are calling for unprecedented, dramatic shifts in American energy systems in the next twelve years. There is a significant possibility that electric utilities aren’t up to the task -- at least on the timescale needed. Looking at the railroads or telecommunication industries throughout history, regulated monopolies have rarely, if ever, adapted to new conditions in any timeframe that scientists now consider reasonable. (We could refer to electric utilities’ pace of change as “glacial,” but the irony is that the world’s glaciers are melting much faster than anticipated.) Can large, bureaucratic utilities compress their clockspeeds in order to rapidly decarbonize? It seems much more likely that the marketplace of distributed energy resources (DERs) could provide precisely the velocity that utilities lack. Connecting DERs to the grid as quickly as possible can likely only be accomplished by harnessing market forces.

Second, electric utilities have long used token gestures toward clean energy or “consumer empowerment” to neutralize opponents in ways that are anti-competitive. For example, one utility argued to us that third party data access was unnecessary because the utility offered its own website and mobile app. The utility has a state-granted monopoly over power distribution, yet where in statute did the state grant the utility a monopoly on websites and smartphone apps that use customer energy data? Similarly, utilities with energy efficiency (EE) programs have long argued that the existence of such programs make wholesale business model changes unnecessary. Gradualism, it is argued, is sufficient, and saving 0.5% to 1.0% of energy demand per year with EE programs is good enough. Unfortunately, however, utilities can stifle competition in the process. Why enable a truly competitive market for EE when you can control it entirely? In the wake of Cambridge Analytica, many see Facebook’s actions to increase user privacy as merely a ploy to delay sweeping new legislation from Congress. DER proponents should similarly view utilities’ token gestures for what they are -- small concessions that prolong the utilities’ dominance at the expense of cheaper, cleaner and more reliable distributed resources from a competitive market.

Third, new energy around anti-trust enforcement has recently entered the national political scene. America’s 40-year low in company formation coupled with the reaction to Facebook’s Cambridge Analytica scandal (which we wrote about before) have caused members of Congress to ask not only whether individuals’ data are adequately protected, but whether market concentration in the hands of a few players is in part responsible for the vulnerability in the first place. As recently as this week, twelve state Attorneys General wrote to the Federal Trade Commission expressing concern over data monopolies’ effects on competition:

“[T]here is concern that the immense advantages certain firms have in consumers’ data...may effectively block new entry or expansion, thereby limiting choice and, in some cases, harming competition.

“Firms that have obtained a disproportionate advantage in one line of business may find it easy to abuse that advantage by applying it to other lines of business in order to keep out competitors – who may be equally or more efficient but for the data advantage carried over from the first market. This could be of concern with new lines of business, and perhaps particularly in the context of new services. For example, firms with an asymmetric advantage in data might be able to identify competitive rivals at a very early stage, and perhaps eliminate competition…”

As data monopolies such as Facebook come under increasing scrutiny by politicians, we can harness the national attention on this topic to ask: Are electric and gas utilities data monopolies, too?

In our recent report, we highlighted the “demarcation point” in telecommunications. This is the point where the public telephone system ends and the customer’s in-home wiring begins. The FCC’s 1968 Carterfone decision defined this electrical interface and limited the telco’s role and responsibility to their side of the fence, thereby allowing market innovations on the customer’s side of the system such as wireless telephony, voice mail and modems. Without the Carterfone decision, we might still be using landline telephones manufactured by AT&T. Ma Bell would sue you for connecting another manufacturer’s telephone to their network.

Similarly, electric utilities will tend to exert their power over anything that touches the electricity system, whether that serves the public interest or not. Anti-trust enforcement by the Federal Trade Commission, Department of Justice and state Attorneys General is worthy of consideration to meet our pro-competition, pro-consumer and pro-environment goals. The DER community could use a fascinating 1976 Supreme Court Case, Cantor v. Detroit Edison Co., as a model: A retailer of lightbulbs sued the utility, Detroit Edison, for using its monopoly power to unfairly restrain the sale of lightbulbs in violation of the Sherman Anti-Trust Act. The Supreme Court agreed that state regulation does not exempt the utility from certain anti-trust laws.

There are limits to the utility’s monopoly. As a strategy for the DER community, settling with utilities for another decade of uninventive EE programs in which utilities pick winners and control the market is not going to meet our objectives. It’s time to look at anti-trust law to enforce limitations on utilities and mandate utility-to-DER interoperability standards. After all, restrictions on “behind-the-meter” activities of utilities are not only necessary to protect competition, but they may be necessary to save the planet.

#### Antitrust ends anti-competitive rate structures that exclude distributed energy resources (DERs) from electricity markets. That drives emissions and eliminates innovative competition.

Wara 17 [Michael, Associate Professor and Justin M. Roach, Jr. Faculty Scholar, Stanford Law School. “COMPETITION AT THE GRID EDGE: INNOVATION AND ANTITRUST LAW IN THE ELECTRICITY SECTOR”. 10/25/17. https://www.nyuelj.org/wp-content/uploads/2016/09/Wara\_ready\_for\_printing\_v2.pdf]

Following the release of Disruptive Challenges, utilities around the country, but especially in key solar markets, have responded in two significant ways to the challenge presented by distributed solar energy. First, they have sought to change rate structures to eliminate the incentives their customers may have to adopt the new technology, thereby suppressing the trigger of the death spiral.20 Second, and to a lesser extent, they have entered into direct competition with the companies that seek to provide distributed solar to electricity consumers, thereby positioning themselves to succeed in the new market environment to which the industry is transitioning.

Electric utilities have shareholders whose interests they are legally obligated to protect. And utilities appear to be acting to head off the nascent threat to a business model that has served them well for more than a century. Depending on one’s perspective, and on the details, these regulatory changes amount to either a more accurate allocation of grid costs or the erection of barriers to prevent entry of new, innovative competition. Utilities may be protecting their non-solar customers from the burden of subsidizing those who install solar, or they may be working to ensure that competition with their entrenched monopolies never occurs. Telling the difference has become a key unaddressed policy and legal question for public utility commissions.

Traditionally, utilities have billed their customers with rate structures based on energy sales. A customer’s bill was a function of their total energy consumption, measured in kilowatt hours (kWh) over a billing period, usually a month. In the face of new competition, utilities and their regulators are rapidly reassessing this energy sales-based rate structure and moving to a more complex structure, sometimes for all customers, but more often only for those customers that choose to install distributed energy resources. The new rate structures involve either a large fixed charge, independent of usage; a demand charge, which is set based upon a customer’s maximum rate of consumption during the billing period; or both, in addition to a charge for energy consumption. These rate structures are not novel—they have long been common for large customers such as large commercial or industrial customers, but they have never before been applied to the residential customers whose installation of solar PV poses a competitive threat to utilities.

Normally, when firms with market power move to quash competition, antitrust liability under the Sherman Act, or at least the risk of it, is created. However, because investor owned electric utilities are state-chartered monopolies, they are generally exempt from federal regulation of their anticompetitive conduct. But this exemption from antitrust liability is not unlimited. Moreover, the contours of the exemption are relatively unclear given current U.S. Supreme Court jurisprudence, especially in the face of a radical change in the technological structure of the industry. Thus, moves by utilities to prevent entry or forestall competition create at least a risk of antitrust liability, even if approved by their PUCs.

The division of regulatory authority between the federal and state governments under the Federal Power Act allocates oversight of wholesale electricity sales to the Federal Energy Regulatory Commission and oversight of retail electricity sales to state PUCs. Because the technological and economic challenge to utilities is coming from the retail customers of utilities rather than from, for example, large power plants that wish to sell power across the utilities’ transmission systems, state regulators will make the key decisions governing the competition between solar energy providers and regulated utilities. The Federal Power Act leaves to states the authority to regulate retail and intrastate energy transactions.22 The heart of this jurisdiction is the authority of state public utility commissions to regulate the rates that utilities charge their retail customers for power sales. Thus, public utility commissions are in the position of having to manage a difficult transition from a highly stable monopoly structure to a much more dynamic and competitive one, although one in which grid-supplied electric energy will remain central for many years to come.

Attempts to ensure market competition, or to avoid the social costs that occur when markets are not sufficiently competitive, require taking account of industries’ technological and economic structure. Traditionally, in the United States, competition has been policed in structurally competitive markets using antitrust law.23 However, in markets that are best characterized as natural monopolies, a grant of monopoly power has often been provided to a single firm that is then subject to an obligation to serve all customers and to price regulation via cost-of-service ratemaking.24 While both systems are far from perfect,25 many legal and economic scholars have argued that in their appropriate contexts— a structurally competitive market or a natural monopoly—these approaches fill a similar need.26 The most challenging context in which to apply either, however, is when industries undergo transition, often because of technological change, between a stable, naturally monopolistic structure, and unstable, structurally competitive one.2

In this Article, I detail the utility industry response to the call to action in Disruptive Challenges. I present evidence for the widespread existence of potentially anticompetitive actions by utilities from a survey of rate cases. My survey shows that, from 2013 to 2015, utilities in at least 19 states sought to restructure rates to reduce competition from distributed energy resources. Some utilities are also going into direct competition with solar providers. I explore the legal implications of this response by today’s utility industry to current and anticipated competition from distributed solar generation. I examine the ambiguities that exist in the current doctrine on utility antitrust immunity. I then suggest approaches for public utility commissions that may serve to reduce the anticompetitive aspects of new rate structures and so reduce the risk of antitrust liability for electric utilities as they respond to emerging competition from distributed energy resources. Finally, I argue that in managing responses to competition by electric utilities, public utility commissions must exercise oversight of the competitive impacts of rate cases.

#### Utilities use both rates and non-price related practices.

Wara 17 [Michael, Associate Professor and Justin M. Roach, Jr. Faculty Scholar, Stanford Law School. “COMPETITION AT THE GRID EDGE: INNOVATION AND ANTITRUST LAW IN THE ELECTRICITY SECTOR”. 10/25/17. https://www.nyuelj.org/wp-content/uploads/2016/09/Wara\_ready\_for\_printing\_v2.pdf]

Of course, this cannot be the whole story. Regulated utilities recognize the competitive threat, exercise market power, and are likely to respond in anticompetitive ways if permitted to do so. One would expect that regulated utilities, seeking to protect their shareholders’ value, would act to modify rates in ways that would forestall or eliminate new competitive entrants. Rates are just one method of creating barriers to entry for new technologies that may reduce returns for grid-supplied energy.

Other methods include rules that explicitly limit or forbid such competition or rules that erect non-price barriers to entry such as complicated, expensive, or time-consuming processes governing connection of DERs.43 The evidence suggests that utilities can, and to some degree are, engaging in a number of non-price-related practices that would normally raise competition concerns. Utility permission is required to interconnect distributed energy resources with the grid.44 Getting interconnection permission often results in varying time delays.45 Furthermore, it can result in substantial and unpredictable costs because utilities can require mitigation for new distributed energy resources in the form of distribution system investments.46 Utilities also have important informational advantages regarding where on the grid distributed energy may be most valuable.47

Nevertheless, given that most utilities have to routinely submit rate cases to their commissions, attempts to modify rates to forestall or eliminate competition are to be expected given the business incentives facing the utilities. The traditional job of the commission in this context is to evaluate these rates and to protect ratepayers—presumably balancing the interests of customers both with and without DERs against the expectation of utilities for a fair return on their investment. Generally speaking, protecting the interests of other firms that might compete with the utility, or considering the impacts of a rate on innovation, are not part of the process.

#### DERs are a renewable accelerant and replace carbon-intensive peaker plants.

Roberts 21 [David, Clean Energy Expert with 15 Years of Experience, CE Writer @ Vox, Previously Writer @ Grist. “Rooftop solar and home batteries make a clean grid vastly more affordable”. 5/28/21. https://www.volts.wtf/p/rooftop-solar-and-home-batteries]

Energy nerds love arguing over the value of distributed energy resources (DERs), the rooftop solar panels and customer-owned batteries that are growing more popular by the day. There’s a fight in California right now over the value of energy from rooftop solar, just the latest skirmish in a long war that has ranged over numerous states.

The conventional wisdom in wonk circles is that the value provided by DERs is not sufficient to overcome the fact that the energy they produce is, on a per-kWh basis, much more expensive than that produced by utility-scale solar, wind, and batteries (residential solar is roughly 2.5 times as expensive as utility-scale solar, according to NREL).

For that reason, many wonks view DERs as a kind of boutique energy and argue that public funds are better spent on utility-scale energy.

Turns out: no, that’s wrong. Some groundbreaking new modeling demonstrates that the value of DERs to the overall electricity system is far greater than has typically been appreciated.

The work didn’t get the attention it deserved when it came out in late December, so I want to spend some time with it. First, though, let’s get clear on what we’re talking about.

The misguided battle between centralized and distributed energy

To understand the difference between centralized and distributed energy, it’s important to understand the distinction between transmission grids, the high-voltage power lines that carry electricity over longer distances, and distribution grids, the nests of low-voltage power lines (strung from the familiar brown poles) that carry electricity to local consumers. If the transmission grid is the interstate highway system of electricity, distribution grids are the local road systems that branch off those main trunks.

Centralized energy generally refers to utility-scale power generators (or energy storage) hooked up directly to the transmission grid: coal or natural gas plants, wind farms, solar fields, grid-scale battery stacks, what have you. The big stuff.

Distributed energy consists of anything that generates, stores, or manages electricity on distribution grids: rooftop solar panels, ground-mounted “community solar” arrays, consumer batteries, electric vehicles, building energy management software, and the like. (And then there’s truly distributed energy, in the form of off-grid installations that don’t connect to any larger grid. We won’t be getting into that today.)

Some distributed solar covering a parking lot. (Photo: Getty Images)

Some distributed solar covering a parking lot. (Photo: Getty Images)

To paint in broad and somewhat crude strokes, advocates for centralized renewable energy tend to view advocates for distributed energy as crunchy pastoral proto-hippies who can’t handle modernity. They note that utility-scale energy is cheaper and capable of powering highly energy-dense modern economies, whereas distributed energy is expensive and diffuse.

Advocates for distributed energy tend to view advocates for centralized energy as corporate capitalists in thrall to perpetual growth. They note that distributed energy brings a range of benefits, from resilience and independence to savings on avoided infrastructure, whereas utility-scale energy tends to do greater damage to landscapes and concentrate economic power.

Like many disputes in the energy world, this one has hardened into an identity battle, which is annoying and unproductive, since the answer, like with so many other disputes, is both-and.

Nonetheless, it’s worth noting that advocates for distributed energy have been at something of a disadvantage to date. It can be devilishly difficult to quantify the benefits of DERs, so a lot of the discussion gets into hand-wavey intangibles.

It can be especially difficult to quantify the benefits of DERs to larger grid systems, because energy modeling to date has effectively ignored distribution grids (which represent about a third of US spending on electricity). It has treated them purely as load, as demand to be satisfied, rather than as active, flexible participants in grid management.

Until now!

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Or, until a few months ago anyway. In December, energy modeler Christopher Clack (a familiar name to Volts readers) and his team at Vibrant Clean Energy (VCE) debuted a new way to model the energy system that takes into account DERs and the services they provide. They used it to study the effect of DERs on the electricity system and the results are summarized in “A New Roadmap for the Lowest Cost Grid.” (Full technical report here; slideshow presentation here.)

Spoiler: the cheapest possible carbon-free US grid involves vastly more centralized renewable energy, but it also involves vastly more distributed energy. What’s more, far from being alternatives, they are complements: the more DERs you put in place, the more centralized renewables you can put on the system. DERs are a utility-scale renewable accelerant.

The practical implication is that going all out on DERs is to everyone’s benefit, up and down the electricity supply chain, from utilities to consumers.

It is difficult to exaggerate just what a revolutionary change this represents in energy modeling and how much it turns conventional wisdom on its head. By making distribution grids visible to their model and co-optimizing those grids with the transmission system, the team at VCE uncovered a source of grid flexibility that could save a decarbonizing electricity system some half a trillion dollars through 2050. That’s real money.

(If you want to take a deep dive into the material, check out this interview with Clack on Chris Nelder’s Energy Transition Show. It is gleefully nerdy; I cannot recommend it highly enough.)

The cheapest energy scenario is clean and distributed

At the heart of VCE’s work is Clack’s state-of-the-art modeling tool: Weather-Informed energy Systems: for design, operations and markets planning (WIS:dom). It allows resolution down to two-mile square areas and makes dispatch decisions every five minutes. It takes into account granular weather data stretching over decades, climate impacts, policy, all forms of generation, storage, transmission, and on and on. VCE boasts that it “leverages 10,000 times more data points than traditional models.”

For this study, WIS:dom was augmented to better understand and represent distribution grids, so that it could bring transmission and distribution systems together in one system and co-optimize them. It was given better information about the costs and capabilities of DERs and more options; for example, instead of spinning up a new generator to meet peak demand, it could draw on distributed solar and batteries.

The transmission/distribution interface. (VCE)

The transmission/distribution interface. (VCE)

No one to Clack’s knowledge has done this before, so there was a lot of experimenting to get it right. “I had to spend a lot of money and time and resources upgrading the model to include this, with a lot of failures along the way,” says Clack. “That's why I'm confident that we did it first, because I spent a lot of time trying to find someone else that had done it, so I didn’t have to do the hard work.”

The modeling question was: if a high-resolution optimization tool is given DERs as an option, will it choose to deploy them? If so, how much?

The broader social question was: can DERs help lower the overall costs of a clean electricity system? If so, by how much?

The paper presents four core scenarios (which were run across a range of geographies):

BAU (business as usual), which includes existing policies and mandates but otherwise lets economics drive dispatch decisions; it deploys WIS:dom in a way that mimics traditional models;

BAU-DER, which does the same but uses the augmented form of WIS:dom, with greater visibility into distribution systems;

CE (clean energy), which models a system that reduces power sector carbon emissions 95 percent from 1990 levels by 2050; WIS:dom mimics traditional models;

CE-DER, which models a 95 percent reduction but uses the augmented form of WIS:dom.

To skip straight to the results: if you make DERs an option for the model, it deploys an absolute boatload of them (spending about $10 billion extra over the first 10 years), and by doing so substantially reduces overall system costs.

(VCE)

(VCE)

BAU-DER is $301 billion cheaper than BAU (the blue line above), which means we would save money from day one by deploying more DERs even if we didn’t care about climate change.

CE-DER is $473 billion cheaper than CE (the green line), which means DERs will make the decarbonization of electricity much less expensive than doing it all with centralized renewables and storage.

And here’s the kicker: CE-DER is $88 billion cheaper than BAU (the red line), which means, economically speaking, we’d be better off reducing electricity emissions by 95 percent using DERs than continuing with the status quo.

(And this is all just the pure economics — it leaves out the enormous health savings and environmental justice benefits of reduced point-source pollution.)

Whether you’re concerned about climate change or not, whether you want to reduce emissions or not, whether you care about the health and resilience of local communities or not, deploying DERs brings down system costs. It’s the fiscally responsible thing to do.

Now, note the shape of the red line above (and to a lesser extent, the green line). Scenarios that decarbonize using DERs are a smidgen more expensive for the first 10 years or so because they use those early years to deploy an enormous quantity of DERs.

The US currently has about 98 gigawatts of rooftop solar and less than a gigawatt of distributed energy storage installed. Through 2025, CE-DER deploys an additional 75 gigawatts of distributed solar and 27 gigawatts of distributed storage; by 2035, it is 200 and 90, respectively. (By 2050, it is 247 and 160.)

That is an absolute DER building binge, starting now.

(VCE)

(VCE)

After that early period of heightened investment, though, savings begin to skyrocket as DERs pay off in system benefits.

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DERs make everything else on the grid work better

For the entire history of electricity up until about five minutes ago, grid operators viewed electricity demand as an exogenous variable, a set figure they had to meet with supply, not something they had much control over.

The key to the value of DERs is that they make electricity demand more controllable. With energy generation and storage scattered throughout distribution grids, grid operators have a way to move energy around, both geographically and temporally, without firing up more power plants. They can absorb extra energy if there’s a dip in demand or produce extra energy if there’s a spike. The overall effect is to smooth out the “demand curve.”

Look at the thick black line on the top right graph below — that’s the distribution demand curve throughout a representative year:

Look at the demand curve on the top right and then on the bottom right: flatter! (VCE)

Look at the demand curve on the top right and then on the bottom right: flatter! (VCE)

Now note the same black line on the bottom right graph. By satisfying the little demand peaks with distributed solar and storage, the demand for utility-scale energy is leveled off.

Here’s a graph that shows a “load duration curve,” which reveals how high demand is, for how often in the year, and how DERs affect it:

(VCE)

(VCE)

As you can see by the sharp spike on the left, there are relatively rare periods of extremely high demand (peaks). The problem is that the current electricity system has to be sized to meet those peaks, even if that means many power plants end up idle most of the time. Clack says that today, roughly 20 to 25 percent of generation capacity on the grid — some 300-350 gigawatts — covers around 3 percent of the energy load each year. (This, in a nutshell, is why electricity systems everywhere are so overbuilt.)

The light blue-shaded area on the curve shows the reduction in demand that DERs can provide (the dark blue on the right is the increase in demand). Not only can DERs “shave the peak” by an average of 17 percent nationwide, they can reduce the demand for utility-scale energy for 80 percent of the hours of the year. They make the load duration curve more level as well.

These demand-leveling effects bring four big benefits:

First, if you don’t have those big peaks in demand for utility-scale energy, then you don’t need that 20 to 25 percent of capacity that only runs during peaks. Not building those plants, or shutting them down early, saves lots of money.

Second, a more level demand curve means that all generators on the system will run more consistently, with fewer ramps up and down, at closer to their full capacity, helping to maximize their value.

Third, a more level demand curve means that transmission congestion will be reduced and transmission assets will be more efficiently utilized. (In one of my Transmission Month posts, I discussed “energy storage as a transmission asset.” This is the same idea, on a broader scale.)

Fourth, DERs offer the system the option to shift demand to meet variable supply, rather than always forcing it to shift supply to meet demand. Shifting demand is often much cheaper.

These benefits explain why CE-DER is so much cheaper than CE, and even than BAU. They explain why, even though rooftop solar may cost more than centralized solar on a per-kWh basis, its value is greater.

Infusing distribution systems with DERs allows grid operators more stability and more options — including more renewables.

DERs enable more utility-scale renewables

Wind and solar are cheap, but they are variable. They come and go on their own schedule, outside of our control. There will be times — seconds, minutes, hours, sometimes weeks and months — when wind and solar dip and something else is needed to fill the gaps.

Conventionally, this role is played by dispatchable generators that can be turned up and down at will — these days, mostly natural gas plants. Given that most natural gas plants, at least those without carbon capture, will have to be phased out in a decarbonized system, there’s a hunt on for “firm” zero-carbon alternatives — think nuclear, hydro, natural gas or biomass with carbon capture, or geothermal.

But VCE’s modeling shows that a big chunk of that role can be played by DERs, which Clack calls a “firming agent on the load.”

By bringing demand more under grid operators’ control, DERs virtually eliminate curtailment, or discarding of renewable energy due to temporary oversupply, through 2045. Just as they allow transmission to be used more effectively, they allow us to consume more of the energy generated by existing utility-scale renewables.

They also prevent the familiar problem of “value deflation” — more wind and solar energy at particular times and places competes with existing wind and solar energy from the same times and places — by giving grid operators a whole series of time- and location-specific demand knobs that they can turn up or down at will to better accommodate renewables.

By preventing value deflation, DERs will allow for more new renewables on the system (and the retirement of more thermal and fossil generation). That’s why the CE-DER scenario builds more utility-scale wind and solar than the CE scenario. CE-DER builds 800 gigawatts of utility wind, 800 of utility solar, and 200 of utility storage, whereas CE builds 60 gigawatts less wind and 50 less solar (though slightly more batteries).

By enabling renewable energy to be moved around, DERs unlock more of it — with, again, enormous public health benefits that are not captured in the model.

Put technically, as Clack told Nelder, “the model says that distributed [solar] and storage in some combination ends up being higher value than the differential in the [levelized] cost of utility-scale solar and distributed solar.”

Put more colloquially, though it will require enormous upfront investment in the coming decade, laying a quilt of DERs over the nation’s distribution systems is the best thing we can possibly do to enable the rapid emission reductions we will need in the decade after.

DERs are not a boutique version of, or a distraction from, utility-scale renewables; they are a necessary complement, an enabler and accelerator.

(VCE)

(VCE)

DERs will mean more jobs

VCE did some analysis estimating that the DER-enhanced scenarios would add an additional million jobs per year relative to conventional scenarios.

It stands to reason that a huge deployment of DERs would create lots of jobs. These are very hands-on, labor-intensive projects. And since distribution systems are ubiquitous in the US, it would create jobs in every part of the country (though not uniformly).

I’m generally suspicious of employment projections, so I don’t know how much stake to put in the particular figure, but we can be confident that more DERs = more jobs.

DERs could hasten the collapse of existing power markets

VCE’s modeling shows that current electricity markets, if they are not reformed, basically collapse in the next 10 to 20 years. DERs will hasten that collapse in two ways.

First, they will reduce demand peaks, which produce a great deal of value in current markets. Lots of peaker plants will get cancelled or shut down and peaker money will dry up.

Second, DERs will enable more utility-scale wind and solar, which have zero marginal costs. They are all upfront capital costs; once a solar panel is in place, it doesn’t cost it anything more to produce the next kW. It can bid into markets at $0. Pretty soon, so much of the market’s power will come from zero-marginal-cost sources that prices will be $0 most of the year, and $0 means zero profit for participating generators.

Electricity markets were built for fossil fuel generators. They need reform — but that’s a topic for a different post. (This is a good start.)

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Clean electrification boosts the value of DERs

An intriguing note: Clack says that if WIS:dom is told not just to decarbonize electricity but to decarbonize the whole economy (i.e., electrify everything), the value of DERs to the grid effectively doubles.

An economy-wide decarbonization scenario that makes use of DERs saves a trillion dollars relative to one that doesn’t. VCE will have a new report on economy-wide decarbonization coming out soon.

DERs also provide a range of co-benefits

VCE’s modeling only captures DERs’ contribution to overall grid performance and cost. It does not capture many of the benefits that have long attracted customers to them: resilience against brownouts and blackouts, the capacity to go off-grid temporarily (or permanently), independence from the whims of utilities and state regulators, reduced personal greenhouse gas emissions, and most of all, lower electricity bills.

All of those benefits will help drive early adoption of DERs as their value to the grid ramps up (though they should be boosted by utility, state, and federal incentives).

The value of DERs should be visible in all models and states

Clack says that it’s just four paragraphs of code that open WIS:dom up to distribution grids — other models, including the models that utilities use in planning, could easily replicate this.

“One of the reasons I was so keen on having it be relatively simplistic is, it should be able to be adopted by other models,” he says. “Maybe they wouldn't show as much savings as we do, because of different model logic, but I'm pretty confident they will show similar trajectories.”

Today, we have released our full technical report on the "Why Local Solar and Storage Costs Less". Two weeks ago, we released the main findings: savings of $473 billion when co-optimizing distribution. This released provides more details!

Image

December 14th 2020

26 Retweets65 Likes

This is just one more area where outdated utility models and practices are keeping costs too high and the clean-energy transition too slow. Utilities have traditionally been hostile to DERs, viewing them as competitors or net costs, but VCE’s modeling demonstrates what should have been obvious: having flexible generation and storage infused throughout distribution grids offers a fantastic tool to help stabilize a grid with growing renewables and increasing electric loads and bring costs down for all ratepayers.

#### Integration in the US is modeled globally.

Shen 21 [Bo Shen, Energy Analysis and Environmental Impacts Division, Lawrence Berkeley National Laboratory, Fredrich Kahrl, 3rdRail Inc., and Andrew J. Satchwell, Energy Analysis and Environmental Impacts Division, Lawrence Berkeley National Laboratory, "Facilitating Power Grid Decarbonization with Distributed Energy Resources: Lessons from the United States", Annual Review of Environment and Resources, vol. 46, no. 1, 7/2/21, https://www.annualreviews.org/doi/pdf/10.1146/annurev-environ-111320-071618]

Globally, renewable energy is already playing a significant and growing role in electricity systems. The world's renewable energy power generation capacity more than doubled from 1,223 GW in 2010 to 2,532 GW in 2019 (9). Wind and solar account for most of the recent growth in renewable generation. The installed capacity of wind energy increased from 181 GW in 2010 to 622 GW in 2019 while the installed solar photovoltaic capacity increased significantly from 40 GW in 2010 to 579 GW in 2019 (9).

The United States is among the world's fastest-growing countries in terms of both renewable installed capacity and power generation (10). Renewable electricity generation in the United States doubled from 2008 to 2018, with wind and solar generation accounting for the majority of growth (11). As a result of rapid growth, the share of nonhydro renewable generation rose from 3% of US electricity generation in 2008 to 10% in 2018 (11, 12). The share of renewable generation is expected to continue to grow in order to meet state-level renewable energy targets and state and federal climate goals.

Approximately half of the growth in renewable energy deployment in the United States can be attributed to state-level renewable energy targets (13). As of 2019, 13 states as well as Washington, DC, and Puerto Rico had either enacted legislation or issued executive orders with a commitment to achieving either 100% renewable energy or 100% clean energy goals (14).1 Figure 1 shows state-level renewable energy targets adopted across the United States by the end of 2019.

[FIGURE 1 OMITTED]

Despite ambitious renewable energy targets, major obstacles must be overcome to enable future energy systems to economically and reliably operate with high penetration of variable renewable energy (VRE). As the US Department of Energy points out, “[o]ne of the greatest challenges to integrating VRE lies in managing its effects (variability, uncertainty, location specificity, nonsynchronous generation, and low capacity factor) on grid operations and planning” (15, p. 61). With the large-scale deployment of wind and solar generation on both the grid side and customer side, transmission system operators and distribution utilities face new operational challenges. Distributed energy resources (DERs) are emerging as a potential solution alongside traditional generation, transmission, and distribution infrastructure for addressing these challenges.

As the US Federal Energy Regulatory Commission (FERC) points out, there is no uniform definition of DERs, and the definition keeps changing (16). The US National Association of Regulatory Utility Commissioners (17, p. 45) broadly defines DERs to reflect their diversity:

A DER is a resource sited close to customers that can provide all or some of their immediate electric and power needs and can also be used by the system to either reduce demand (such as energy efficiency) or provide supply to satisfy the energy, capacity, or ancillary service needs of the distribution grid. The resources, if providing electricity or thermal energy, are small in scale, connected to the distribution system, and close to load. Examples of different types of DER include solar photovoltaic (PV), wind, combined heat and power (CHP), energy storage, demand response (DR), electric vehicles (EVs), microgrids, and energy efficiency (EE).

DERs have seen rapid growth in the United States. Distributed PV installations grew from 0.4 GW in 2010 to 10.5 GW in 2017 (18). According to data from the US Energy Information Administration (19, 20), the total existing small-scale storage power capacity connected to the US distribution network increased from 66 MW in 2016 to 234 MW in 2018. Among the capacity in 2018, 97% were behind-the-meter installations, and the share in the commercial, residential, and industrial sectors were slightly higher than 50%, 31%, and 15%, respectively. Demand response (DR), which is a program aimed at adjusting electricity demand “in response to price, monetary incentives, or utility directives so as to maintain reliable electric service or avoid high electricity prices (21, p. i),” has been active in the United States over the past five years. Between 2015 and 2019, the number of customers enrolled in DR programs increased from 9 million in 2015 to almost 11 million in 2019. At the same time, the actual peak demand savings averaged 12.2 GW per year, and the average annual power savings was 1357.4 GWh (22). Advanced metering infrastructure (AMI) is the foundation for the expansion of distributed energy systems. AMI is “an integrated system of smart meters, communications networks, and data management systems that enables two-way communication between utilities and customers” (23, p. 4). The number of advanced meters increased from 58.5 million in 2014 to 86.8 million in 2018. Its penetration rate (the proportion of advanced meters in the total number of meters deployed in the United States) jumped from 38.8% to 56.4% in the same period (24).

The role of DERs as an electricity system resource has evolved over time. Historically, most DERs in the United States were demand-side management programs funded and administrated by utilities with the goals of cost-effectively reducing demand and enhancing utilities’ interactions with their customers. These traditional programs focused primarily on energy efficiency and interruptible load management programs oriented around peak reliability needs.

Advanced DER applications go beyond traditional power system reliability needs to serve customers’ growing interests in new, customer-sited applications such as distributed generation (DG), energy storage, load response, and managing electric vehicles while helping address emerging power system challenges. These challenges include the need to balance a large amount of solar and wind energy output that is neither constant nor fully predictable and the need to more actively operate distribution systems that have growing penetrations of customer-sited resources. Through bidirectional power flow, advanced system control, and real-time information flow, DERs are well suited to provide flexible resources to enable dynamic load adjustments to real-time operational conditions, thus improving the stability of the grid and enhancing grid flexibility for integrating VRE (25).

DERs offer numerous services and provide value to three different power system perspectives—regional system operators, utilities, and customers (see Table 1). Many of these services are critical for operating a stable and flexible electricity system powered by VRE (26). In addition to the benefit of grid flexibility, DERs could also play an increasingly critical role in improving power system resilience to deal with significant disruptions resulting from severe weather, deadly wildfires, and other extreme events (27).

[TABLE 1 OMITTED]

This article examines US regulatory policy and implementation experience in deploying DERs to offer insights for the design of energy and climate policies and the potential role and challenges of DERs in decarbonization and improved power system resilience, in both the United States and other countries. The remainder of the article is organized as follows. Section 2 presents the framework through which this article reviews the US experience and lessons learned in adopting enabling policies and creating effective markets and business models for DER. Section 3 focuses on the role of specific federal and state policy measures in the United States in driving DER deployment. Section 4 discusses various market strategies and business models adopted in the United States in facilitating DER expansion. Section 5 describes major challenges and lessons learned thus far that may inform possible solutions in both the United States and elsewhere. Section 6 concludes the article with insights for other countries.

#### And, competitive markets overcome utility’s regulatory influence. That cements clean energy innovation.

Roberts 15 [David, Energy Writer @ Vox and Volts. “Reimagining electric utilities for the 21st century.” https://www.vox.com/2015/9/11/9306247/utilities-21st-century]

Another way of putting that is that utilities have every incentive to begrudge competitors, cling to sunk costs, and use access to regulators to keep the game rigged in their favor. As long as a company with a captive set of customers and state-guaranteed returns is participating in energy-service markets, it will distort those markets.

In fact, this is the great danger of the transition that lies ahead for utilities: that they will fight it every step of the way, clinging to the regulated assets that provide them their most predictable returns. You can see this happening in crude form in utilities like FirstEnergy seeking customer bailouts for their big baseload coal and nuclear plants. You can see it happening with the battles over rooftop solar all over the country. But as utilities are pushed toward the service model, unbundling even the products and services they provided on the retail side, that type of fight will become more common.

If they use their pull with regulators to protect themselves, it will only slow down (and raise the cost of) the clean energy transition. Technology has evolved to the point where there are uncounted innovations waiting to happen all along the outer edges of the grid, just as the internet unleashed a wave of distributed innovation.

Part of the reason utilities are still using technologies older than, uh, me is that the technologies are huge and the regulatory model is built for caution. It takes a long time to innovate on technologies that only come in multibillion-dollar increments, and when your returns are guaranteed by law and reliability is your only obligation, you're likely to stick with the tried and true.

By contrast, grid-edge innovations are based on new ICT services, new financing models, and small-scale technologies that are plunging in price. That makes for low barriers to entry, if regulators don't keep those barriers artificially high. One way or another, those distributed innovations are going to swarm over the utility dinosaurs like mammals. Utilities have a choice: evolve or, like US coal companies, go under in maximally undignified and ungracious fashion.

Three things that could help with the transition to the utility of the future

#### Competition also lowers costs of green tech adoption.

Kahn 8 [Alfred, Robert Julius Thorne Professor of Political Economy, Emeritus, Cornell University. “Competitive Electricity Markets: The Benefits for Customers and the Environment”. February 2008. https://www.nera.com/content/dam/nera/publications/archive1/PUB\_CompetitiveElectricityMarkets\_Feb2008.pdf]

Prices derived by competitive markets and rates derived by traditional regulation2 are fundamentally different, and will produce different outcomes. Over time, competitive markets are widely held to produce the most efficient results in our economy, providing the lowest costs to customers. Markets reward innovation—the search for and discovery, development, adoption, and commercialization of new products, services, organizational structures, processes, and procedures—that meets market demand. In a competitive environment, customers have more control over what they consume and what they pay, price levels will encourage more efficient use of energy, and market prices will encourage more demand response. Economists and experienced regulators, as well as national electricity policy, favor reliance on competitive markets when workable competition is feasible. It is important to evaluate the attributes of the competitive and cost-based regulatory models, and to critically analyze the strengths and weaknesses of each.

Competition facilitates the most efficient means of production. Competitive market pricing provides significant benefits not found under traditional regulatory pricing. Among these benefits are the following:

* Market-based price signals are transparent and can stimulate appropriate infrastructure investment, energy conservation, and demand response.
* Competition provides customers with choices—i.e., customer sovereignty. Customers can exercise their own choices with respect to long-term risks, environmental concerns, and even reliability levels.
* Competitive market pricing allows sellers to tailor products and services to their customers’ needs, and use demand-side solutions to avoid supply-side investment where appropriate.
* By pricing at market, prices will be similar for proximate utilities.
* Competition shifts risks from customers to investors.
* Competition produces more efficient results because the investor, not the ratepayer, assumes the generation investment risk.
* In competitive markets, poor producers fail and are acquired or replaced by those with more skill, foresight, and industry.

The electric utility industry pursued competition not for academic reasons, but because regulation was producing unacceptable outcomes, including large price differences between proximate utilities, large plant cost overruns, rate shocks and phase-ins, and customer dissatisfaction with lack of control over their electricity costs. Some innovative pricing concepts were studied, but they were rarely implemented on a large scale, and offerings were limited to a few standard tariffs. New generation built under regulation was considered too risky by both customers and investors, and power plants, particularly nuclear generators, demonstrated poor operating performance.

The differences between cost-of-service regulated rates and prices derived from competition are predictable and certain, and include the following:

* Regulated rates are founded on utilities’ and regulators’ judgment about the attributes of the product (e.g., reliability, environmental impacts) rather than the discipline of market forces.
* Regulated rates result in utilities and regulators imposing their choices on customers.
* Cost-based regulation makes it difficult for customers to make choices based on their own preferences and responses to market price signals.

While the promotion of competitive markets may not have been implemented perfectly, the points above suggest that customers would be better served by regulatory efforts directed at refining and improving the competitive model, rather than returning to cost-of-service regulation.

INTRODUCTION

Over $400 billion of electric industry infrastructure investment in generating plants will be required between 2006 and 2030.3 Investments will be needed not only to accommodate the growth in population and the economy, but to replace aging facilities,4 reduce emissions, fund research and development of innovative technologies, and lessen dependence on the use of liquid fuels from politically unstable foreign sources. In addition, all of these factors must be viewed in the context of heightened interest in renewable energy.5 With such a large investment at stake, efficiency must be maximized and customers’ interests must be protected. A failure to make this investment in the most efficient manner will: (1) make it difficult to ensure affordable and reliable electricity supply; (2) threaten the global competitiveness of the United States; and (3) risk having the country fall short of achieving environmental objectives.

#### Competitive, low-emission wholesale markets cement US climate leadership and international climate action.

Winegarden 11/9 [Wayne Winegarden, Senior Fellow in Business and Economics at the Pacific Research Institute and the Director of PRI's Center for Medical Economics and Innovation. “Expand competitive power markets, not regulations and subsidies, to address global climate change.” 11/9/21. https://www.utilitydive.com/news/expand-competitive-power-markets-not-regulations-and-subsidies-to-address/609523/]

Empowering wholesale and retail electricity competition will encourage the implementation of efficient low-emission technologies for the same reason markets provide consumers with more reliable and more affordable electricity services: free competition better aligns incentives.

Take the experience of wholesale competition in the U.S.. Approximately 60% of the country is served by competitive wholesale electricity markets managed by a regional transmission organization (RTO) or independent system operator (ISO). In contrast to the monopoly markets, competitive wholesale markets empower independent power producers and suppliers to compete in the generation side of the business. Restructured electricity networks utilize market forces to facilitate which supplier will provide the generation services to meet customer demand.

Competitive markets enable power generation providers to offer electricity across a broader region and to more customers, improving the incentives and ability to produce electricity more efficiently. The competitive model also improves the incentives to invest in productive generation assets by ensuring that utilities bear the consequences (both good and bad) from their investment decisions. Thanks to these positive incentives, customers benefit from better pricing and more efficient electricity services.

What is true about pricing and reliability also holds for low-emission technologies. Competitive suppliers cannot ignore consumers' desires about low emissions technologies just as they cannot ignore their desires about cost and reliability. Therefore, electricity suppliers operating in competitive markets have an incentive to efficiently balance all these considerations. Those suppliers who can balance them better will gain customers, those who cannot, will lose customers. These positive incentives do not exist for utilities operating in monopoly markets. Instead of balancing the needs of customers, monopoly utilities serve the need of regulators, and consequently lack the same incentives to constantly strive to serve customers better.

The evidence appears to be consistent with these incentives.

Experts agree on the power of competitive energy markets

Recognizing both the environmental and pricing benefits from competitive wholesale markets, nine former commissioners and chairs of the Federal Energy Regulatory Commission (FERC) argued in a June 2021 letter to Congress that RTOs and ISOs "provide compelling platforms for renewable energy development and are achieving considerable consumer benefit." According to these commissioners, "the approach FERC has championed for over two decades to ensure a well-functioning and dynamic grid is organized wholesale markets. There is no longer any doubt that these markets are reliable, resilient and highly attractive to innovative new technologies and clean energy resources."

Part of the reason competitive markets are "attractive to innovative new technologies" is due to the benefits enabled by greater economies of scale. As a 2020 study by the Nicholas Institute for Environmental Policy Solutions at Duke University concluded, "in terms of renewables development and integration, participation in RTOs and [Energy Imbalance Markets] offer advantages. Interconnection and the ability to connect far-flung but cheap renewables with customers through transmission is an advantage of RTOs. For example, RTO regions have seen more wind generation development compared to comparably wind-rich regions outside of RTOs. Markets with large geographic reach can improve the flexibility of the power system, which is important in the long run as more variable renewables come online."

The positive incentives created by competitive wholesale markets are further enhanced when competition at the retail level is simultaneously empowered. When evaluating the impact of competition on the ability for commercial and industrial customers to increase their use of low-emission energy sources, the REBA Institute in collaboration with the Brattle Group, found that "allowing customers to choose their suppliers (such as in states with retail choice) has the highest technical potential for expanding access [to low-emission technologies] to the most C&I customers (potentially up to 100 percent) and lowering the cost of renewable energy procurement up to 11 percent" compared to customers who cannot choose their suppliers.

Essentially, many customers prefer electricity that is generated from low emission sources if it is affordable and reliable. Competitive retail markets provide the means for customers to express these preferences and reward those generators who provide the preferred combination of these attributes.

Data from the Energy Information Administration confirm that these incentives matter. The percentage change in carbon-dioxide emissions between 2008 and 2018 (the latest data available) in the retail competitive jurisdictions declined 12.1% on average compared to an average decline of 7.3% in the states that still rely on monopoly retail markets.

The evidence is clear — competitive electricity markets can help the country achieve its clean energy goals in affordable and efficient ways. If the Biden Administration really wants to demonstrate America's leadership on climate change to skeptical leaders from around the world, then it should embrace competitive electricity markets as one of the keys to America's clean energy future.

#### Antitrust provides vital deterrence that compliments FERC oversight. Prefer—our ev assumes the CP and concludes it’s insufficient.

Vaheesan 19 [Sandeep Vaheesan is legal director at the Open Markets Institute. Vaheesan previously served as a regulations counsel at the Consumer Financial Protection Bureau, where he helped develop and draft the first comprehensive federal rule on payday, vehicle title, and high-cost installment loans. Paula Bliss, of counsel, Bernheim Kelley Battista & Bliss, MARK A. GOTTLIEB Counsel of Record PUBLIC HEALTH ADVOCACY INSTITUTE, PNE Energy Supply LLC, On Behalf Of Themselves And Others Similarly Situated V. Eversource Energy And Avangrid, Inc. Motion Of Open Markets Institute For Leave To File Amicus Curiae Brief In Support Of Plaintiff-Appellant. 10/25/19, https://static1.squarespace.com/static/5e449c8c3ef68d752f3e70dc/t/5eaa1d9d2790182e187cc171/1588207017816/19-1678\_Documents-as-filed.pdf]

Since Congress and FERC have committed to market-based pricing in wellhead gas, resales of gas, and wholesale electricity, the full application of the antitrust laws is critical for ensuring the success of this legislative and regulatory market creation. Even as FERC maintains oversight of the electricity and natural gas markets, this regulatory supervision has important limitations and cannot be expected to root out all anticompetitive conduct. Antitrust enforcement complements FERC oversight and provides vital deterrence against anticompetitive practices in gas and electricity markets. Specifically, antitrust suits brought by injured consumers and businesses provide strong deterrence of anticompetitive conduct as well as compensation. In dismissing the plaintiff-appellant’s suit, the district court severely weakened the effectiveness of the antitrust laws and empowered sellers of gas and electricity to profit through anticompetitive market conduct. FERC oversight is not adequate to prevent anticompetitive conduct and ensure that markets in natural gas and electricity are free from collusive, exclusionary, and other unfair market conduct. Although FERC has an obligation to maintain “just and reasonable rates” under the Natural Gas and Federal Power Acts, 15 U.S.C. § 717c, it has only very limited tools to police specific anticompetitive conduct in the gas and electricity markets and to provide any remedy for anticompetitive market conduct it discovers after the fact.

Even assuming FERC acts against anticompetitive and other unfair conduct, 5 its remedies provide inadequate deterrence and cannot be counted on to compensate injured parties. FERC can impose monetary penalties of up to a fixed maximum amount per day on parties over whom it has jurisdiction and who have violated FERC rules in gas or electricity markets. 15 U.S.C. 717t-1; 16 U.S.C. 825o-1(b). All such penalties, however, go to the United States Treasury, not to the injured customers, absent agreement by the defendant. FERC can also order disgorgement of ill-gotten profits as a result of market manipulation. Revised Policy Statement on Enforcement, 123 FERC ¶ 61,156 (2008). Both remedies are, at best, an imperfect approximation of market-wide injury to purchasers and, at worst, a small fraction of market harm and woefully inadequate to deter market misconduct. And they offer no guarantee of full compensation for injured parties.

Given FERC’s limited market oversight powers, antitrust enforcement plays an important role in gas and electricity markets. Antitrust lawsuits help identify and stop anticompetitive practices and ensure that market-based pricing serves the public. When sellers engage in collusion, exclusion and mergers, they can enhance and maintain their market power and profit at the expense of purchasers and rivals. See, e.g., Keyspan, 763 F.Supp. at 636 (describing alleged effects of anticompetitive swap agreement involving rival generators in New York City). As federal regulators have renounced or been deprived by Congress of direct price setting authorities, the full effectiveness of the antitrust laws is essential. Jim Rossi, Lowering the Filed Tariff Shield: Judicial Enforcement for a Deregulatory Era, 56 Vand. L. Rev. 1591, 1648 (2003). See also Alfred E. Kahn, Deregulatory Schizophrenia, 75 Calif. L. Rev. 1059, 1059 (1987) (“While prepared to defend enthusiastically the deregulations with which I have been involved, I feel equally strongly that they have greatly accentuated the importance of antitrust enforcement.”).

The filed rate doctrine’s limitation on private antitrust enforcement subverts the effectiveness of the antitrust laws. The ability of injured consumers and businesses to bring antitrust suits is a pillar of the American antitrust enforcement regime. Under the Clayton Act, “[a]ny person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue . . ., and shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee.” 15 U.S.C. § 15. See, e.g., Blue Shield of Va. v. McCready, 457 U.S. 465, 472 (1982) (quoting Mandeville Island Farms, Inc. v. Am. Crystal Sugar Co., 334 U.S. 219, 236 (1948)) (“Congress sought to create a private enforcement mechanism that would deter violators and deprive them of the fruits of their illegal actions, and would provide ample compensation to the victims of antitrust violations. . . . As we have recognized, ‘[t]he statute does not confine its protection to consumers, or to purchasers, or to competitors, or to sellers. . . . The Act is comprehensive in its terms and coverage, protecting all who are made victims of the forbidden practices by whomever they may be perpetrated.’”).

Empirical research shows the public importance of “private attorneys general” and the value of having more enforcers on the beat against corporate collusion, consolidation, and monopolization. A study of 60 private antitrust lawsuits between 1990 and 2011 found that these actions generated more deterrence than the federal government’s entire criminal antitrust enforcement activity over the same period. Joshua P. Davis & Robert H. Lande, Defying Conventional Wisdom: The Case for Private Antitrust Enforcement, 48 Ga. L. Rev 1, 26 (2013). And these lawsuits compensated injured parties, whereas public enforcement generally did not.

#### The United States federal government should substantially increase its prohibitions on anticompetitive business practices by private electricity corporations by reducing application of regulatory antitrust immunities.

### Advantage Two is Capture

#### Regulatory immunities guarantee manipulation of enforcement at all levels

Rossi 5 [Jim, Harry M. Walborsky Professor and Associate Dean for Research, Florida State University College of Law. “Moving Public Law Out of the Deference Trap in Regulated Industries.” 2005. https://scholarship.law.vanderbilt.edu/cgi/viewcontent.cgi?article=1608&context=faculty-publications]

For most of the twentieth century, the doctrines of public law have, at their core, largely advised deference to regulators and other political bodies. Deference may have suited the cost-of-service ratemaking paradigm, in which regulatory jurisdiction was settled and most utilities did not compete well in interstate markets. Previous authors, such as Garland, Sunstein, and Pierce, have debated the strength of deference in such a context.214

However, the regulatory context has changed. As the vignettes in this Article illustrate, in deregulated industries and other competitive industries in transition, deference can lead to adverse private conduct as well as to undemocratic law making. The filed rate doctrine illustrates how deference can lead to strategic manipulation of regulatory enforcement. As the dormant commerce clause and state action immunity doctrine illustrate, deference can lead to private manipulation of the lawmaking process in ways that do not encourage the development of interstate and intrastate markets. And federal preemption, which implicitly embraces a type of deference to federal agencies and encourages federal courts to ignore state political processes, may create regulatory commons in which jurisdictional problems fester.

Lifting public law out of the deference trap would require courts to be more mindful of incentives in the lawmaking process and their adverse effects on social welfare-especially in a partially deregulated industry. Deference will have an important place in evaluating many regulatory disputes. Courts should not, for example, impose their own policy and market preferences on regulators. However, rather than embracing blanket deference in reviewing every complex regulatory law dispute, public law should take into account ex ante incentives of private parties in the lawmaking process as well as the behavior of law makers themselves. Judicial deference may be appropriate in some contexts, such as in direct review of clearly jurisdictional agency regulations, but in the political decision-making contexts discussed in this Article, courts could improve the functioning of deregulated markets by taking into account ex ante incentives for strategic private behavior as well as the incentives associated with the lawmaking process. Finally, if the analysis of this Article is correct, courts will increasingly share some of the blame with Congress, states, and regulatory agencies for dysfunctional deregulation of industries such as electric power. Overbroad deference to regulators and states does not excuse courts from taking responsibility for such dysfunction.

#### That guts grid reforms necessary to solve societal collapse from solar storms

Boland 15 [Andrea, Maine representative, leader in safety issues of electromagnetic radiation. “Political Realities of Legislation for Extreme Events.” 9/16/15. <https://www.domesticpreparedness.com/commentary/political-realities-of-legislation-for-extreme-events/>]

The single extreme solar storm (GMD/geomagnetic disturbance) or electromagnetic pulse (EMP) attack (manmade weapon) – together often known as natural and manmade EMP, or simply EMP – could cause a blackout lasting months or years. Even for government officials who have the authority to do something about it, legislation may be required to make new demands on a resistant, powerful industry.

For unfamiliar and intellectually intimidating topics, it may be necessary to educate legislators. The effort it takes to pass legislation to solve even relatively simple problems, however, may be enough to discourage legislators from voluntarily taking on this kind of new, unfamiliar challenge. Therefore, when facing the specter of a massive infrastructure problem and a powerful industry lobby, many default to a wait-and-see position.

Educating Legislators

Key sources of information for legislators are typically the legislation sponsor and supporters, the industry and its lobbyists, content experts, and outside interests, including the general public and the legislators’ own supporters. The primary forum for educating legislators comes from a public hearing presented before the legislative committee that has jurisdiction over that policy area. Thus, to seek protections of the Maine electricity transmission system (the grid) from long-term blackouts due to GMD and EMP requires the public hearing to take place before the Energy, Utilities, and Technology (EUT) Committee.

As a state representative, it took a significant amount of time to learn about the threats of GMD and EMP, and to develop a substantial network of national experts on policy, science and technology, manufacturing, space weather, weapons, intelligence, and national defense. Dr. Peter Vincent Pry and the office of (now former) Congressman Roscoe Bartlett, both long-time national leaders on EMP, were significant in introducing politicians to experts who had been working on these issues at the federal level. Many of them came to Maine to testify at the hearing. These experts informed the EUT about threats to the electric grid that they had never heard about before from the power companies. They challenged the legislators to do the following:

Acknowledge that the State has a problem (as do all the states);

Recognize that the State has regulatory authority to fix the problem;

Identify available solutions and their costs (GMD protections exist that are low cost);

Provide effective leadership to protect Maine’s electrical grid from long-term blackout; and

Serve as a model for other states.

The experts were articulate, convincing, and impressive when describing a compelling but scary message, so committee members were able to understand the issue.

On the other hand, the electric power industry “representatives” (lobbyists) who had spent careers lobbying for the industry before the EUT Committee (and other legislators) were not content experts, but rather public relations experts highly paid to deliver a message. They spoke positively about the electric companies’ management of the threat, with statements including the following: “We are talking about a low-probability event; we have competing priorities; we’ve been protecting the grid for years; we are following all the NERC (North American Electric Reliability Corporation) reliability standards.” Despite sounding impressive when delivering a reassuring message, they failed to answer key questions and to win over the committee. The threat they posed to passage of the bill was that they were familiar faces to the committee members – and their ingratiating smiles can tip the balance for lazy, confused, or just undecided legislators.

The Process Behind a Maine Bill

Facing news it could not ignore, the EUT lacked the confidence to act on or confront the industry’s resistance, and amended the bill (LD 131, introduced by Andrea Boland) to a study, with the provision that the EUT could use its findings to draft permanent protective legislation the following year. The Maine Public Utilities Commission (PUC) was to conduct the study, and assured the EUT they could deliver it on schedule in January 2014. The industry agreed to the plan. LD 131 passed unanimously in committee as emergency legislation and in the House of Representatives, and passed by a vote of 32-3 in the Senate, to become law on 11 June 2013.

It was a deftly designed study and internationally acclaimed as model legislation. It also was the first ever EMP/GMD legislation passed in the nation. The Federal Energy Regulatory Commission (FERC) has an Office of Energy Infrastructure Security, which has a mission to assist states; its director, Joe McClelland, offered help with the study.

Two reports finally emerged – one influenced heavily by the electric power companies, and one supported by the independent experts – but not until 2015, and new elections had resulted in a newly configured legislature. Senator David Miramant introduced a new bill (LD 1363) to require installation of known, available protections supported in the studies. This time, the EUT split its vote, and the bill failed in the legislature – by one vote in the Maine Senate, along party lines. Low-cost solutions existed, and the prior legislature’s nearly unanimous vote had supported emergency action to protect the grid, but the industry had succeeded in defeating it.

The difference in the results of the two legislative efforts may be explained by different factors at work. In 2013, the legislation, sponsor, and experts surprised the industry, which was unable to recover from the unexpected exposure of the threat and the apparent disinterest and/or incompetence of the power companies regarding GMD and EMP. In January 2014, the EUT chair, without a vote of the committee, had granted the PUC an extension to January 2015 to finish the study – under the direction of the biggest electric utility in Maine, Central Maine Power (CMP). By 2015, when LD 1363 was introduced, the industry had regained its political control, as the 2014 election had populated the EUT and one-third of the full legislature with new faces. Various systemic political realities also may have contributed to the industry defeat of protections:

Uneasiness about supporting a big, new, unfamiliar issue – It may not seem advantageous to some legislators to invest the time and effort to support a bill that might not pass, or to take a politically risky position opposing a political power industry. Legislative leaders remained quiet, not signaling support, maybe for similar reasons.

Legislators’ fears and lobbyist arguments, valid or not, to oppose the bill – lobbyists make it easy for reluctant legislators to adopt their positions when they do not conduct their own research.

Hesitation to cause trouble with big campaign donors – Legislative leaders are expected to raise money to get themselves and their members elected, and to fulfill an agenda.

Committee chairs in Maine are appointed by legislative leadership (Speaker of the House and President of the Senate) – These leaders typically support the agenda of those who appointed them and often of the special interests under the committee’s jurisdictions, and they are in a position to influence outcomes. The chairs never took up the PUC study reports for review, causing committee members to not be informed on their contents. Thus, they influenced the committee vote, which in turn, influenced the full legislature’s vote.

Appointment of committee members by leadership – Only three of the 2013 members of the EUT Committee were reappointed to the 2015 committee; 10 were new, including the chairs. Therefore, the committee did not benefit from a lot of experience with the subject.

Influence of committee chairs – In 2013, the chairs did not limit the time visiting experts had to testify. In 2015, chairs limited them to three minutes each (meanwhile, the lobbyists were working every day in committee and in the halls of the State House). With so little input from the independent, national experts, and deliberately confused by lobbyists protecting electric companies from higher standards, new members were frustrated, unable to master critical new information, and split the committee vote. They thereby weakened the message to the rest of the legislature.

The Senate chair of the EUT, Senator David Woodsome, who had been supporting the bill all along, changed his vote in the end, probably, as a new legislator, succumbing to party pressure, and spoke against it on the floor of the Senate. This was enough to defeat the bill by one vote, even though Senator Miramant spoke strongly for it. The House of Representatives had passed it decisively, where the three veteran EUT committee members spoke in favor of it.

Future Legislative Concerns

Many legislators who are motivated to follow and be politically safe, rather than lead on tough issues, often go along with party leadership or powerful interests. The legislative hierarchy structure, campaign funding laws, and committee system can work symbiotically to marshal votes for a separate agenda. Legislators who take on serious problems may find themselves opposing powerful interests and getting little or no help from their leadership because high political costs could reflect on them personally. Their constituents and the public in general may be strongly supportive, but not enough of them raise their voices.

Not unlike other powerful industries, the electric power industry uses media and lobbyists to telegraph an image of integrity and professional authority, but then uses inaccurate data in their studies to try to prove invalid arguments that work for them. To inexperienced, often stressed legislators, it may be persuasive. NERC, the electric power industry’s association and lobbying arm, has sole authority to write its own “reliability standards” that determine their level of public responsibility. The Federal Energy Regulatory Commission (FERC) is charged with regulating NERC, but often turns to NERC for answers. In the same way, the Maine PUC turned to Central Maine Power Company for the LD131 study. CMP then turned to NERC, which provided data from another country, rather than using the Maine data it had, to support the outcome it wanted: the argument against GMD/EMP protections.

First-Hand Experience in the Maine Legislature

Big money and special interests have outside influence on the legislative process. It can often compromise leaders, defeat good legislation, endanger the public, and promote regulatory capture. It is difficult to display political courage when lobbyists of powerful interests smile and create confusion about the facts. For these reasons, testimony from subject matter experts needs to be treated with great respect. In this case, the testimony of first responders was very important. The public is critically important, too. Without public support, the nation cannot expect to maintain a self-governance.

The United States is the most vulnerable country in the world to natural and manmade solar storms and EMP because of its huge, interconnected grid and its dependence on electric power and electronics. State Senator and Navy veteran Robert “Bob” Hall of Texas refers to obstruction of protections of the grid as “treason” because it is also a national defense threat. Imagine what the fifth week of a blackout would be like following an EMP or solar storm: no heating, cooling, communications, water and waste systems, banking, hospitals, transportation, food delivery, etc.

#### Now is key—we’re approaching solar maximum

Drake 21 [NADIA DRAKE, "The sun is getting stormier, and it’ll peak just in time for a total solar eclipse", 5/14/21, https://www.nationalgeographic.com/science/article/the-sun-is-getting-stormier-just-in-time-for-a-total-solar-eclipse]

Now, the next solar cycle has ignited, with peak activity predicted around 2025. And this time, the sun will shake off its slumber while NASA’s Parker Solar Probe is continuously dive-bombing the sun, swooping closer to the star than any craft has yet dared.

“It still gives me goosebumps when I think about it,” says NASA’s Madhulika Guhathakurta, a solar physicist. “I think I stayed on at NASA headquarters for one—and only one—mission, and that is Parker Solar Probe.”

The European Space Agency’s Solar Orbiter is also looping around the sun, and it will ultimately deliver our first good observations of the sun’s poles. Until this mission, scientists mostly have been limited to scrutinizing the faces of the sun that we can see from Earth, and observing its poles is crucial for understanding its magnetic activity and the intensity of activity during each 11-year cycle.

Perhaps even more thrilling for space fans, the peak of this cycle is expected to happen very close to the time a total solar eclipse will be visible from North America, in April 2024. When the moon blots out the sun, people in the path of totality will be able to see the delicate, diaphanous halo of the sun’s upper atmosphere, or corona, and it should be a spectacular sight so close to solar maximum.

“It will have the appearance of stuff coming out from everywhere, very dynamic,” Guhathakurta says.

Plotting the terminators

While solar experts agree the next cycle has begun, debate swirls over how strong it’s likely to be. In September 2020, the Solar Cycle 25 Prediction Panel announced that cycle 25 had kicked off—and they predicted it would be mild. Traditionally, these predictions are based on counting dark, transient patches on the sun’s surface known as sunspots. Appearing in regions where magnetic fields are strong, sunspots bloom and shrivel as the sun’s activity waxes and wanes.

The sun keeps the planets in its orbit with a tremendous gravitational force. What would happen if it disappeared entirely? Learn about the star at the center of our solar system, and how it is critical to all life as we know it.

In December 2019, scientists recorded a minimum number of sunspots. That observation marked the end of cycle 24, the panel later said, and based on how fast the spots had started reappearing, it seemed that cycle 25 would be similar in intensity to the relative calm of cycle 24.

However, other solar cycle experts reached a dramatically different conclusion: Cycle 25 could be one of the strongest since record-keeping began in 1755. Instead of counting sunspots, Robert Leamon of the University of Maryland, Baltimore County, and his collaborators based their prediction on something they call the terminator, or the point when all magnetic activity from a previous solar cycle vanishes. Sunspots generally track that transition, but the true terminator tends to lag behind the sunspot minimum by somewhere between 12 and 18 months.

“If there’s one take-home I can get to everybody, it’s that there’s more to activity than sunspots,” says Leamon, whose team published their contradictory prediction in the journal Solar Physics.

By plotting terminator events over 270 years, Leamon and his colleagues found that the timing between terminators is tightly linked to the strength of the next cycle, with shorter gaps portending stronger activity. And that’s the situation we’re in now, he says, where the gap between terminators is short, and magnetic activity from cycle 25 is likely to take over in the next couple of months.

“We are close,” Leamon says. “That’s when you’ll see a big jump in activity.”

Forecasting disasters

A strong solar cycle might spell trouble for Earth. Sunspots can unleash massive explosions called solar flares, and those flares sometimes sling volleys of radiation and charged particles into space called coronal mass ejections, or CMEs. If a sufficiently strong CME collides with Earth, it could cause a damaging geomagnetic storm.

Perhaps the best-known of these storms occurred in 1859, during solar cycle 10. Known as the Carrington Event, it disrupted telegraphs and shocked operators at the controls, and it lit the skies with auroras that were visible as far south as the Caribbean. Today, a storm of this magnitude would be devastating. It could crash power grids, knock out satellites, endanger astronauts in orbit, change planned flight routes, and render Earth’s upper atmosphere impenetrable to ground-based communication systems.

Weaker eruptions are also dangerous. On March 12, 1989, the entire province of Quebec lost power when a CME a fraction the strength of the Carrington event smashed into Earth and fried the power grid, trapping people in elevators and tunnels. In orbit, multiple satellites temporarily went dark or had trouble maintaining altitude, and sensors tripped aboard the space shuttle Discovery—which had launched earlier that day.

#### **Solar flares are most threatening scenario for extinction – outweighs nuclear war on probability and magnitude**

O’Reilly 14 [William F.B. O’Reilly, corporate and political communications consultant, citing Frank Gaffney, the founder and president of the Center for Security Policy and hedge fund giant Paul Singer, July 31, 2014. “The day we almost went stupid.” <https://www.amny.com/opinion/columnists/william-f-b-o-reilly/the-day-we-almost-went-stupid-william-f-b-o-reilly-1.8933432>]

She popped to mind this week when I heard that the world just missed being sent back to the Bronze Age by a solar flare. It happened on July 23, 2012, but scientists just got around to telling us about it. This flare apparently caused something called a coronal mass ejection, which in turn created an electromagnetic pulse [EMP] that missed Earth by a whisker. A smaller coronal mass ejection caused telegraphs around the world to melt down in 1859 in what became known as the Carrington Event. Pretty big difference between 1859 and 2014 technology-wise. If Carrington had struck in the summer of '12, we'd likely have lost electricity; water services; bank accounts; financial markets; anything online; and car, rail and air travel -- pretty much everything except those solar calculators that now come as tradeshow giveaways. It would take years to bring services back online, experts say. A lot of smart people are taking this threat seriously. Hedge fund giant Paul Singer issued a memo to investors this week, calling the threat of an EMP rendering useless everything with a battery or a plug "the most significant danger" in the world. "While these pages are typically chock full of scary or depressing scenarios," Singer wrote, "there is one risk that is head-and-shoulders above all the rest in terms of the scope of potential damage adjusted for the likelihood of occurrence. Even horrendous nuclear war, except in its most extreme form, can [be] a relatively localized issue, and the threat from asteroids can be mitigated." When the Paul Singers of the world worry enough to alert investors about something, it's probably worth thinking about. Frank Gaffney, the founder and president of the Center for Security Policy, and a former client, has been warning about the threat of EMPs for years. But Gaffney doesn't look to the sun. His concern is China, North Korea, Russia, or a nuclear Iran. Anyone with nuclear capability who can sail a barge near America's shores would be capable of knocking out America's power grid with a high altitude nuclear detonation.

#### Severe space weather is a great filter event that sparks resource wars, grid failure, pandemics, and nuclear miscalc

Loper 19 [Dr. Robert D. Loper, Ph.D. from the Air Force Institute of Technology, Assistant Professor of Space Physics, Spring 2019. “Carrington-class Events as a Great Filter for Electronic Civilizations in the Drake Equation.” Publications of the Astronomical Society of the Pacific. https://iopscience.iop.org/article/10.1088/1538-3873/ab028e/meta]

Eastwood et al. (2017), the National Academy of Sciences (2008), and the Royal Academy of Engineering (2013) outline the potential economic impacts of severe space weather. In particular, major direct impacts from a Carrington-class CME could be outlined as including the following. 1. Power grid failure due to destruction of large transformers by geomagnetically induced currents. The large transformers in question here generally cost about $1 million per unit and require about 18 months to manufacture, ship, and install. The National Academy of Sciences (2008) report estimates such a power grid failure would cost $1–2 trillion per year6 and last four to ten years. 2. Outages or failures of LEO (low Earth orbit) space assets due to enhancement of the inner Van Allen belt. A severe solar storm can also cause ionospheric uplift which can dramatically increase satellite drag (Tsurutani et al. 2012). Additionally, LEO spacecraft operation could be disrupted by solar energetic protons (SEPs) generated in the shock of the CME passage through the solar wind (Royal Academy of Engineering 2013). 3. Outages or failures of GEO (geosynchronous equatorial orbit) space assets due to enhancement of the outer Van Allen belt or due to SEPs generated in the shock of the CME passage (Royal Academy of Engineering 2013). 4. GPS outages due to GEO spacecraft outages or failures, or GPS degradation due to ionospheric uplift and enhancement, potentially lasting several days or longer. 5. Communications outages due to high-frequency and ultrahigh-frequency radio blackouts, as well as cellular communication network and internet collapse due to extended power outages beyond the limits of generators and stored fuel. In particular, although optical ﬁber cables are the foundation of much of the global communication network, electrical power is still needed to power optical repeaters and transmitters (Royal Academy of Engineering 2013). 6. Increased radiation doses to astronauts and airline passengers (Royal Academy of Engineering 2013). This is more of a risk for long-haul airline ﬂights or manned spaceﬂight. Major indirect effects could include, but are by no means limited to, the following: 1. water and waste water shortages due to reduced or eliminated pumping from power grid failure; 2. fuel shortages due to reduced or eliminated pumping from power grid failure, which could result in transportation stoppages; 3. food shortages due to transportation stoppages, which could contribute to increased death rates and incite rioting and/or looting; 4. reduced hospital care due to water shortages and power outages, which could contribute to increased death rates and rates of infection; and 5. a years-long power grid and internet degradation or outage might irrevocably damage the global economy, in turn greatly prolonging the time to restore the power grid beyond the estimate of four to ten years. If one recalls major disasters caused by terrestrial weather events like hurricanes Katrina (New Orleans, 2005) and Maria (Puerto Rico, 2017), one can imagine the sorts of major effects on people and life in those areas. The most striking difference is that, whereas humanitarian aid came to bear on these disasters, a Carrington-class event would be a global catastrophe with little or no aid forthcoming. Much greater loss of life could result, and our civilization could be driven back to a much more fractured and pre-electronic one. For the purposes of another planet’s Drake equation, our civilization would be eliminated from the calculation. Conversely, another planet whose electronic civilization were struck by a Carrington-class CME would be eliminated from our calculation. Riley (2012) estimates the probability of another Carringtonclass event occuring within the following decade at about 12%. This estimate preceded the solar storm of 2012, but a good rule of thumb would be to estimate this to be the probability of having a Carrington event during any given solar cycle. Love (2012) and Kataoka (2013) have calculated probabilities in rough agreement, but there are a wide range of probabilities in the literature, ranging from once per 60 years (Tsubouchi & Omura 2007) to once per 500 years (Yermolaev et al. 2018). This work will retain the result of Riley (2012), which is also used in National Academy of Sciences (2008) and Royal Academy of Engineering (2013). This roughly agrees with the “once in a century” designation usually given to the Carrington event. Royal Academy of Engineering (2013) indicates that this designator is not well understood given the relative lack of data, but also that there are several tens of Carrington-class CMEs every century that either miss Earth or have lesser impact due to a northward orientation of the interplanetary magnetic ﬁeld. As shown in Figure 1, such a CME has a very wide angular extent (in the 2012 July event, the CME extended in about a 135° arc from the Sun), which could strike Earth in three out of eight occurrences. There is also some indication that a solar storm could trigger other Great Filter events. Knipp et al. (2016) outlines a solar storm in 1967 May that nearly triggered a nuclear war, as American radar operators initially mistook a solar storm for Soviet jamming. It might also be possible that a Carrington-class event could unleash or exascerbate an infectious disease due to reduced hospital care at a critical time, resulting in a pandemic.

#### Extinction--

#### 1--Grid resilience

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Societies and nations are examples of large-scale, complex social-physical systems. Thus, societal resilience can be defined as the ability of a nation, population, or society to anticipate and prepare for major stressors or calamities and then to absorb, adapt to, recover from, and restore normal functions in the wake of such events when they occur. A nation’s dependence on its Critical Infrastructure systems, and the resilience of those systems, are therefore major components of national and societal resilience. There are a variety of events that could deal crippling blows to a nation’s Grid, Critical Infrastructure, and social fabric. The types of catastrophes under consideration here are “very bad day” scenarios that might result from severe GMDs induced by solar CMEs, HEMP attacks, cyber attacks, etc.5 As briefly discussed in Sec. III.C, the probability of a GMD of the magnitude of the 1859 Carrington Event is now believed to be on the order of 1%/year. The Earth narrowly missed (by only several days) intercepting a CME stream in July 2012 that would have created a GMD equal to or larger than the Carrington Event.41 Lloyd’s, in its 2013 report, “Solar Storm Risk to the North American Electric Grid,” 42 stated the following: “A Carrington-level, extreme geomagnetic storm is almost inevitable in the future…The total U.S. population at risk of extended power outage from a Carrington-level storm is between 20-40 million, with durations of 16 days to 1-2 years…The total economic cost for such a scenario is estimated at $0.6-2.6 trillion USD.” Analyses conducted subsequent to the Lloyd’s assessment indicated the geographical area impacted by the CME would be larger than that estimated in Lloyd’s analysis (extending farther northward along the New England coast of the United States and in the state of Minnesota),43 and that the actual consequences of such an event could actually be greater than estimated by Lloyd’s. Based on “Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack: Critical National Infrastructures” to Congress in 2008 (Ref. 39), a HEMP attack over the Central U.S. could impact virtually the entire North American continent. The consequences of such an event are difficult to quantify with confidence. Experts affiliated with the aforementioned Commission and others familiar with the details of the Commission’s work have stated in Congressional testimony that such an event could “kill up to 90 percent of the national population through starvation, disease, and societal collapse.” 44,45 Most of these consequences are either direct or indirect impacts of the predicted collapse of virtually the entire U.S. Critical Infrastructure system in the wake of the attack. Last, recent analyses by both the U.S. Department of Energy46 and the U.S. National Academies of Sciences, Engineering, and Medicine47 have concluded that cyber threats to the U.S. Grid from both state-level and substatelevel entities are likely to grow in number and sophistication in the coming years, posing a growing threat to the U.S. Grid. These three “very bad day” scenarios are not creations of overzealous science fiction writers. A variety of mitigating actions to reduce both the vulnerability and the consequences of these events has been identified, and some are being implemented. However, the fact remains that events such as those described here have the potential to change life as we know it in the United States and other developed nations in the 21st century, whether the events occur individually, or simultaneously, and with or without coordinated physical attacks on Critical Infrastructure assets.

#### 2--Pandemics

Millett 17 [Piers Consultant for the World Health Organization, PhD in International Relations and Affairs, University of Bradford, Andrew Snyder-Beattie. “Existential Risk and Cost-Effective Biosecurity.” http://online.liebertpub.com/doi/pdfplus/10.1089/hs.2017.0028]

Historically, disease events have been responsible for the greatest death tolls on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world’s population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization. A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to remote populations, overcome rare genetic resistances, and evade detection, cures, and countermeasures. Even evolution itself may work in humanity’s favor: Virulence and transmission is often a trade-off, and so evolutionary pressures could push against maximally lethal wild-type pathogens.5,6 While these arguments point to a very small risk of human extinction, they do not rule the possibility out entirely. Although rare, there are recorded instances of species going extinct due to disease—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also historical examples of large human populations being almost entirely wiped out by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include native American tribes exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and theWestern Abenaki (which suffered a staggering 98% loss of population). In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But many diseases are proof of principle that each worst-case attribute can be realized independently. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, natural evolution would be an unlikely source for pathogens with the highest possible levels of transmissibility, virulence, and global reach. But advances in biotechnology might allow the creation of diseases that combine such traits. Recent controversy has already emerged over a number of scientific experiments that resulted in viruses with enhanced transmissibility, lethality, and/or the ability to overcome therapeutics.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-2 Although these experiments had scientific merit and were not conducted with malicious intent, their implications are still worrying. This is especially true given that there is also a long historical track record of state-run bioweapon research applying cutting-edge science and technology to design agents not previously seen in nature. The Soviet bioweapons program developed agents with traits such as enhanced virulence, resistance to therapies, greater environmental resilience, increased difficulty to diagnose or treat, and which caused unexpected disease presentations and outcomes.22 Delivery capabilities have also been subject to the cutting edge of technical development, with Canadian, US, and UK bioweapon efforts playing a critical role in developing the discipline of aerobiology.23,24 While there is no evidence of staterun bioweapons programs directly attempting to develop or deploy bioweapons that would pose an existential risk, the logic of deterrence and mutually assured destruction could create such incentives in more unstable political environments or following a breakdown of the Biological Weapons Convention.25 The possibility of a war between great powers could also increase the pressure to use such weapons—during the World Wars, bioweapons were used across multiple continents, with Germany targeting animals in WWI,26 and Japan using plague to cause an epidemic in China during WWII.27

#### Antitrust solves captured regulatory gaming

Dogan 8 [Stacey L. Dogan, Associate Dean for Academic Affairs, Professor & Law Alumni Scholar, Boston University School of Law. and Mark A. Lamley, William H. Neukom Professor of Law at Stanford Law School and the Director of the Stanford Program in Law, Science and Technology. “Antitrust Law and Regulatory Gaming.” October 2008. https://scholarship.law.bu.edu/cgi/viewcontent.cgi?article=1873&context=faculty\_scholarship]

Antitrust law promotes competition in the service of economic efficiency. Government regulation may or may not promote either competition or efficiency, depending on both the goals of the agency and the effects of industry “capture.” Antitrust courts have long included regulated industries within their purview, working to ensure that regulated industries could not use the limits that regulation imposes on the normal competitive process to achieve anticompetitive ends. 4 Doing so makes sense; an antitrust law that ignored anticompetitive behavior in any regulated industry would be a law full of holes.

The role of antitrust in policing regulated industries appears to be changing, however. A cluster of Supreme Court decisions in the past decade have fundamentally altered the relationship between antitrust and regulation, placing antitrust law in a subordinate relationship that, some have argued, requires it to defer not just to regulatory decisions but perhaps even to the silence of regulatory agencies in their areas of expertise. 5 While many of those decisions might be justified on their facts as a matter of antitrust law, 6 together they are leading courts and commentators to conclude that the antitrust laws are impliedly repealed by government regulation of a particular industry.7 The new vogue for antitrust deference will come to a head in 2009, when the Supreme Court decides Pacific Bell v. linkLine, which raises the question whether a regulated monopoly with franchised rights of way violates the antitrust laws by engaging in a “price squeeze”: charging broadband competitors wholesale prices for use of the right of way that exceed the retail prices its own subsidiary charges its customers.

Absolute antitrust deference to regulatory agencies makes little sense as a matter either of economics or experience. Economic theory teaches that antitrust courts are better equipped than regulators to assure efficient outcomes in many circumstances. Public choice theory – and long experience – suggests that agencies that start out trying to limit problematic behavior by industries often end up condoning that behavior and even insulating those industries from market forces. And as history has shown, relying on regulatory oversight alone without the backdrop of antitrust law would leave both temporal and substantive gaps in enforcement, which unscrupulous competitors could exploit to the clear detriment of consumers. 9 The mere existence of a competition-conscious regulatory structure cannot guarantee against abuses of that structure, or against exclusionary behavior that falls just beyond its jurisdiction.10 Indeed – and perhaps ironically – the very regulatory structure that exists to promote competition can create gaming opportunities for competitors bent on achieving anti-competitive goals. Such “regulatory gaming” undermines both the regulatory system itself and the longstanding complementary relationship between regulatory and antitrust law.

We argue that the risk of regulatory gaming provides an important example of the need for ongoing antitrust oversight of regulated industries. We define regulatory gaming as private behavior that harnesses pro-competitive or neutral regulations and uses them for exclusionary purposes. Complex regulatory systems – particularly those requiring government approval for market entry – can create opportunities for such gaming, by enabling dominant parties to dictate industry standards while delaying entry of competing products. The pharmaceutical industry has witnessed this behavior for years, as branded drug companies have used exclusionary tactics to stay one step ahead of generic entry. In one species of this behavior – product-hopping – the branded company makes repeated changes in drug formulation to prevent generic substitution, rather than to improve the efficacy of the drug product.11 Product-hopping raises difficult questions for antitrust courts. On the one hand, product hopping antitrust suits require courts to inquire into product design choices, something antitrust judges take pains to avoid; they also raise concerns about courts second-guessing judgments by agencies and legislators about how best to balance competition and innovation in regulated markets. On the other hand, if left unchallenged, this kind of behavior can cause sustained inefficiencies in markets.

Industry standards set or endorsed by government bodies offer a second example. If the government requires that products include particular features or perform in particular ways, private parties can sometimes hoodwink regulators into adopting standards that favor their proprietary technologies and exclude their competitors. 12 Of course, nothing prevents the government from settling on a patented standard, and private parties have a protected right to petition the government regardless of their motive. But when petitioning behavior contains material misstatements or omissions, and results in standards that exclude competition in ways the government did not anticipate, the petitioning party has abused the regulatory process. Here, too, antitrust courts must strike a delicate balance among several competing concerns – the right to petition the government, the legitimate enforcement of patent rights, and the very real problem of patent holdup and regulatory abuse.

Our goal in this paper is not to persuade the reader that these particular examples of regulatory gaming violate the antitrust laws (though we think they do) or that other examples, such as regulatory price squeezes, do not violate the antitrust laws. Rather, our point is that whether or not particular acts of regulatory gaming harm competition is and should be an antitrust question, not merely one that involves interpreting statutes or agency regulations. Regulatory agencies and even Congress cannot prevent gaming ex ante. Experience with the pharmaceutical industry suggests that if Congress acts to squelch one form of gaming, companies will find other ways to game the system. And even if Congress or the regulating body can surgically fix a particular type of exclusionary behavior, such an ex post response (unlike the threat of antitrust treble damages) does nothing to compensate for past harm or to deter future gaming behavior. Some level of antitrust enforcement – with appropriate deference to firm decisions about product design and affirmative regulatory decisions that affect market conditions – provides a necessary check on behavior, such as product hopping, that has no purpose but to exclude competition.

Part I begins with an introduction to the relationship between antitrust law and industry-specific regulation. After briefly discussing the historical collaboration between antitrust and regulatory law, we explore the recent cases that show skepticism toward antitrust intervention in regulated industries – skepticism that represents a marked departure from antitrust history. In Part II, we contend that this skepticism, if applied too broadly, contradicts both logic and a rich economic literature that suggests that antitrust law generally does a better job of disciplining exclusionary behavior and achieving competitive outcomes than do government agencies. The decisions that have ushered in antitrust deference have perverted the lessons of law and economics, taking the efficiency-based attacks lodged against overly vigorous antitrust enforcement as license to cut back on all antitrust enforcement, even where antitrust offers the only hope of curbing regulatory abuse.

#### The filed rate doctrine encourages strategic manipulation of regulatory agencies and over-disclosure of ambiguous ex ante terms and conditions that makes squo antitrust enforcement impossible

Rossi 10 [Jim Rossi, Harry M. Walborsky Professor and Associate Dean for Research, Florida State University College of Law . Edited by Daniel A. Farber and Anne Joseph O’Connell. “Research Handbook on Public Choice and Public Law”, Ch 13 ‘Public choice, energy regulation and deregulation’. 7/30/10. https://www.e-elgar.com/shop/usd/research-handbook-on-public-choice-and-public-law-9781847206749.html]

One of the cases that illustrates the broad scope – and potential cost – of the filed rate doctrine for the operation of deregulated energy markets involved a price squeeze claim by a municipal utility in Massachusetts against New England Power Company, alleging, among other claims, that the defendant offered the city’s affiliates preferential treatment as customers over Norwood.32 FERC had purportedly approved these terms as ‘just and reasonable’ as a part of New England Power Company’s restructuring plan, which included approval of market-based tariffs; since both tariff s were on file with the FERC, the US Court of Appeals for the First Circuit invoked the filed rate doctrine as a complete bar to the price squeeze claim. The court reasoned that, ‘[i]t is the filing of the tariffs, and not any affirmative approval or scrutiny by the agency, that triggers the filed rate doctrine’.33 Because ‘the rationale for the filed rate doctrine is to protect the exclusive authority of the agency to accept or challenge such tariff s’,34 in the view of the First Circuit, ‘this is not a case that calls out for revisiting the fi led rate doctrine or for strenuous efforts to carve out exceptions . . . ’35

Federal courts continue to vigorously endorse the filed tariff shield, keeping competitor and consumer claims almost completely out of the hands of both state regulators and federal courts (Rossi 2003). For example, the US Court of Appeals for the Ninth Circuit applied the fi led tariff doctrine to imply federal pre-emption of the California Governor’s eff ort to protect consumers against strategic manipulation of its deregulated power market.36 In the court’s view, ‘interstate power rates fi led with FERC must be given binding effect’ by state regulators, even when regulating in areas subject to state jurisdiction. Thus, the court stated with a sweeping confidence, ‘FERC-approved rates preempt conflicting regulations adopted by the states’.37

Public choice themes reveal how the filed tariff doctrine not only influences the course of litigation after a tariff has been filed with regulators; it also creates incentives that can influence the private behavior of regulated firms in interacting with regulators before litigation commences. Specifically, by encouraging strategic filing of tariffs with regulators to pre-empt litigation, the fi led rate doctrine may encourage a type of forum-shopping behavior by private fi rms in the regulatory process before actual litigation commences (Rossi 2003). Institutionally, agencies and courts have never been very effective at monitoring the process of filing rates and other tariff s as a private forum-shopping strategy. Although many question the effectiveness of rate regulation, this may have been a moderately stable state of aff airs with cost-of-service regulation, given routine regulatory proceedings that served as some safeguard for public values. However, with the introduction of competition to formerly regulated industries and other regulatory transitions, market norms are emerging to expose a gap in regulatory agency ability to deter wrongdoing by private firms. To the extent the filed tariff doctrine encourages strategic manipulation of the tariffing process to foreclose judicial enforcement, it widens this gap and may even result in more radical deregulation than either Congress or agencies intend – essential firms may be able to elect to operate in markets without any antitrust, contract and tort protections.

Political scientists and economists have begun to analyze how interest groups, including regulated firms, decide to allocate their resources between various types of regulation, congressional, agency, or judicial (de Figueiredo and de Figueiredo 2002; Rubin 2001). Since it has unique implications for the behavior of regulated firms, the filed rate doctrine is a worthy candidate for similar analysis. Since the doctrine is only available on a widespread basis if a utility has fi led its tariff with federal regulators, the doctrine creates a strong ex ante incentive for private fi rms, such as regulated utilities, to invest more heavily than otherwise in lobbying regulators to accept or approve tariffs. By engaging in such conduct ex ante, private firms can avoid the uncertainty of an ex post judicial proceeding in which courts enforce antitrust, tort, or contract law. The doctrine thus encourages a type of forum shopping, triggered primarily by private decisions to provide information in the regulatory process. If a private fi rm desires the protection of the fi led tariff shield – immunity from antitrust and state common law suits for its market behavior – it has a strong incentive to divulge information (especially ambiguous information) to regulators ex ante, in anticipation that this information will be included in published tariffs and will minimize unpredictable, ex post judicial meddling (Rossi 2003). Where there is no check on the accuracy, clarity and relevance of the information fi rms are submitting in the regulatory process with tariff fi lings, opportunities for manipulation of regulation – and in particular institutional choice – are presented.38 To the extent regulated firms engage in strategic conduct ex ante, an institutional bias in favor of regulatory agencies, and away from courts and markets, is likely to result.

In the context of asymmetric information disclosure of non-verifiable information in contractual bargaining, Eric Talley has observed a need for judicial monitoring or verifi - cation (Talley 2001, 192–3). Typically, the balance between disclosure, on the one hand, and institutional decisions to regulate, on the other is monitored by the oversight of a third party who has the ability to protect the public interest. For example, in the context of tort litigation, securities regulation, and witness immunity from criminal prosecution, each of which use information disclosure to influence regulatory choices, third party oversight plays an important role in monitoring the divulgence of information to ensure that the choice is welfare-enhancing. In the context of many price-regulated industries, however, third-party monitoring of strategic disclosure is ineffective. Third-party monitoring of information disclosure in the utility regulation would depend on the actions of either regulators, as in the context of the SEC, or courts, as in the context of criminal immunity. To the extent that the filed rate doctrine applies, however, both regulators and courts have been ineffective at policing this balance ex ante to ensure that the application of the shield is not harmful to social welfare ex post in the utility regulation context.

As regulators have moved towards restructured markets, and away from cost-of service regulation, agencies have tended to acquiesce in, rather than seriously scrutinize or refuse, tariff filings. In fact, often filed tariff s become effective by operation of law after the passage of time, with little or no scrutiny by agencies. So the filed tariff bar curiously aligns the incentives of both private fi rms and regulators to include as many terms and conditions as possible in tariff s – even when these terms and conditions are a sham, in the sense that agencies often lack the power to seriously enforce them. This is not as much of a problem with cost-of-service regulation, since tariff s are subject to potential adjudication in a hearing; with restructuring, however, tariff s are frequently accepted without such scrutiny, presenting the potential for a new kind of private manipulation of the regulatory process.39 Given the principles of deference courts have provided to regulators in the late twentieth century (Kearney and Merrill 1998, 1396; Pierce 1989, 1046; Goldsmith 1989, 243), the judiciary has played very little role in policing private behavior in the tariffing process and its relationship to the fi led tariff shield.

### IF TIME

#### Utilities can’t solve—monopolization leads to underutilization.

Burger 18 [Scott P. Burger, Jesse D. Jenkins, Carlos Batlle, and Ignacio J. Pérez-Arriaga. MIT Center for Energy and Environmental Policy Research. PhDs & Working for MIT Energy Initiative. “Restructuring Revisited: Competition and Coordination in Electricity Distribution Systems”. March 2018. <https://www.iit.comillas.edu/documentacion/IIT-18-033A/Restructuring_revisited:_competition_and_coordination_in_electricity_distribution_systems.pdf>]

**Note: DNO is distribution network operator, DSO is distribution system operation**

From an industry structure perspective, the key question is whether monopoly DNO/SOs should be permitted to own DERs, or whether this activity should be left exclusively to competitive actors. The answer to the question of DER ownership depends on three primary factors:

1. The minimum efficient scale of DER ownership and operation relative to the market size.

2. The magnitude of economies of vertical integration between the DNO/SO and DER ownership.

3. The potential for anti-competitive behavior by the DNO/SO vis-à-vis competitive DER providers/owners.

4. The ability for price signals to coordinate independent DER owners with the DNO/SO and other actors.

This section focuses on the first three factors, while Section 3 focuses on the fourth.

For competitive DER markets to emerge, the minimum efficient firm size must be small relative to the market size. That is, the market size must be sufficiently large for many firms to compete without exhibiting sufficient market power to raise prices well above long-run marginal costs. Regulated monopoly ownership of DERs may be justified where such conditions cannot be met, as the appropriate conditions for competition would not be present.

Minimum efficient firm size is not a well-studied phenomenon for DER providers. However, two pieces of the limited evidence exist that indicates that developing and owning solar PV – the most commonly deployed DER today – is suitable for competition and thus is not a monopolist activity.

First, the market size for the primary services that DERs provide – that is, energy, firm capacity, ancillary services – is quite large (MIT, 2016, chap. 2). During the previous wave of deregulation, scholars found that economies of firm scale for generators were not prohibitively large, implying that competition in the generation sector was likely workable in most locations (Joskow and Schmalensee, 1983). Given their modular nature, DER ownership would be expected to exhibit even smaller minimum efficient firm sizes than their traditional bulk generation counterparts. 2

Second, by plotting the distribution of installed capacity of the largest 150 solar PV installers in the U.S. (Figure 4), we can see a small number of large installers followed by a very long tail of small installers, indicating that barriers to entry in the DER provision market are also relatively low. In addition, Nemet et al. (2016) found that low priced residential and commercial solar PV systems were more likely to be installed by experienced but small firms with low market shares, indicating that greater competition in the installer market leads to lower system prices. While other DER technologies are less well studied than solar PV systems, there is no reason to believe that the economic characteristics of other DER technologies, including distributed storage and demand response, are dramatically different.

While the evidence indicates that DER ownership is a role well suited for competitive actors, some regulatory agencies have taken steps to allow DER ownership by DNO/SOs. For example, the CPUC has granted DNO/SOs the authority to own and operate up to 50% of the 1.325 GW of energy storage that the California legislature mandated be procured under AB 2514 (CPUC, 2013). The NYDPS has indicated that DNO/SOs can own certain DER resources under four conditions:

“1) procurement of DER has been solicited to meet a system need, and a utility [DNO/SO] has demonstrated that competitive alternatives proposed by non-utility parties are clearly inadequate or more costly than a traditional utility infrastructure alternative;

2) a project consists of energy storage integrated into distribution system architecture;

3) a project will enable low or moderate income residential customers to benefit from DER where markets are not likely to satisfy the need; or

4) a project is being sponsored for demonstration purposes” (NYDPS, 2015, p. 70).

The CPUC’s arguments for enabling DNO/SO ownership of DER assets largely echoes the NYDPS’s. Despite the fact that the NYDPS and CPUC have stated desires to minimize DNO/SO participation in DER markets in the long-term, the above criteria provide many opportunities for DNO/SO ownership of DERs.21 Furthermore, the logic for DNO/SO ownership of DERs articulated by both regulatory commissions is not entirely clear.

The NYDPS argues that DNO/SOs can own DERs when non-DNO/SO providers fail to offer a costcompetitive alternative. DER assets deployed for reliability purposes will likely exhibit temporal, locational, and capital specificity, all of which, all else equal, tends to favor vertical integration (Joskow, 1985; Lafontaine and Slade, 2007; Pirrong, 1993). Should DNO/SOs contract with third parties for reliability services, these contracts would likely involve long time horizons and terms navigating significant uncertainty, which again favor vertical integration. It is plausible, therefore, that the cost of contracting would prevent non-utility developers from being cost competitive with DNO/SOs. Using these arguments, Brunekreeft and Ehlers (2006) conclude that preventing DNO/SO ownership of DERs will lead to insufficient investment in DER capacity.

However, three factors necessitate that regulators proceed with allowing DNO/SO ownership of DERs with caution.

First, DNO/SO ownership of DER infrastructure could lead to the underutilization of DER assets in markets with competitive generation and ownership unbundling rules between generators and monopoly network utilities. In markets with competitive generation, regulatory authorities determine which assets monopoly network utilities can own. Regulators typically classify a given asset as generation, transmission, or distribution. An asset classified as generation cannot be owned by monopoly DNO/SOs, and assets classified as transmission or distribution typically cannot earn revenues by providing services in competitive markets (Usera et al., 2017). FERC (2017) clarified that DERs (in particular, energy storage systems) can earn revenues from providing services to transmission and distribution utilities while also earning revenues from providing services in competitive energy markets, so long as the system operator maintains its independence from the DER owner. However, FERC (2017) also clarified that DERs cannot earn market-based revenues if the asset is to recover all of its costs by providing services to monopoly network owners and operators.

These rules exist primarily to prevent network owners and operators from inefficiently foreclosing competition, and follow from the “Bell Doctrine,” which states that monopolies should be “quarantined” from any competitive segments of an industry (Joskow and Noll, 1999). Under these rules, should a DNO/SO own a DER facility and recover its costs from regulated rates, it would not be able to use this facility to simultaneously provide services to wholesale electricity markets. In contrast, an independent competitive actor could earn revenues providing an identical service to the DNO/SO via contractual relationship, and, when not needed by the DNO/SO, could also earn revenues in competitive markets. Revenues from these competitive activities would then lower the cost of providing network services to the DNO/SO. Thus, in many cases, the benefits of a DER asset earning revenues from competitive services may outweigh the transaction costs associated contracting for service provision with the DNO/SO. In such cases, DNO/SO ownership would lead to an inefficient underutilization of DER assets and would be ill advised.

Second, it will likely be difficult to closely monitor DNO/SO cost saving efforts with respect to DER infrastructure procurements, which increases information asymmetry challenges and is likely to yield some degree of inefficiency in DER investments. Information asymmetries between monopoly DNO/SOs and their regulators make it impossible for regulators to ensure that the utilities they regulate are pursuing all cost saving possibilities (Laffont and Tirole, 1993). This dynamic has been demonstrated to lead to higher cost procurements by regulated utilities than competitive generators (Cicala, 2015). This is particularly true when the goods that regulated utilities are procuring are non-homogenous. If regulators are unable to effectively monitor the procurement decisions of the utilities they regulate or establish sufficient incentive-compatible performance incentives for the regulated utility, DNO/SO ownership of DERs could lead to higher cost procurements than would otherwise be efficient. In contrast, competition between DER providers would impose price discipline without regulatory oversight.

Finally, enabling DNO/SO ownership of DERs opens the possibility for anti-competitive behavior on behalf of the DNO/SO in two key ways. The DNO/SO may:

1. favor DERs owned by itself or its affiliates in dispatch or in procurements of services.

2. provide greater service to its affiliates relative to other agents (for example, in maintenance of network assets or in settlement).

The risks of monopoly engagement in competitive roles were detailed in Section 2.3.1 and 2.3.2. Legal unbundling and incentive regulation may be insufficient. The DNO/SO will face a natural incentive to self-provide or procure services from its affiliates over other competitors, even if these options are less competitive than other providers. If the profits gained by the DNO/SO or its affiliate outweigh any reduction in regulated profit relative to procurement from a competitor,22 the DNO/SO will be incentivized to favor its own assets.

Given the risks of enabling DNO/SO ownership of DERs, regulators would be wise to ask the question of whether third parties could provide these same services as a vertically integrated DNO/SO with reasonably competitive terms. Many examples of third-party ownership and operation of resources used for reliability purposes exist. For example, in systems with competitive generation markets, BAs use reliability must-run contracts to secure generation from non-BA owned resources in critical regions. Furthermore, the bulk-system BAs rely on non-BA owned resources for providing reserves to prevent failures on very short timescales. DERs have demonstrated their efficacy in providing these short-term security-related services (see, for example, (Hulle et al., 2014) and (Mathieu et al., 2012)). If the most costeffective or only available location for DER deployment is on DNO/SO property (for example, locating energy storage or distributed generation at a substation in a dense urban area), the DNO/SO could lease this space to competitive DER providers.23 Given competitive pressures for cost-efficiency, it is also reasonable to assume that competitive actors are likely to deliver least cost DERs, and evidence from solar PV markets (e.g. Nemet et al., 2016) support this hypothesis. The limited evidence that exists therefore does not indicate that DNO/SO ownership is strictly required for reliability purposes.

#### Filed rate is a zombie. Generators no longer file rates, private orderings determine profits. FERC (Federal Electric Regulatory Commission) continues to fail to act.

Macey 20 [Joshua C. Macey, Assistant Professor of Law, University of Chicago Law School. His Article Zombie Energy Laws (73 Vand. L. Rev.) received the 2020 Morrison Award for most impactful environmental law article of the previous year. “Zombie Energy Laws .” May 2020. https://scholarship.law.vanderbilt.edu/cgi/viewcontent.cgi?article=3475&context=vlr]

C. The Zombie Filed Rate Doctrine

The filed rate doctrine is another example of a zombie energy law. The filed rate doctrine is a judicially created exception to a variety of state laws that attaches when plaintiffs challenge the validity of rates or terms that have been approved by a federal regulatory body.170 Courts have described utility tariffs as firm-specific regulations that lock in place utility rates and services.171 As discussed in Section III.C, once a utility files a tariff, it cannot change the terms and services it offers to its customers without receiving approval from its public service commission.

The filed rate doctrine might have been a sensible rule when generators were regulated as public utilities. It is difficult to imagine how a plaintiff could have brought an antitrust case in court when utilities had a legal right to a monopoly and when regulators determined what prices were reasonable. The problem with the filed rate doctrine today is that many generators no longer actually file rates with public service commissioners.173

Energy markets look radically different than they did a century ago. Much of the country’s generation is now compensated through competitive procurements, and, as of 2018, thirty-six percent of all generation is produced by independent power producers that are unaffiliated with investor-owned utilities.174 In the mid-1950s, the Supreme Court announced that it would assume that rates that had been negotiated at arm’s length were just and reasonable.175 Thus, in most of the country, private ordering—not formal ratemaking proceedings—now determines the profits generators make when they sell electricity.

There is therefore no need for regulators to worry that antitrust suits will prevent the public service commissions from realizing their mandate to prevent discriminatory rates, because regulators in these parts of the country no longer rely on ratemaking proceedings to ensure that rates are just and reasonable. In fact, FERC now presumes that freely negotiated contracts are just and reasonable.177 When FERC and state energy regulators presume, without reviewing contracts in a ratemaking proceeding, that all freely negotiated contracts are just and reasonable, they do not have an opportunity to assess whether a contract has anticompetitive effects.

Yet the application of the filed rate doctrine to competitive energy markets means that market participants are largely shielded from the laws that mitigate anticompetitive behavior in ordinary markets. In 1986, the Supreme Court affirmed the filed rated doctrine on stare decisis grounds, and it did so despite recognizing that the doctrine no longer served its original purpose.178 Without authority to enforce antitrust laws, consumers have to trust that regulators will prevent collusive behavior and monopolistic pricing.

And regulators have failed to prevent market power abuses in electricity markets. Consider the 2000–2001 California energy crisis. At the turn of the twenty-first century, large generators began to strategically refuse to sell electricity until prices rose to astronomical levels.179 Companies such as Enron would purposefully export electricity that was needed in the state to neighboring states such as Nevada in order to drive up California electricity prices.180 Pacific Gas and Electric (“PG&E”), one of the two California companies that purchased electricity from generators to sell to consumers, was forced into bankruptcy when it found itself unable to afford electricity it was required to supply to Californians.181 This type of behavior contributed to market inefficiencies worth an estimated $12 billion.182 Suppliers’ anticompetitive behavior was one of the reasons wholesale prices increased so dramatically and was thus one of the reasons California had to implement rolling blackouts.183

Other states have experienced similar abuses. Texas found itself in the same position in 2005, when market manipulation cost Texans more than $70 million.184 In the summer of 2006, New York market manipulation cost New Yorkers approximately $150 million.185 Studies of energy prices have demonstrated that market manipulation is an ongoing problem and that the tools FERC uses to deter manipulation are ill-equipped to prevent the types of abuses that pervade energy markets.186

It arguably made sense to funnel antitrust suits against regulated monopolies through the federal regulator charged with overseeing those monopolies. That is because judicial enforcement may undermine a market’s entire rate structure and lead to discriminatory rates. On top of that, a company that enjoys a legal right to a monopoly is by definition permitted to engage in some conduct that would otherwise constitute an antitrust violation. In such cases, it arguably made sense to have the regulator responsible for ensuring that a company charge just and reasonable rates also make sure that the company is complying with service obligations imposed by state tort, contract, and antitrust laws.

Yet courts continue to apply the filed rate doctrine in restructured energy markets. The U.S. Court of Appeals for the First Circuit, for example, has held that “utility filings with the regulatory agency prevail over . . . other claims seeking different rates or terms than those reflected in the filings with the agency.”187 According to the Ninth Circuit, the doctrine is “a form of deference and preemption, which precludes interference with the rate setting authority of an administrative agency, like FERC.”188

As explained in Section III.C, the filed rate doctrine was a judicially created doctrine intended to make sure that the judiciary did not undermine rates filed in cost-of-service ratemaking proceedings. Today, however, FERC has replaced monopoly cost-of-service ratemaking with a market-based approach to setting wholesale rates in most of the country. The Commission now seeks to ensure “just and reasonable” rates “by enhancing competition” among multiple wholesale providers of electricity.189 FERC has done so because it has concluded that competition is the most effective way “to bring more efficient, lower cost power to the Nation’s electricity consumers.”190 To achieve that purpose, FERC has endeavored “to break down regulatory and economic barriers that hinder a free market in wholesale electricity”191 and it has chosen to rely on market forces in competitive auctions to fulfill its statutory charge of ensuring “just and reasonable” wholesale rates.192 Courts thus seem to reflexively apply the filed rate doctrine in restructured markets without recognizing that the doctrine has become obsolete in markets where energy regulators do not review every energy contract before determining that the contract is just and reasonable.

Restructured energy markets are intended to create the same incentives as ordinary markets. To that end, exempting energy companies from judicial enforcement of ordinary tort, contract, and antitrust claims gives energy companies an exceptional privilege. In the cases described in this Section, the filed rate doctrine prevented civil plaintiffs from enforcing antitrust laws.194 In this way, a doctrine that was originally meant to protect consumers by ensuring utilities treat all customers fairly has become a weapon that generators yield to exploit their market power.

Antitrust laws are supposed to protect competitive markets by preventing monopolists from restricting supply, raising prices, and redistributing surplus from consumers to suppliers.195 As this Section has shown, energy markets clearly remain vulnerable to market power abuses. While it may have made sense to shield companies from antitrust suits when firms were shielded from competitive markets, there is no reason to continue to do so once regulators embrace market principles. In such circumstances, the laws meant to deter anticompetitive behavior should apply.

# 2AC

## A1

### 2AC – AT: Circumvention

#### Strong congressional text writing solves court circumvention

Baer 20 [Bill Baer, American lawyer who served as the Assistant Attorney General for the United States Department of Justice Antitrust Division. Jonathan B. Baker Michael Kades, Fiona M. Scott Morton, Nancy L. Rose, Carl Shapiro, Tim Wu. “Restoring competition in the United States”. 11/19/20. https://equitablegrowth.org/research-paper/restoring-competition-in-the-united-states/?longform=true]

Congress need not passively accept today’s cramped interpretation of the antitrust laws. It should once again reassert its commitment to competition by updating our antitrust laws and directing the courts to better protect competition, consumers, and workers. Legislation allows Congress to make broad policy judgments about what the antitrust laws should prohibit and the best legal rules for achieving those results.

Meaningful antitrust reform should be a priority of the next administration and the 117th U.S. Congress. The challenge of drafting legislation is substantial. On the one hand, the legislation must be written for a judiciary that is both increasingly hostile to antitrust claims in general and increasingly textualist in its statutory interpretation. On the other hand, in the context of the antitrust laws, courts have often “abandoned statutory textualism” to interpret the laws “in favor of big business,”15 explains Daniel Crane, the Fredrick Paul Furth Sr. professor of law at the University of Michigan Law School. If given discretion to interpret new legislation, the current judiciary is likely to fall back on the same skepticism of antitrust enforcement that it has advanced over the past 40 years.

Despite those concerns, legislation remains the best option to revitalizing antitrust enforcement. In drafting legislation, Congress can learn from the past. One case in point: The legislative history of the Celler-Kefauver bill, not its text, reveals the bill’s intent, which courts increasingly ignore.16 Congress can reduce that risk by being explicit in the text when vacating or rejecting existing precedent and when identifying relevant factors, such as the importance of protecting both actual and potential competition. Congress should identify in statute the elements sufficient to establish an antitrust violation as precisely as possible.

In particular, Congress should specify the circumstances under which the burden of proof switches from the plaintiff to the defendant and the evidence necessary to rebut presumptions of illegality once they are established, based on the underlying economics, the type of evidence available to the parties, and the respective risks of underenforcement and overenforcement. Because courts regularly apply burden shifting across many areas of the law, they will understand and respect its implications.17 Successful legislative reform would accomplish the following goals:

Correct flawed judicial rules that reflect unsound economic theories or unsupported empirical claims18

Clarify that the antitrust laws protect against competitive harms from the loss of potential and nascent competition, especially harms to innovation

Incorporate presumptions of illegality that better reflect the likelihood that certain practices harm competition

Recognize that under some circumstances conduct that creates a risk of substantial harm should be unlawful even if the harm cannot be shown to be more likely than not

Alter substantive legal standards and the allocation of pleading, production, and proof burdens to reduce barriers to demonstrating meritorious cases19

We are under no illusion about the difficulty in passing legislation, but it remains the best way to address deficiencies in the current application of our antitrust laws. And the time seems ripe for bipartisan support of this effort.

#### Courts will enforce the plan faithfully.

Charles S. Dameron 16, Yale Law School, J.D. 2015. "Present at Antitrust’s Creation: Consumer Welfare in the Sherman Act’s State Statutory Forerunners." https://www.yalelawjournal.org/note/present-at-antitrusts-creation-consumer-welfare-in-the-sherman-acts-state-statutory-forerunners

Notwithstanding occasional invocations of the judiciary’s “common law” authority over the Sherman Act, federal courts have, since the Act’s earliest days, expended great energy attempting to divine the legislative purpose behind it.5If the Sherman Act were truly a blanket grant of common law-making authority to federal courts, they would hardly need to undertake such searching inquiries. The Supreme Court’s and lower courts’ close attention to the Sherman Act’s language and legislative history indicates that they have sought to abide by their constitutional role as interpreters of federal statutes.6

It is therefore more precise to say that the judiciary enjoys an especially wide authority to fill statutory gaps when interpreting the Sherman Act due to the Act’s ambiguous language, its constancy over time, and the fact—peculiar in light of many modern regulatory regimes—that Congress did not assign rulemaking authority to an administrative agency. These traits do not imply that federal courts may pursue whatever antitrust policy they find most desirable or wise; courts are obliged to follow the statute’s contours to the extent that they can perceive those contours.7

## T Per Se

### 2AC – Prohibit Filed Rate

#### The filed rate doctrine is a per se rule

Joshua C. Macey 20, Visiting Assistant Professor at Cornell Law School, 05/07/2020, Zombie Energy Laws, Vanderbilt Law Review, Vol. 73, p. 1077-1126

In much of the country, solar and wind generators could provide electricity more cost effectively than fossil fuel generators,1 yet solar and wind developments are routinely abandoned because they do not receive a “certificate of public convenience and necessity” to build transmission lines that would allow them to send power to the grid.2 Energy markets are vulnerable to market power abuses,3 yet the judicially created “filed rate doctrine” largely preempts judicial enforcement of state and federal antitrust laws.4 [FOOTNOTE 4 BEGINS] The filed rate doctrine is a common law rule that was extended to utility companies in Keogh v. Chicago & Northwestern Railway Co., 260 U.S. 156, 163 (1922) and prohibits entities that are required to file rates and services (also known as “tariffs”) with a regulator from charging rates deviating from the terms they filed with regulators. Today, energy companies invoke the filed rate doctrine to avoid judicial enforcement of antitrust and bankruptcy regulations. See, e.g., Tex. Commercial Energy v. TXU Energy, Inc., 413 F.3d 503, 508–09 (5th Cir. 2005) (“Since Keogh, courts have consistently applied the filed rate doctrine in a number of energy cases to preclude lawsuits against companies based on rates that were filed with a government agency.” (citation omitted)); Wegoland Ltd. v. NYNEX Corp., 27 F.3d 17, 18 (2d Cir. 1994) (“[T]he doctrine holds that any ‘filed rate’—that is, one approved by the governing regulatory agency—is per se reasonable and unassailable in judicial proceedings brought by ratepayers.”). [FOOTNOTE 4 ENDS] Congress has repeatedly taken steps to encourage generators to participate in competitive markets,5 yet many utilities that own both transmission and generation assets have managed to circumvent competitive markets for generations. By selling electricity at a loss and recovering these losses in state rate recovery proceedings, vertically integrated utilities have managed to continue operating coal generators even when those generators are uncompetitive.6

#### Prohibit means hinder or preclude – prefer court interps

Prelogar 20 [Elizabeth, Acting Solicitor General of United States. “ZIMMIAN TABB, PETITIONER v. UNITED STATES OF AMERICA”. https://www.supremecourt.gov/DocketPDF/20/20-579/169149/20210216195252075\_20-579%20Tabb.pdf]

Application Note 1’s interpretation of the career offender guideline as including drug conspiracies is firmly grounded in the guideline’s text. The key term is “prohibits.” Unlike an adjacent provision stating that a “crime of violence \* \* \* is murder” or a list of other specified offenses, Sentencing Guidelines § 4B1.2(a)(2) (emphasis added), the definition of “controlled substance offense” extends to any felony offense that “prohibits the manufacture, import, export, distribution, or dispensing of a controlled substance,” id. § 4B1.2(b) (emphasis added). Although the term “prohibit” can mean “forbid by authority or command,” it can also mean “prevent from doing or accomplishing something.” Webster’s Third New International Dictionary of the English Language Unabridged 1813 (1986). In that sense, the term is synonymous with “hinder” or “preclude.” See, e.g., Black’s Law Dictionary 1465 (11th ed. 2019) (defining “prohibit” to mean “forbid by xlaw” or “prevent, preclude, or severely hinder”). Application Note 1 confirms that Section 4B1.2(b) uses the term “prohibit” in the latter sense. As the Eleventh Circuit recognized in United States v. Lange, 11 862 F.3d 1290, cert. denied, 138 S. Ct. 488 (2017), after reviewing the two accepted senses of “prohibit” noted above, see id. at 1295, Application Note 1 indicates that “‘[c]ontrolled substance offense’ cannot mean only offenses that forbid conduct outright, but must also include related inchoate offenses that aim toward that conduct.” Ibid. The court observed that “a ban on conspiring to manufacture drugs hinders manufacture even though it will ban conduct that is not itself manufacturing.” Ibid.; cf. United States v. Vea-Gonzales, 999 F.2d 1326, 1330 (9th Cir. 1993) (“The guideline refers to violations of laws prohibiting the manufacture, import, export, distribution, or dispensing of drugs. Aiding and abetting, conspiracy, and attempt are all violations of those laws.”).

#### Floor/ceiling---‘expanding the scope’ automatically meets the floor.

Prewitt ’2k [James K., Phillip R. Garrison, Robert S. Barney; July 27; Judges on the Missouri Court of Appeals, writing Per Curiam; Westlaw, “Little Portion Franciscan Sisters, Inc. v. Boatright,” 26 S.W.3d 443]

In so concluding, we note that the preposition “by” is defined as “[w]ith the use of; through,” “[t]o the extent of,” or “[t]hrough the agency or action of.” THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (1978). The same source states that a synonym for “by” is “through” and that the preposition “by” indicates the agency or means by which something is accomplished. WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY (1976) defines “by” as “through the means or instrumentality of,” “through the direct agency of,” “through the medium of,” or “through the work or operation of,” and that it is “used as a function word to indicate something that forms an accompanying setting or condition ... or that constitutes a manner ... often with an added sense of means.” For the ballot proposition to have had the meaning espoused by Defendants, the voter would have had to ignore the important word “by.” To do so is to ignore the plain and ordinary reading of the words used.

#### Business practices are actions to complete business objectives – no time or org restriction – prefer intent to define

JGD ND [Just Great Database, “Business Practice”. https://jgdb.com/dictionary/business-practice]

Definition: is a specific method, action, regulation, operation or rule introduced or followed by an organization in order to meet or surpass its business objectives. Additionally, this term can refer to a group of related methods or processes. The introduction of basic business practices is essential for the company’s maintenance of a correct accountability structure. The most popular business practice types include a) developing business plans and strategies, b) defining the boundaries of accountability for each employee, c) determining company-wide and individual performance objectives, d) implementing open-ended communication channels, and e) providing the company’s employees with regular and relevant training.

## Reg CP

### 2AC – Other Agency CP

#### Struck down or links – filed rate immunizes all damages in every area of law if rates are on file with ferc or state regulators

Quinn 20 [Jennifer Quinn-Barabanov is a partner and co-leader of Steptoe and Johnson’s Energy Litigation practice. Shaun Boedicker is a member of the Energy practice in Steptoe’s Washington, D.C., office. “Filed Rate Doctrine: A Powerful Tool in Energy Litigation.” 6/1/2020. https://www.powermag.com/filed-rate-doctrine-a-powerful-tool-in-energy-litigation/]

The regulatory landscape for the energy industry has changed significantly in the past few decades, but a century-old Supreme Court canon—the filed rate doctrine—continues to be a valuable tool for regulated parties in litigation. The doctrine can provide a basis for a court to dismiss many types of lawsuits, including antitrust, tort, and contract claims. Evaluating the extent to which a claim may improperly infringe upon a filed rate, whether at the state or federal level, is a critical first step in litigation that may save parties substantial time and money.

#### Filed rate prohibits the CP – it remains limited to prospective rate setting

Spence 12 [David B. Spence, Rex G. Baker Centennial Chair in Natural Resources Law at the University of Texas School of Law, and Professor of Business Government & Society. Robert Prentice, Professor and Department Chair, Business, Government and Society, McCombs School of Business, UT Austin. The Transformation of American Energy Markets and the Problem of Market Power.” 1/1/12. https://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=3184&context=bclr]

The California crisis revealed that while FERC had anticipated some of the forms of unfair competition that emerged after restructuring (such as discrimination by owners of gas and electric transmission lines in favor of their affiliates), it apparently had not foreseen some of the ways in which sellers on competitive wholesale markets were able to capture and abuse market power, or to influence prices in the spot and derivatives markets. Exercising its continuing responsibility to regulate competition and ensure that wholesale rates (including market-based rates) were “just and reasonable,”149 the agency’s initial response to the crisis focused on preventing and deterring wholesale sellers from acquiring and abusing market power. FERC’s previous grants of authority to charge market prices for energy had always been conditioned on the sellers’ lack of market power; however, long-standing precedent under both the FPA and the NGA—the so-called “filed rate doctrine”150— prohibited FERC from retroactively penalizing sellers who charged market rates that had been “filed” with FERC.151 In the wake of the California crisis, courts affirmed the agency’s conclusion that the market rates charged by FERC-authorized sellers in the California spot markets were “filed rates” for purposes of the filed rate doctrine.152 Therefore, in the event a seller authorized to charge market-based rates acquires market power—the power to capture scarcity rents by influencing price—the only remedy available to FERC at the time was to revoke that seller’s authority to charge market-based rates prospectively. FERC can do this in either of two ways: (1) by reimposing cost-based rates for that seller, or (2) by imposing rate caps for that seller in the relevant market (what it calls “mitigation”).

#### Electricity regulators are captured – guts the CP – latest evidence

Agarwal 21 [Aakshi, HARVEY M. APPLEBAUM ’59 AWARD Winning Paper in the Yale University Digital Platform for Scholarly Publishing, B.S. Yale University, Advisor: Professor Michael Fotos. “Regulatory Agency Capture: How the Federal Energy Regulatory Commission Approved the Mountain Valley Pipeline.” 4/30/21. https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1083&context=applebaum\_award]

To illustrate, agencies are prime targets for capture by the industries they regulate. The agencies the FERC works with, like the USACE and BLM, were criticized for their permitting errors and inadequate analyses by the courts, which could suggest they have already been captured. Like these agencies, the state agencies that the FERC works with such as the West Virginia Department of Environmental Protection and Virginia Department of Environmental Quality can become captured by pro-industry ideology from the industry. These state agencies are also uniquely vulnerable to “electorally sanctioned pro-business governance,” because the revenues and jobs from big projects can cause elected state and local officials to persuade regulatory decision makers.251

Furthermore, the FERC’s agenda can stem from Congress or the Executive. The FERC is intended to be an independent agency, but the FERC derives its power and funding from Congress and an agenda from the Executive. For example, the Trump administration was reported to pressure agencies with its pro-energy stance on the Atlantic Coast Pipeline.252 John Schmidt, a former regulator with the USFWS, also described that the Trump administration did not operate like previous administrations.253 Likewise, Congress, the Executive, and the bureaucracy are also influenced by public opinion. If the public opinion in any constituency supports pipelines, the FERC can conduct “electorally sanctioned pro-business governance” where it favors the industry because the constituency desires that.25

Furthermore, Carpenter & Moss’ gold-standard for diagnosing capture emphasizes how a solid capture diagnosis must “Show action and intent by the industry (special interest) in pursuit of this policy shift sufficiently effective to have plausibly caused an appreciable part of the shift.”255 Though this study points to areas where the MVP appears to have influenced the FERC, the unwritten conversations between the MVP and the FERC are not revealed. However, a study of capture rarely finds a “eureka” piece of evidence such as a link between the regulator and the industry that can prove capture. Further analysis via FOIA requests may indicate more evidence of capture in the future to better meet this standard set by Carpenter & Moss.

Additionally, this study’s findings are confounded by the FERC’s own procedural errors and institutional justice concerns. Several parts of this study find errors in the FERC’s process such as tolling orders, which suggest capture due to how these errors favor the industry. However, it is also possible that the FERC conducts a poor public participation process on its own. For example, an investigation by the Office of the Inspector General on the FERC revealed the FERC did not post Notices of Schedule for Environmental Review for 9 years, including a period where the MVP was considered.256 During interviews, several participants raised similar concerns. A journalist brought up that several people they met did not have internet access and missed big updates that otherwise were not on the front of the news.257 Walker from the Sierra Club also explained that in her experience at the Sierra Club, “Of all agencies, FERC is the absolute worst in terms of public participation.”

Lastly, this study’s findings may not be representative of the FERC’s actions on other pipeline cases. The MVP and ACP are unique cases due to the level of pushback and how the opposition succeeded. 259 The level of permitting errors is unprecedented to this research’s knowledge and as Chairman Glick’s office confirmed, no one opposed pipelines like this before.260 Although the MVP may not entirely represent the FERC’s experiences with pipelines, it is an indication of how pipeline permitting may go with the new pipelines intended in Appalachia.

Though there are other explanations for the FERC’s pattern of decision-making and confounding variables are present in the study, this paper nevertheless posits the FERC is culturally and corrosively captured. The FERC’s nearly universal record of decision-making against the public interest is difficult to explain via other means, and there are numerous instances where the FERC should have been making decisions insulated from congressional or Executive influence but still chose to favor the MVP. Therefore, the evidence at hand points to weak cultural and corrosive capture and further studies will be needed to verify these claims.

## FERC CP

### 2AC – FERC CP

## Cap K

### 2AC – Cap

#### Alt can’t spillover

* Constant pro-growth messages in media and politics make it the most effective frame—alt must fiat mindset shift to solve, which should be rejected
* The alt’s strategy fails—creates resistance and unifies the pro growth camp
* Prefer—sociological studies demonstrate difficulties creating a unified, successful anticap movement

Drews 16 [Stefan Drews, Institute of Environmental Science and Technology, Universitat Autònoma de Barcelona, Miklós Antal, Institute of Social Relations, Eötvös Loránd University, "Degrowth: A “missile word” that backfires?", June 2016, https://www.sciencedirect.com/science/article/pii/S0921800915305516?casa\_token=MdngnyoLsRYAAAAA:rfo3ysm8jZPC3m992fZng2HQB7iKrhE69yQO3WOSVoAwtO2aUeguS-9p0w-irLYI7jF\_54UBqcQ#!]

When thinking about economic growth, most people will make connections to positive ideas such as prosperity, employment, development, economic and social improvement, higher wages, and well-being (Mohai et al., 2010), which makes it a very effective frame in politics (GSG, 2015). How much these positive connections are justified by evidence is debatable, but most ordinary people will see economic growth as something good. Very few people would think about environmental unsustainability, resource/energy limits, or social limits to growth (Mohai et al., 2010). Again, the mass media plays an important role in shaping these associations simply by the constant repetition of explicit pro-growth messages.

Degrowth, on the other hand, may evoke thoughts about crisis, recession, spending cuts, lower salaries, and job losses. The reason for this is straightforward. In economic parlance, growth generally means GDP growth, which is a main policy goal. People who are not familiar with the term degrowth—i.e. the vast majority—may simply, and often unconsciously, negate that meaning and understand degrowth as economic contraction or an intentional reduction of the GDP. As past and current periods of GDP decline have been socially and psychologically painful (De Neve et al., 2015), the first spontaneous conscious reactions to the idea of degrowth will be generally negative. The retrieval of such negative conscious associations is facilitated by the initial affective judgment of degrowth. Clearly, losses loom larger than gains in the degrowth frame (see also Davey, 2014).

Therefore, attacking growth head on is a strategy that will inevitably create a lot of resistance and—if it ever becomes more influential—may even activate and unify the growth camp. Winning the battle seems unlikely as long as in most countries economic growth really is correlated with important short-term goals such as lower unemployment, better public finances, and higher social stability (Antal and van den Bergh, 2013). Furthermore, changing initially negative opinions about degrowth will be difficult because people are generally more reluctant to change their prior beliefs than to develop new and positive opinions about an issue (Lord et al., 1979). In addition, an abstract slogan like degrowth communicated by the far left is problematic because convincing an audience whose political positions differ from the speaker's is more effective with concrete messages (Menegatti and Rubini, 2013). If repoliticizing environmental issues is the way to go, then it should be done in a way that creates a more favorable starting position in the debate.

#### Transition wars zero solvency

Crownshaw et al 18 [Timothy Crownshaw, Economics for the Anthropocene (E4A) 2Department of Natural Resource Sciences, McGill University, Canada, Caitlin Morgan, Food Systems Graduate Program at the University of Vermont, Alison Adams, Rubenstein School of the Environment, University of Vermont, Martin Sers, Faculty of Environmental Studies, York University, Natalia Britto dos Santos, Alice Damiano, Laura Gilbert, Gabriel Yahya Haage, Daniel Horen Greenford, "Over the horizon: Exploring the conditions of a post-growth world", 2018, https://journals.sagepub.com/doi/pdf/10.1177/2053019618820350?casa\_token=\_O1GadWsXLwAAAAA:YjDaSmPLmQU5qV6fMt0lozJqG465r9ipDqM2Z9DqmXnjNTNfixx\_OFr4mEuXoCEiiLBfnRp6YZHX6Q]

Conflict in various forms is likely to increase significantly in frequency and severity in a post-growth world, driven by various factors such as migration, poverty, and population pressures, rising unemployment (particularly among young men), ecological degradation, climate change impacts, scarcity of natural resources (particularly food and energy), and geopolitical tensions (Ahmed, 2017; Brzoska and Fröhlich, 2016; Homer-Dixon, 1991, 2001; Myers, 2005; Omer and Dan, 2014; Rees, 2015). This conflict may occur at all levels – between states, communities, and individuals – although the incidence of conflict in specific locales will be highly unpredictable and subject to many emergent factors. Clearly, major wars between nations or blocs have the potential to disrupt adaptation to the end of growth and may significantly worsen and accelerate many post-growth challenges. Under these circumstances, attempts at conflict resolution will likely see mixed success and will depend critically on levels of inter- and intra-state economic inequality, political responses to violence, and the presence of existing social, religious, or ethnic tensions (Acemoglu et al., 2010; Horowitz, 1993; Karl, 2000).

#### Alt can’t solve climate change fast enough.

Piper 21, \*Kelsey Piper, a Staff Writer for Vox's new vertical; (August 3rd, 2021,“Can we save the planet by shrinking the economy?”, https://www.vox.com/future-perfect/22408556/save-planet-shrink-economy-degrowth)

Degrowth is unrealistic — and gaining traction

As a policy program, degrowth suffers from being both too radical and not radical enough.

There’s a lot of broad-brush policy prescriptions in the degrowth lit, but those details never really add up.

While it’s not a short book, Less Is More feels surprisingly sparse when it comes to envisioning how the changes it recommends could be brought about. The chapter on solutions recommends cutting the workweek and changing tax policy — two solid proposals — but then rounds that out by recommending ending technological obsolescence, advertising, food waste, and student debt.

I’m not particularly opposed to those policies. But they seem laughably inadequate for the magnitude of the task at hand: confronting the climate crisis. Degrowth successfully persuades that guiding humanity and our planet through the 21st century will be really, really hard — but not in a way degrowth particularly solves.

Where degrowth literature is relentlessly pessimistic about the prospect of our problems being solved under our current economic system, it turns oddly optimistic about the prospect that they’ll be solved once we embrace a different way of viewing wealth and progress. If cutting carbon emissions fast enough to matter requires shrinking the global economy by 0.5 percent a year indefinitely, starting right now, as the Nature paper estimates, that’ll take policy measures much larger and more ambitious than any proposed in Less Is More.

“If we are to avert catastrophic warming, we have to lower carbon emissions by a factor of two within the next 10 years. I find it highly implausible that capitalism/market economics will be abandoned by the world on that time frame,” Pennsylvania State University climatologist Michael Mann told me. “That means we have to act on the climate crisis within the framework of the current system.”

In that sense, there’s actually something anti-radical about any climate plan so radical that it can’t be concretely brought about in the next decade.

## FTC

### 2AC—FTC Backlash DA

#### Recent antitrust action is causing massive backlash—chamber of commerce is suing the FTC!!!

Tankersley 12/25 [Jim Tankersley is a White House correspondent with a focus on economic policy, Alan Rappeport is an economic policy reporter, based in Washington, "As Prices Rise, Biden Turns to Antitrust Enforcers", 12/25/21, https://www.nytimes.com/2021/12/25/business/biden-inflation.html]

As rising inflation threatens his presidency, President Biden is turning to the federal government’s antitrust authorities to try to tame red-hot price increases that his administration believes are partly driven by a lack of corporate competition.

Mr. Biden has prodded the Agriculture Department to investigate large meatpackers that control a significant share of poultry and pork markets, accusing them of raising prices, underpaying farmers — and tripling their profit margins during the pandemic. As gas prices surged, he publicly encouraged the Federal Trade Commission to investigate accusations that large oil companies had artificially inflated prices, behavior that the administration says continued even after global oil prices began to fall in recent weeks.

The push has extended to little-known agencies, like the Federal Maritime Commission, which the president has urged to search for price gouging by large shipping companies at the heart of the supply chain.

The turn to antitrust levers stems from Mr. Biden’s belief that rising levels of corporate concentration in the U.S. economy have empowered a few large players in each industry to raise prices higher than a more competitive market would allow.

Corporate culpability for rising prices remains unclear. Inflation is at a 40-year high because of pandemic-related factors such as broken supply chains and high demand for goods from consumers still flush with government-provided cash. But as the price increases have spread across sectors, including food and gasoline, the administration has come under increasing pressure to find ways to respond.

White House officials concede that their antitrust moves are unlikely to reduce costs for U.S. businesses or consumers immediately. The efforts, they say, will be more effective down the road. But the rise of inflation has given the White House an opportunity to take action that Democrats have long encouraged, and that Mr. Biden made an early focus of his tenure: using the power of government to break up monopolies and promote economic competition.

In July, before the recent run-up in prices, Mr. Biden issued an executive order that included 72 directives for cabinet and independent agencies to more vigorously enforce antitrust laws and to pursue specific actions to promote competition, such as eliminating noncompete agreements for workers and forcing tech companies like Apple to allow consumers to repair their own products.

He has also tapped antitrust crusaders for key roles, including Lina Khan to be chairwoman of the Federal Trade Commission, and Jonathan Kanter, an adversary of Facebook and Google, to lead the antitrust division of the Justice Department. Tim Wu, a proponent of breaking up Facebook and other large companies, was brought on as a special White House adviser to Mr. Biden on competition issues.

White House officials say fighting inflation was not the initial motivation for Mr. Biden’s competition agenda. But, they say, the push has given the president some of his most powerful tools to take action against rising prices, and it will play a central role in federal efforts to reduce costs for consumers over the long term.

That role could grow even more prominent if Democrats lose control of the House or Senate in next year’s midterm elections and Mr. Biden is forced to rely on executive actions to advance his economic agenda.

The administration’s focus on increasing competition “will spawn more innovation, more disruption, more start-up businesses in the U.S.,” said Brian Deese, who heads the White House’s National Economic Council. And, he added, it “will deliver lower prices for Americans right away.”

The president’s efforts to promote competition and potentially break up large players have rattled big companies and angered prominent industry groups in Washington, at a time when businesses are already grappling with supply chain problems, higher input costs and labor shortages.

The U.S. Chamber of Commerce has accused the Biden administration of interfering with the work of independent agencies even as it threatened litigation against the Federal Trade Commission, an independent consumer protection agency.

Neil Bradley, the executive vice president and chief policy officer for the chamber, said in an interview that the measures would do little to blunt inflation.

“It’s a fundamental misunderstanding of inflation and frankly a poorly dressed-up political argument,” Mr. Bradley said, adding that inflation had been very low in the last decade during a period of corporate consolidation. “Did they get soft concentration all of a sudden and in nine months it produced rampant inflation? Of course not.”

Much of the business community concern is aimed at the F.T.C., which, empowered by Mr. Biden’s executive order, has targeted companies without looping in the White House.

An F.T.C. official said that the agency was pursuing its own agenda under Ms. Khan.

Late last month, the commission ordered nine large retailers, including Walmart, Amazon and Kroger, to turn over detailed information to help root out the sources of supply chain disruptions that were “harming competition in the U.S. economy.”

The demand for documents was news to the White House, which had arranged for Mr. Biden to meet that same day with a group of retailers to discuss the administration’s efforts to relieve backlogs at the nation’s ports and to highlight the companies’ promises that their shelves would be well stocked for the holiday season. Among the top executives attending the White House event were officials from Kroger and Walmart.

Overall, though, White House officials say they are pleased with the zeal federal agencies have shown for Mr. Biden’s antitrust efforts. Administration officials say the biggest successes so far include blocking the merger of a large American railroad, Kansas City Southern, with a Canadian counterpart and the merger of two large insurance companies, Aon and Willis Towers Watson, which officials say could both have resulted in higher costs for consumers. They also cite a regulation allowing hearing aids to be sold without prescriptions and the auctioning of some gate slots at Newark Liberty International Airport to low-cost airlines.

More dramatic results could emerge from a Justice Department fight against consolidation in the sugar industry and new efforts by the White House’s Office of Management and Budget to require that future federal regulations be evaluated, in part, based on how they might affect competition in regulated industries.

The Agriculture Department has distributed $500 million to help seed new entrants in the meatpacking industries to challenge the small group of corporate giants that dominate it.

The Federal Maritime Commission has investigated the handful of corporate shipping alliances that effectively control the flow of goods across the world’s oceans and that have raised prices as much as ninefold during the pandemic, according to data from the freight-tracking firm Freightos. The commission’s analysis determined that market forces — particularly the rising demand for furniture and other items by consumers who have cut down on travel and dining out — are driving the increases, said Daniel B. Maffei, the former New York congressman who is chairman of the commission.

But, Mr. Maffei said, the focus on antitrust has given the commission tools and confidence to investigate other abuses by shipping companies, now and in the future, when demand falls and companies might be tempted to try to keep their freight rates artificially high. “I think it has upped our credibility” with companies and discouraged anticompetitive behavior, he said.

Perhaps the administration’s most sustained focus, in the near term, has been on the meat industry. A report from the National Economic Council this month accused the largest meat processing companies of price gouging to pad profits. According to the latest data from the Bureau of Labor Statistics, prices for meat were up 16 percent in November compared with the same month last year.

“We’re seeing the dominant meat processors use their market power to extract bigger and bigger profit margins for themselves,” the report said. “Businesses that face meaningful competition can’t do that, because they would lose business to a competitor that did not hike its margins.”

The North American Meat Institute, an industry lobbying group, denied the allegations and accused the Biden administration of cherry-picking economic data. It said that the White House was overlooking the record levels of demand for beef, pork and poultry.

#### Biden and FTC action thumps

Carroll 12/16 [John D. Carroll, partner in the Sheppard, Mullin, Richter & Hampton LLP Antitrust & Competition Practice Group in the Washington, D.C. office. Thomas Dillickrath, Katie Daw, Sheppard, Mullin, Richter & Hampton LLP, Antitrust Law Blog. “Antitrust Scrutiny Heating Up in Oil and Gas Industries.” 12/16/21. https://www.natlawreview.com/article/antitrust-scrutiny-heating-oil-and-gas-industries]

President Biden recently wrote a letter to FTC Chair Lina Khan urging the Commission to immediately investigate potential anticompetitive behavior in the oil and gas sector. The President noted that gas prices have been rising, while the costs faced by oil and gas companies themselves have decreased. Concerned that the two largest oil and gas companies in the country are set to double their net income over 2019 while the gap between the price of unfinished gasoline and the price at the pump is increasing, he called on the FTC to “bring all of the Commission’s tools to bear if you uncover any wrongdoing.”

Steps Already Taken

The Biden administration has made a previous attempt to direct the FTC’s focus towards the oil and gas industries. At President Biden’s behest, the Director of the National Economic Council, Brian Deese, wrote to Chair Khan on August 11, citing “divergences between oil prices and the cost of gasoline at the pump” and urging the FTC to investigate. Chair Khan responded with a letter of her own, outlining a three point plan to address the administration’s concerns about the cost of gas. First, the FTC would identify additional legal theories to challenge fuel station mergers that involve dominant players in the market acquiring family-run businesses. Second, the FTC “would tak[e] steps to deter unlawful mergers in the oil and gas industry.” The Chair specifically referred to the imposition of prior approval requirements to deter illegal mergers in sectors including retail gas markets. Third, Chair Khan indicated that she would direct staff to investigate abuses in the franchise market, noting that the sale of gasoline at high prices may benefit chains at the expense of franchisee store operations.

President Biden expressed in his November 17th letter that he appreciated the plans to “strengthen oversight of mergers in the oil and gas sector” but that further inquiry is required.

Potential Avenues for Enforcement and Investigation

Given the President’s explicit requests to investigate, participants in the oil and gas industry can expect the FTC to increase scrutiny and enforcement. The FTC may pursue several avenues to execute the President’s agenda.

Investigative Powers: Subpoenas and 6(b) Studies

In the wake of Hurricane Katrina, the FTC expended significant resources under its statutory authority to investigate accusations of price gouging in the gasoline market. The Commission issued subpoenas, also known as “Civil Investigative Demands” (CIDs) to petroleum industry firms and issued requests to retailers under Section 6(b) of the FTC Act. The FTC ultimately concluded in May of 2006 that the pricing was explained by normal market trends.

The FTC may employ similar methods to investigate oil and gas industries now by issuing CIDs and 6(b) orders. Orders issued under 6(b) of the FTC Act function similarly to CIDs and require the recipient to provide information to the FTC in writing, subject to court-ordered compliance. Both can require an organization to turn over company information. 6(b) authority also enables the Commission to conduct wide-ranging studies that do not have specific law enforcement purposes. For example, utilizing its 6(b) power and without an underlying specific law enforcement purpose, the FTC recently launched an inquiry into supply chain disruptions and its impacts on consumers.

Wholesalers, refiners, single-location retailers, pipeline owners and operators, terminal owners, and petroleum marketers could all be issued CIDs or 6(b) requests for information if the FTC seeks to gain a deeper understanding of the gasoline cost problem. This possibility seems more likely given the FTC’s recent willingness to utilize Section 6(b) in other industries, including the investigation into the supply chain shortage. However, 6(b) studies are incredibly exhaustive and time consuming to deploy. The costliness of a 6(b) study could be a barrier.

Increased Merger Scrutiny

The FTC may also increase scrutiny on oil and gas companies by ramping up its focus on mergers within the industry, as Chair Khan indicated it would in her letter to Director Brian Deese. This methodology of increasing merger scrutiny also fits within the FTC’s larger trend of increased merger enforcement across a variety of industries under Chair Khan’s leadership.

There is evidence that increased attention on mergers in the gas and oil sector is already taking place—regulators extended the approval process for at least five oil and gas mergers and acquisitions in the third quarter of 2021 alone. This sort of scrutiny has been rare in the oil and gas sector, in which mergers have, up until recently, largely sailed through the regulatory process. The FTC has not blocked a major oil merger in two decades. It brought only four energy related actions in all of 2020, while the DOJ did not file any merger enforcement actions in the energy sector last year. If the FTC’s enforcements behaviors as of late 2021 continues, we may very well see not only more extended approval processes and issuances of second requests, but perhaps more merger challenges, as well.

Takeaways

Participants in the oil and gas market have enjoyed several decades of flying relatively beneath the notice the antitrust regulatory bodies. Increased antitrust scrutiny of the industry from both the DOJ and FTC has been occurring and likely will increase, with President Biden’s request being just a recent example. As clients consider potential transactions, they would be well-served by seeking advice from experienced antitrust counsel.

#### If they’re right, expanded FTC enforcement would result in more backlash – crushes its effectiveness – Jones says resource cuts

Alison Jones & William E. Kovacic 20, Jones is a professor at King’s College London; Kovacic is Global Competition Professor of Law and Policy, The George Washington University Law School, “Antitrust’s Implementation Blind Side: Challenges to Major Expansion of U.S. Competition Policy,” The Antitrust Bulletin, vol. 65, no. 2, SAGE Publications Inc, 06/01/2020, pp. 227–255

The second path is to lobby the Congress. The FTC is called an “independent” regulatory agency, but Congress interprets independence in an idiosyncratic way.126 Legislators believe independence means insulation from the executive branch, not from the legislature. The FTC is dependent on a good relationship with Congress, which controls its budget and can react with hostility, and forcefully, when it disapproves of FTC litigation—particularly where it adversely affects the interests of members’ constituents. Controversial and contested cases may consequently be derailed or muted if political support for them wanes and politicians become more sympathetic to commercial interests. The FTC’s sometimes tempestuous relationship with Congress demonstrates that political coalitions favoring bold enforcement can be volatile, unpredictable, and evanescent.127 If the FTC does not manage its relationship with Congress carefully, its litigation opponents may mobilize legislative intervention that causes ambitious enforcement measures to the founder.

#### Chinese tech is safe.

Lee & Triolo ’17 [Kai-Fu; Ph.D., is a Co-Founder, Chairman, President, Chief Executive Officer, and Managing Partner of Sinovation Ventures, Paul Triolo is a China Digital Economy Fellow at New America and the geo-technology practice head at the Eurasia Group, “China’s Artificial Intelligence Revolution: Understanding Beijing’s Structural Advantages”, https://www.eurasiagroup.net/files/upload/China\_Embraces\_AI.pdf]

Beijing’s AI policy priorities are clear. The “Next Generation Artificial Intelligence Development Plan,” announced by China’s State Council in July 2017, called for China to catch up on AI technology and applications by 2020, and to become a global AI innovation hub by 2030. Chinese President Xi Jinping hammered the point home in his 19th Party Congress speech in October, when he mentioned the development of advanced manufacturing and the promotion of further integration of the Internet, big data and artificial intelligence with the real-world economy. Beijing has placed huge bets on AI for a host of political and economic reasons, from improving governance capacity to improving policy development and surveillance. The plan calls for China to lead the way in developing a regulatory environment to both encourage AI development and to mitigate the potential downsides of AI. A few months after the national plan’s announcement in July, the Ministry of Science and Technology (MOST) designated Baidu to lead the autonomous vehicle platform, Tencent for medical, Alibaba for Smart Cities, and iFlyTek for speech interfaces. These plans should be taken seriously, as the Chinese government has shown a strong track record in delivering results. For example, Beijing announced in 2010 that China would become the world’s leader in adopting high-speed rail (HSR). Today it has 60% of the world’s HSR market. In 2014, the Chinese government announced the “Mass Entrepreneurship and Innovation Plan.” Today there are business 8000 incubators in China, compared to 1400 in 2014. These plans have teeth, both due to the deadlines and metrics set out at the national level, as well as the local companies that are likely to take these directions as top priorities. We can expect a similar trajectory for China’s AI policies. Historically, the Chinese government has been open-minded towards technology development. When a new technology comes out, the government will give it the benefit of doubt and let it grow, rather than stifle it with policy or endless debates. Also, the environment in China is more conducive to fast launch and iteration. There is a general belief that it is better to launch something and then get it approved later. This allows Chinese businesses to generate real data at scale, which in turn allows technology to improve over a shorter period of time, particularly once AI is introduced into the equation. For example, while in the US, truckers’ unions are petitioning the Department of Transportation to delay autonomous truck testing, in China, the Xiong’an New Area, a planned smart city development southwest of Beijing, is being designed from the ground up with full autonomy in mind. Various highway authorities are willing to develop road augmentation, special lanes, or move warehouses near highway exits, all to facilitate faster deployment of autonomous trucks. We also see major initiatives in cities, following the central government’s call to action. Shanghai, Nanjing, Wuhan, and Tianjin are but a few of the cities coming out with their own AI initiatives. As with past policies, much of the resources will be applied at the provincial and city government levels. The types of resources may include subsidies for top talent (especially overseas talent); guidance for top VC funds, with the government playing the role of limited partner (LP) but offering some of its upside to the general partners (GPs) of the funds; special programs for top AI companies and start-ups (free rent, subsidy for local hiring, housing and private school for top talents); and technical awards for companies and individuals. Finally, the US, EU, and China will also compete to be out in front on developing a regulatory regime around AI technologies and applications. The National Plan’s explicit recognition of the need for regulatory, legal, and ethical principles for AI development and use represents an uncommonly foresighted approach. Of course, the government’s approach to AI regulation, ethics, and economic adjustment will reflect Beijing’s broader model of governance and ideology. Given its preference for a state-centric approach to international issues, for example, it is possible China will launch an initiative via the UN to establish first an automation/AI-related “code of conduct,” or basic regulatory approach, followed by a special committee on the topic and eventually an oversight body operating within a UN framework. Such an initiative would put China at the forefront of developing a global approach to these issues. Beijing has attempted a similar approach on cybersecurity issues, which it argues have a global impact and require a global regulatory response.

#### Democracy is resilient but fails

Renske Doorenspleet 19, Politics Professor at the University of Warwick, “Conclusion: Rethinking the Value of Democracy,” Rethinking the Value of Democracy, Springer Berlin Heidelberg, 2019, pp. p. 239-243

Key Findings: Rethinking the Value of Democracy

The value of democracy has been taken for granted until recently, but this assumption seems to be under threat now more than ever before. As was explained in Chapter 1, democracy’s claim to be valuable does not rest on just one particular merit, and scholars tend to distinguish three different types of values (Sen 1999). This book focused on the instrumental value of democracy (and hence not on the intrinsic and constructive value), and investigated the value of democracy for peace (Chapters 3 and 4), control of corruption (Chapter 5) and economic development (Chapter 6). This study was based on a search of an enormous academic database for certain keywords,6 then pruned the thousands of articles down to a few hundred articles (see Appendix) which statistically analysed the connection between the democracy and the four expected outcomes.

The frst fiding is that a reverse wave away from democracy has not happened (see Chapter 2). Not yet, at least. Democracy is not doing worse than before, at least not in comparative perspective. While it is true that there is a dramatic decline in democracy in some countries,7 a general trend downwards cannot yet be detected. It would be better to talk about ‘stagnation’, as not many dictatorships have democratized recently, while democracies have not yet collapsed.

Another fnding is that the instrumental value of democracy is very questionable. The feld has been deeply polarized between researchers who endorse a link between democracy and positive outcomes, and those who reject this optimistic idea and instead emphasize the negative effects of democracy. There has been ‘no consensus’ in the quantitative literature on whether democracy has instrumental value which leads some beneficial general outcomes. Some scholars claim there is a consensus, but they only do so by ignoring a huge amount of literature which rejects their own point of view. After undertaking a large-scale analysis of carefully selected articles published on the topic (see Appendix), this book can conclude that the connections between democracy and expected benefts are not as strong as they seem. Hence, we should not overstate the links between the phenomena.

The overall evidence is weak. Take the expected impact of democracy on peace for example. As Chapter 3 showed, the study of democracy and interstate war has been a fourishing theme in political science, particularly since the 1970s. However, there are four reasons why democracy does not cause peace between countries, and why the empirical support for the popular idea of democratic peace is quite weak. Most statistical studies have not found a strong correlation between democracy and interstate war at the dyadic level. They show that there are other—more powerful—explanations for war and peace, and even that the impact of democracy is a spurious one (caveat 1). Moreover, the theoretical foundation of the democratic peace hypothesis is weak, and the causal mechanisms are unclear (caveat 2). In addition, democracies are not necessarily more peaceful in general, and the evidence for the democratic peace hypothesis at the monadic level is inconclusive (caveat 3). Finally, the process of democratization is dangerous. Living in a democratizing country means living in a less peaceful country (caveat 4). With regard to peace between countries, we cannot defend the idea that democracy has instrumental value.

Can the (instrumental) value of democracy be found in the prevention of civil war? Or is the evidence for the opposite idea more convincing, and does democracy have a ‘dark side’ which makes civil war more likely? The findings are confusing, which is exacerbated by the fact that different aspects of civil war (prevalence, onset, duration and severity) are mixed up in some civil war studies. Moreover, defining civil war is a delicate, politically sensitive issue. Determining whether there is a civil war in a particular country is incredibly diffcult, while measurements suffer from many weaknesses (caveat 1). Moreover, there is no linear link: civil wars are just as unlikely in democracies as in dictatorships (caveat 2). Civil war is most likely in times of political change. Democratization is a very unpredictable, dangerous process, increasing the chance of civil war significantly. Hybrid systems are at risk as well: the chance of civil war is much higher compared to other political systems (caveat 3). More specifcally, both the strength and type of political institutions matter when explaining civil war. However, the type of political system (e.g. democracy or dictatorship) is not the decisive factor at all (caveat 4). Finally, democracy has only limited explanatory power (caveat 5). Economic factors are far more significant than political factors (such as having a democratic system) when explaining the onset, duration and severity of civil war. To prevent civil war, it would make more sense to make poorer countries richer, instead of promoting democracy. Helping countries to democratize would even be a very dangerous idea, as countries with changing levels of democracy are most vulnerable, making civil wars most likely. It is true that there is evidence that the chance of civil war decreases when the extent of democracy increases considerably. The problem however is that most countries do not go through big political changes but through small changes instead; those small steps—away or towards more democracy—are dangerous. Not only is the onset of civil war likely under such circumstances, but civil wars also tend to be longer, and the confict is more cruel leading to more victims, destruction and killings (see Chapter 4).

A more encouraging story can be told around the value for democracy to control corruption in a country (see Chapter 5). Fighting corruption has been high on the agenda of international organizations such as the World Bank and the IMF. Moreover, the theme of corruption has been studied thoroughly in many different academic disciplines—mainly in economics, but also in sociology, political science and law. Democracy has often been suggested as one of the remedies when fghting against high levels of continuous corruption. So far, the statistical evidence has strongly supported this idea. As Chapter 5 showed, dozens of studies with broad quantitative, cross-national and comparative research have found statistically signifcant associations between (less) democracy and (more) corruption. However, there are vast problems around conceptualization (caveat 1) and measurement (caveat 2) of ‘corruption’. Another caveat is that democratizing countries are the poorest performers with regard to controlling corruption (caveat 3). Moreover, it is not democracy in general, but particular political institutions which have an impact on the control of corruption; and a free press also helps a lot in order to limit corruptive practices in a country (caveat 4). In addition, democracies seem to be less affected by corruption than dictatorships, but at the same time, there is clear evidence that economic factors have more explanatory power (caveat 5). In conclusion, more democracy means less corruption, but we need to be modest (as other factors matter more) and cautious (as there are many caveats).

The perceived impact of democracy on development has been highly contested as well (see Chapter 6). Some scholars argue that democratic systems have a positive impact, while others argue that high levels of democracy actually reduce the levels of economic growth and development. Particularly since the 1990s, statistical studies have focused on this debate, and the empirical evidence is clear: there is no direct impact of democracy on development. Hence, both approaches cannot be supported (see caveat 1). The indirect impact via other factors is also questionable (caveat 2). Moreover, there is too much variation in levels of economic growth and development among the dictatorial systems, and there are huge regional differences (caveat 3). Adopting a one-size-ftsall approach would not be wise at all. In addition, in order to increase development, it would be better to focus on alternative factors such as improving institutional quality and good governance (caveat 4). There is not suffcient evidence to state that democracy has instrumental value, at least not with regard to economic growth. However, future research needs to include broader concepts and measurements of development in their models, as so far studies have mainly focused on explaining cross-national differences in growth of GDP (caveat 5).

Overall, the instrumental value of democracy is—at best—tentative, or—if being less mild—simply non-existent. Democracy is not necessarily better than any alternative form of government. With regard to many of the expected benefts—such as less war, less corruption and more economic development—democracy does deliver, but so do nondemocratic systems. High or low levels of democracy do not make a distinctive difference. Mid-range democracy levels do matter though. Hybrid systems can be associated with many negative outcomes, while this is also the case for democratizing countries. Moreover, other explanations—typically certain favourable economic factors in a country—are much more powerful to explain the expected benefts, at least compared to the single fact that a country is a democracy or not. The impact of democracy fades away in the powerful shadows of the economic factors.8

## Biz Con DA

### 2AC – Biz Con

#### Tons of antitrust now and coming

Jon Swartz 12-28, Senior Reporter for MarketWatch, “Big Tech Heads for ‘A Year of Thousands of Tiny Tech Papercuts,’ But What Antitrust Efforts Could Make Them Bleed?”, MarketWatch, 12/28/2021, https://www.marketwatch.com/story/big-tech-heads-for-a-year-of-thousands-of-tiny-tech-papercuts-but-what-antitrust-efforts-could-make-them-bleed-11640640776

Antitrust enforcement of Big Tech is expected to take place on a scale never before seen in 2022, following years of escalating rhetoric from Washington.

So far, Wall Street has shrugged as the five companies under the microscope — Google parent Alphabet Inc. GOOGL, -0.92% GOOG, -0.91%, Facebook parent Meta Platforms Inc. FB, -2.33%, Apple Inc. AAPL, -0.35%, Amazon.com Inc. AMZN, -1.14%, and, yes, Microsoft Corp. MSFT, -0.88% — have been targeted by governments and rivals across the globe. Despite a steady drumbeat of negative headlines, tech’s quintet of heavy hitters boasted a cumulative market value of nearly $10 trillion as 2021 neared an end, after producing a collective $2.4 trillion in revenue over the past two years of pandemic misery.

The stock prices of tech companies have only been “minorly impacted because investors do not tend to make decisions based on the mere possibility of legislation,” Ashley Baker, director of public policy at the Committee for Justice, told MarketWatch.

Many investors have simply looked back on history and shrugged, according to one Silicon Valley venture capitalist.

“There is more antitrust noise, but investment people remember the Microsoft and IBM IBM, -0.19% [antitrust investigations] in which waves of innovation followed those investigations and proved they did not own the industry,” Alexandra Sasha Johnson, president of Global Tech Symposium, a Silicon Valley investment conference, told MarketWatch. “Until the Big Tech companies buy each other, this is not a problem.”

For more: Big Tech was built by the same type of antitrust actions that could now tear it down

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This could finally change in 2022 as it did in the late 1990s, when some tech companies struck a cautious stance during the Justice Department’s investigation of Microsoft for monopolistic practices, Syed said.

“The difference is that we’re talking about interconnected companies that own an industry versus just one company [with Microsoft],” she said. “And there is bipartisan support, which makes it easier politically.”

More on the antitrust challenges facing Big Tech in 2022

Amazon has mostly avoided antitrust scrutiny, but that may change in 2022

Possible Justice Department lawsuit looms over Apple, which is facing scrutiny worldwide

Google enters 2022 battling antitrust actions on multiple fronts — with more likely to come

Facebook’s acquisitions of Instagram and WhatsApp are antitrust targets, but its metaverse mergers may be the victims

Microsoft has avoided U.S. antitrust scrutiny, but Europe is a different matter

With more than a dozen pieces of anti-tech legislation, a plethora of lawsuits and regulatory fines escalating in the U.S. and abroad, as well as the Biden administration rounding out Big Tech’s nightmare team of government agency heads, 2022 is shaping up as a seminal year for tech regulation after decades of inaction.

In rapid succession this year, Biden named and nominated an antitrust team of Tim Wu (to the newly created position of head of competition policy at the National Economic Council), Lina Khan (chair of the Federal Trade Commission) and Jonathan Kanter (head of the antitrust division of the Justice Department). Each is a heralded anti-monopolist advocate who has written extensively on the topic or represented companies making antitrust claims against Big Tech.

The trio have been referred to as members of a “New Brandeis movement,” named after Supreme Court Justice Louis Brandeis, whose decisions limited the power of big business in the early 20th century. With the New Brandeis trifecta in place, and Congress evaluating more than dozen possible anti-tech bills, next year is “shaping up to be the year of Tech Takedown,” Bhaskar Chakravorti, dean of global business at the Fletcher School at Tufts University, told MarketWatch.

More troubling for tech CEOs, he said, are the “many tiny actions at the FTC, Justice Department and Congress that will continue to keep feeding the news cycles with a steady stream of actions” that add up to a “a year of thousands of tiny tech papercuts.”

Big Tech’s treacherous path to antitrust enforcement has three potentially damaging roads: federal agencies challenging acquisitions and mergers; legislation tailored to stimulate competition and curtail the influence of tech’s dominant platforms; and federal and state lawsuits.

Closer scrutiny of M&A activity

The biggest immediate impact from the Biden administration’s all-out assault could be a cooling-off period of frenzied mergers and acquisitions by the biggest players. Regulators have been empowered with examining past deals and more strenuously inspecting tech’s latest purchases.

Major movement is already happening on the M&A front because, as lawyers and executives told MarketWatch, the FTC and Justice Department have new leadership empowered to more closely review and approve mergers while they await legislation and court actions. A non-binding presidential executive order largely seen as aimed at Big Tech announced a policy of greater scrutiny of mergers over the summer, and the FTC and Justice Department each would receive $500 million in new funding to boost staff working on antitrust enforcement as part of the House-passed reconciliation bill awaiting Senate action.

The FTC is signaling greater oversight over deals, requiring affirmative consent on certain transactions, which may prolong uncertainty on merger agreements. The agency has already sued to block the largest semiconductor deal ever — Nvidia Corp.’s NVDA, -0.59% proposed $40 billion acquisition of U.K.-based chip-design provider Arm Ltd., saying the deal would “distort Arm’s incentives in chip markets and allow the combined firm to unfairly undermine Nvidia’s rivals.”

Another FTC antitrust probe, into Meta’s plan to acquire VR fitness app Supernatural for $400 million, is underway, according to a report by The Information.

The Justice Department’s direction is less clear at this point, but signals from Kanter’s confirmation hearing point to “vigorous enforcement” of antitrust laws.

“Personnel is policy. With the trifecta of Khan, Kanter and Wu, there is a new sheriff in town,” Luther Lowe, senior vice president of public policy at Yelp Inc. YELP, -0.66%, told MarketWatch. “Efforts by Amazon and Facebook to recuse Khan, and Google’s attempt to recuse Kanter, is like arsonists asking for firefighters to be removed from a fire.”

#### Biz con collapse inevitable and alt causes – COVID, inflation, fed mistakes, and cyber attacks

Egan 12/31 [Matt, CNN reporter, covering biz, economy, and financial markets. “The economy is booming. 5 reasons that could change in 2022”. 12/31/22. https://www.cnn.com/2021/12/31/economy/economy-covid-inflation-2022/index.html]

And yet, the past two years have shown how unforeseen events can alter forecasts, sometimes dramatically.

For all its recent strength, the economy's recovery faces multiple risks in 2022, starting with the force that continues to dominate daily life: Covid.

Covid doesn't go away

The hope is that Omicron is spreading so rapidly that it burns itself out, making its impact short-lived. But what if this latest wave sticks around long enough that it puts a dent in consumer demand -- especially in Covid-sensitive sectors like travel and restaurants?

"The pandemic remains the single largest potential disruptor of the domestic and global economy," said Joe Brusuelas, chief economist at RSM.

The bigger risk is that an even more menacing variant emerges, with more severe symptoms and the danger that it evades vaccines and booster shots.

Wall Street appears to be unfazed by both these risks, at least not lately. Record highs in the stock market suggest investors are betting neither Omicron nor another variant will prove problematic.

"I hope they're right," said David Kotok, chief investment officer at Cumberland Advisors. "This is a mutating disease. We've now had two years of experience. What makes anyone believe Omicron is the last one?"

Supply chains stay scrambled

Omicron arrived just as stressed-out supply chains -- one of the biggest drivers of inflation -- were beginning to show glimmers of hope.

The Delta variant earlier this year piled additional pressure on supply chains by getting workers sick, making them scared to go to work and introducing new health restrictions.

It's too soon to say whether the same will happen now at the factories, ports and trucking companies that keep the economy humming.

Mark Zandi of Moody&#39;s plans to dim his US economic forecast after Omicron concerns

Mark Zandi of Moody's plans to dim his US economic forecast after Omicron concerns

"It is possible that Omicron disrupts supply chains even more and will be a drag on growth and investment," said Vincent Reinhart, a former Federal Reserve official who is now chief economist at BNY Mellon.

The good news is the Omicron wave is hitting at a time when demand typically cools off, which should give supply chains a bit of extra breathing room to deal with the new variant.

Inflation stays hot

Consumer prices rose in November at the fastest pace in 39 years, driving up the cost of living for families. Goldman Sachs expects inflation will heat up a bit further in the coming months, before cooling off considerably later in 2022.

One risk is that new Covid-related bottlenecks limit supply, lifting prices even higher. Another concern is that inflation continues to spread and gets further ingrained in the psychology of consumers and business owners, which in turn could cause a negative feedback loop that drives inflation higher.

High energy prices have been at the heart of the inflation spike, most notably prices at the pump. Another spike in oil prices, as some on Wall Street have been calling for, would darken the inflation picture.

A Fed policy mistake

After nearly two years of unprecedented support, the Federal Reserve is finally taking its foot off the gas pedal -- and preparing to tap the brakes very soon.

In a bid to fight inflation, the Fed is planning to end its bond-buying stimulus program around March and has penciled in three interest rate hikes for next year.

America runs on bad jobs

America runs on bad jobs

Given the strength of the recovery, the economy should be able to absorb those rate hikes without negative repercussions. Borrowing costs will remain historically low.

"My sense is the economy is in a pretty good place right now. The Fed has a lot of bandwidth to work with," said RSM's Brusuelas.

Investors tend to agree, with markets signaling confidence that the Fed will deftly exit emergency mode without harmful side effects.

But there is a chance the Fed overdoes it by raising rates faster than the economy, or financial markets, can stomach. And that could severely slow down or even end the recovery.

No more help from Uncle Sam

After providing nearly $6 trillion in Covid relief during the first two years of the pandemic, federal support for the economy is projected to slow sharply in 2022.

That was always going to be the case, but the trend will be more pronounced given the apparent demise of the Build Back Better Act, including the enhanced child tax credit.

"We are going to run an experiment on how much of this robust expansion is due to fiscal support and how much from private activity," said Reinhart. "We don't know."

The unexpected

Any list of risks to the economy must include wild card events that few expect but could still have a big impact.

The best example would be a massive cyberattack that sets off turmoil, either in the real economy or in financial markets, or both.

Federal pandemic aid runs dry as businesses deal with Omicron&#39;s impact

Federal pandemic aid runs dry as businesses deal with Omicron's impact

The hacking of the Colonial Pipeline earlier this year showed just how vulnerable critical infrastructure is to the cyber threat. A recent report from the JPMorgan International Council warned that cyber is the "most dangerous weapon in the world, politically, economically and militarily."

Fed Chairman Jerome Powell openly worried earlier this month about the potential impact from a cyber intrusion that could take down down a big bank or a key cog in the financial system.

There are countless other wildcard risks beyond cyber, everything from a war and a natural disaster to a crash in the crypto market.

"You've got to be humble. Almost nobody had a pandemic on the radar screen in 2018 and maybe not 2019," Reinhart said. "Is it possible in 12 months that all we will talk about is something we are not talking about now? Yes."

#### Anticompetitive conduct in the electricity sector undermines growth

Moss 13 [Diana Moss is Vice President and Director, American Antitrust Institute (AAI), and Sandeep Vaheesan is Special Counsel, AAI, "Collusive Agreements in the Energy Industry: Insights into U.S. Antitrust Enforcement", 1/10/13, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2198539&download=yes]

The importance of the energy sector in the U.S. economy needs little explanation. According to the Energy Information Administration (EIA), Americans spent over $1 trillion, or roughly eight percent of U.S. gross domestic product, on energy in 2009.4 Energy expenditures comprise a major fraction of household budgets in the U.S. EIA estimates show that U.S. households spent an average of $2,024 on energy for heating in 20095 and $2,832 on gasoline in 2011.6

Because energy is the lifeblood of the modern economy, energy prices play a critical role in economic growth. Although the U.S. economy is not as energy intensive as it was several decades ago,7 rising energy prices can still slow economic growth. As an important input for industry and transportation, higher energy prices increase costs and lower profits. Moreover, consumers’ ability to modify their energy use and transportation arrangements in the short run is limited8 and only mildly responsive to short run changes in prices.9 Higher energy prices can take a particularly large toll on low-income households that spend a larger fraction of their budgets on energy than middle- and upper-income households.10

Because of the important macroeconomic and microeconomic role of energy prices, anticompetitive conduct in energy markets can be particularly harmful. Petroleum markets are vulnerable to collusive agreements, and the incidence of anticompetitive behavior at multiple levels in the supply chain compounds the adverse effects on consumers. Cartelization of the global crude oil market by the Organization of Petroleum Exporting Countries (OPEC) is one of the most well known examples. OPEC’s decision to restrict crude oil production in the early 1970s plunged much of the world economy into recession.11 Anticompetitive agreements also extend to price fixing at the retail level for products such as diesel and gasoline. Agreements to fix and raise prices between local competing retailers of refined petroleum products directly harm consumers by extracting supracompetitive prices on an essential commodity for which consumers cannot easily adjust consumption in the short run. More recently, collusion has surfaced in auctions for oil and gas exploration leases on federal and private land. Agreements between bidders not to compete against each other depress prices and reduce an important revenue stream for the government.12

The pernicious effects of collusive schemes in energy are not limited to petroleum markets. On a more local level, anticompetitive agreements between sellers in regional wholesale electricity markets have forced consumers to pay hundreds of millions of dollars more for electricity than they would have in the absence of such conduct. In these markets, which are structurally vulnerable to the exercise of market power, anticompetitive agreements spanning even a short time can result in large wealth transfers from consumers to suppliers.13

#### Not key to growth

Cameron Bagrie 18, Managing Director of Bagrie Economics, “Business confidence is a hopeless indicator. But that doesn't mean the economy isn't in trouble,” Spinoff, 8-9-2018, https://thespinoff.co.nz/business/09-08-2018/business-confidence-is-bullshit-but-that-doesnt-mean-the-economy-isnt-in-trouble/

The good news is that business confidence is hopeless as an economic indicator. The correlation with economic growth is poor and I largely ignore business confidence readings. Changes in direction can provide some insightful information – whether things are picking up or slowing down, but not the levels.

Businesses tend to be more upbeat regarding general confidence about the economy under a blue flag as opposed to a red one. Business confidence averaged minus 18 between 2000 and 2007. The economy (measured by real gross domestic product) grew on average by more than 3.5% per year. Yep, confidence was negative, but growth was positive. So, we ignore business confidence as an economic indicator. This is nothing new. It’s surprising headline business confidence figures receive so much attention

#### No econ impact

**Walt 20** [Stephen M. Walt is the Robert and Renée Belfer professor of international relations at Harvard University. “Will a Global Depression Trigger Another World War?”, May 13th, https://foreignpolicy.com/2020/05/13/coronavirus-pandemic-depression-economy-world-war/]

On balance, however, I do not think that even the extraordinary economic conditions we are witnessing today are going to have much impact on the likelihood of war. Why? First of all, if depressions were a powerful cause of war, there would be a lot more of the latter. To take one example, the United States has suffered 40 or more recessions since the country was founded, yet it has fought perhaps 20 interstate wars, most of them unrelated to the state of the economy. To paraphrase the economist Paul Samuelson’s famous quip about the stock market, if recessions were a powerful cause of war, they would have predicted “nine out of the last five (or fewer).”

Second, states do not start wars unless they believe they will win a quick and relatively cheap victory. As John Mearsheimer showed in his classic book Conventional Deterrence, national leaders avoid war when they are convinced it will be long, bloody, costly, and uncertain. To choose war, political leaders have to convince themselves they can either win a quick, cheap, and decisive victory or achieve some limited objective at low cost. Europe went to war in 1914 with each side believing it would win a rapid and easy victory, and Nazi Germany developed the strategy of blitzkrieg in order to subdue its foes as quickly and cheaply as possible. Iraq attacked Iran in 1980 because Saddam believed the Islamic Republic was in disarray and would be easy to defeat, and George W. Bush invaded Iraq in 2003 convinced the war would be short, successful, and pay for itself.

The fact that each of these leaders miscalculated badly does not alter the main point: No matter what a country’s economic condition might be, its leaders will not go to war unless they think they can do so quickly, cheaply, and with a reasonable probability of success.

Third, and most important, the primary motivation for most wars is the desire for security, not economic gain. For this reason, the odds of war increase when states believe the long-term balance of power may be shifting against them, when they are convinced that adversaries are unalterably hostile and cannot be accommodated, and when they are confident they can reverse the unfavorable trends and establish a secure position if they act now. The historian A.J.P. Taylor once observed that “every war between Great Powers [between 1848 and 1918] … started as a preventive war, not as a war of conquest,” and that remains true of most wars fought since then.

The bottom line: Economic conditions (i.e., a depression) may affect the broader political environment in which decisions for war or peace are made, but they are only one factor among many and rarely the most significant. Even if the COVID-19 pandemic has large, lasting, and negative effects on the world economy—as seems quite likely—it is not likely to affect the probability of war very much, especially in the short term.

## BBB

### 2AC--AT: BBB Politics

#### Manchin and Sinema are still no’s

Meyer 1/3 [Theodoric Meyer and Jacqueline Alemany, "Here we go again: Build Back Better is back on the Senate stage", 1/3/22, https://www.washingtonpost.com/politics/2022/01/03/here-we-go-again-build-back-better-is-back-senate-stage/]

Never gonna give you up: President Biden and White House aides spent part of the holiday recess working the phones with Senate Democrats on how to get the Build Back Better Act (BBB) through the Senate, according to a White House aide.

But the dynamics of getting the big health care, child care and climate change package through the evenly divided chamber remain as tough as they were the week before the holidays, when Sen. Joe Manchin (D-W.Va.) announced he opposed the current plan and opened a rift with the White House.

It's unclear how much Biden and his legislative emissaries have been in touch with Manchin since their unusually sharp pre-Christmas war of words. Biden and Manchin did speak and pledge to continue negotiating after Manchin's bombshell announcement. Manchin's concerns are rooted in his opposition to an extension of the beefed-up child tax credit — which expired on New Year's Day since Congress did not act — included in the House version of the bill, as well as some climate provisions.

And Senate Majority Leader Chuck Schumer (D-N.Y.) told Senate Democrats in a virtual caucus meeting days before Christmas that he would push to vote on the bill by the end of January, according to a person familiar with the call.

Manchin isn't the only thing standing in the way of passage; Sen. Kyrsten Sinema (D-Ariz.) also hasn't committed to voting for the bill.

New ideas floated over the recess to pass the package through the Senate include breaking it up into smaller pieces.

**Lawmakers will compartmentalize conflict on separate issues – specific to infrastructure**

**Pergram 18** (Chad Pergram, Congressional reporter. “Amid Kavanaugh cacophony, Congress forges bipartisan agreements on key issues”. October 13, 2018. <https://www.foxnews.com/politics/amid-kavanaugh-cacophony-congress-forges-bipartisan-agreements-on-key-issues>)

Step back from the Kavanaugh cacophony. Examine what lawmakers from both parties in both chambers accomplished in September and early October, with virtually zero fanfare. **Amid** the **turmoil**, Congress approved the first revamp of national aviation policy in years. The Senate approved the final version of the legislation 93-6. This came after a staggering six extensions due to bickering and disagreement. Then, Congress approved a sweeping, bipartisan measure to combat opioid abuse. The House okayed the package 393-8. The Senate adopted the measure 98-1. And, there was no government shutdown. The House and Senate came to terms on two bipartisan bills which funded five of the 12 annual spending bills which operate the government. The sides agreed to latch an additional measure to one of the spending plans to fund the remaining seven areas of federal spending through December 7. President Trump briefly threatened to force a government shutdown if lawmakers didn’t include money for his border wall in the plan. But the President ultimately punted that battle until December. Democrats praised Republicans for keeping conservative “poison pill” riders out of the appropriations bills. That decision drew Democratic support for the measures. The Senate approved a bipartisan **water and infrastructure** package. McConnell hailed the **bipartisanship**

which descended upon the Senate – **even as the senators fought over Kavanaugh**. Nearly **in the same breath**, McConnell derided boisterous, anti-Kavanaugh protesters outside the Capitol as a “mob.” McConnell insisted this week he needed the Senate to clear a slate of 15 conservative judges to lower courts before he could cut senators loose for the midterm elections. McConnell and Schumer appeared at loggerheads. McConnell’s goal was clear: extract the confirmation of these nominees – or tether to Washington vulnerable Democratic senators from battleground states to keep them off the campaign trail. Schumer knew McConnell would ultimately prevail on the nominees after the midterms. So the New York Democrat accepted McConnell’s ransom, permitting the Senate vote on a slate of nominees on Thursday night. Schumer also extracted a concession from McConnell: send senators home until November 13th. One may wonder how lawmakers can find themselves in an **imbroglio** over a major issue like Kavanaugh – **yet forge major bipartisan accords on other**. Frankly, that’s just politics. Politics always elicits strange bedfellows. Successful lawmakers know they should **compartmentalize their disputes**. The enemy today may be your best ally tomorrow.

# 1AR

## FERC CP

### 1AR – Deficit

#### Utilities shift to state action coverage – they’re immunized now

GÜNDÜZ 16 [Hale, Competition Expert @ The Turkish Competition Authority.“Antitrust Policy and Regulatory Interventions In The US Electricity Industry”. Competition Journal / Rekabet Dergisi . Jun2016, Vol. 17 Issue 1, p98-125. 28p.]

Antitrust policies have a long history in electricity industry and complement regulatory structures to protect against anticompetitive conduct104. Especially when deregulation has been completed, the antitrust laws should be applied fully to deter anticompetitive conduct105. However, there are some impediments to antitrust policies to be effective: “State action immunity” and “filed-rate doctrines”. Although they do not exempt all conduct in the electricity industry, they provide immunity in some contexts106. In order for antitrust rules to be effective, enforcement of antitrust laws should not be blocked by these doctrines, since the FERC may not check all anticompetitive conducts that may arise in these markets107.

According to the state action immunity doctrine, if an anticompetitive behavior takes place pursuant to a state regulatory program, it will prevent application of the antitrust laws108. Although there is a strict test for this immunity, the role of the antitrust laws in regulated industries may still be diminished109. Furthermore, these state regulations can impose spillover costs to consumers in neighboring states110. Therefore, as stated by the Antitrust Modernization Committee111, the doctrine should not be applied where the effects of conduct are not predominantly intrastate, since overly broad interpretation of the doctrine can lead to consumer harm in other states112.

According to filed-rate doctrine, on the other hand, firms submit rates to the FERC and once they are approved, they are treated as a firmspecific regulation, meaning that nobody can change them except the notifying party or the FERC. If the notifying firm follows these rates, it is exempt from antitrust liability and treble damages113. Although there are some exceptions to the filed-rate doctrine, i.e. enforcement by federal government114, it prevents the antitrust laws to be fully applicable to the electricity industry.

#### State action is key for DERS

Howard M. Crystal & Anchun Jean Su 18, Center for Biological Diversity, “Brief of Center for Biological Diversity, Food & Water Watch, Friends of the Earth, Greenpeace, Inc., Institute for Local Self-Reliance, and NC Warn, Inc. as Amici Curiae in Support of Respondent,” Salt River Project Agricultural Improvement and Power District, Petitioner, v. Tesla Energy Operations, Inc., fka Solarcity Corporation, Respondent, 2018 WL 993878, WestLaw

II. THE FOUNDATIONAL PREMISES OF SRP'S ASSERTED RIGHT TO AN UNBOUNDED MONOPOLY DO NOT HOLD IN THE AGE OF DISTRIBUTED SOLAR COMPETITION

SRP asserts that the state-action defense protects “the need to ensure that government policymakers exercise their discretion efficiently and freely, i.e., with the objective of advancing the public interest rather than of avoiding litigation.” Pet. Br. at 35 (emphasis added). Similarly, APPA claims that the state-action defense “protects public power utilities' ability to meet their public goals” and thereby “allows states to favor public objectives over free-market competition.” APPA Br. at 2, 4 (emphasis added). However, SRP and other public power companies are not advancing public \*17 objectives or the public interest when they improperly target distributed solar generation.

Stilling solar energy competition through discriminatory rates - a widespread action perpetuated by SRP and numerous other power companies - harms the public interest by obstructing the tremendous benefits that distributed solar generation brings to both consumers and the environment. Such discriminatory behavior therefore contravenes the underlying purpose of the regulated monopoly, which was to protect consumers and the public interest. The state-action defense, and interlocutory appeal of adverse state-action defense rulings, should not be available as a legal bulwark for power companies like SRP to exercise unbounded monopoly power that works against the public interest in this anti-competitive manner.

A. The Premise That Electricity Monopolies Necessarily Serve The Public Interest Has Been Undermined By Public Policy And Technology

“Until relatively recently, most state energy markets were vertically integrated monopolies - i.e., one entity … controlled electricity generation, transmission, and sale to retail consumers.” Hughes v. Talen Energy Mktg, LLC, 136 S. Ct. 1288, 1292 (2016). In the electricity industry's infancy of the early 1900s, the vertically integrated regulated monopoly made sense in light of the available technology and existent business structures of the time. Originally a natural \*18 monopoly, the electricity sector faced extreme barriers to entry, whereby construction of power plants and grid infrastructure required massive capital investments, as well as substantial economies of scale, whereby the average cost of delivered power became cheaper with new expansion in demand. Paul Garfield & Wallace Lovejoy, Public Utility Economics 15-19 (1964).

The foundational premise for granting vertically integrated utilities monopoly power was to ultimately serve the public interest.6 The electricity monopoly model sought to achieve widespread access to electricity as a public good while, at the same time, subjecting utilities to electricity rate regulation in order to prevent price gouging for ultimate consumer benefit. W.M. Warwick, U.S. Department of Energy, A Primer on Electric Utilities, Deregulation, and Restructuring of U.S. Electricity Markets 2.0 (2002), available \*19 at https://www.pnnl.gov/main/publications/external/technical\_reports/PNNL-13906.pdf; see also Smyth v. Ames, 169 U.S. 466, 544-45 (1898) (public utility monopolies were “created for [] public purposes [and] perform[] a function of the state,” and the government is obligated to “protect the people against unreasonable charges for services rendered by” the public utility).

However, the century-old premise that vertically integrated monopolies necessarily serve the public interest has been undermined by public policy and technology. In terms of policy, electricity regulators have actively encouraged competition in electricity generation in order to serve the public interest. For example, as the Court noted in FERC v. Electric Power Supply Ass'n, 136 S. Ct. 760 (2016), the Federal Energy Regulatory Commission (“FERC”) “often forgoes the cost-based rate-setting traditionally used to prevent monopolistic pricing […] [and] instead undertakes to ensure ‘just and reasonable’ wholesale rates by enhancing competition - attempting … ‘to break down regulatory and economic barriers that hinder a free market in wholesale electricity’ ” Id. at 768 (emphasis added) (quoting Morgan Stanley Capital Group Inc. v. Public Util. Dist. No. 1 of Snohomish Cty., 554 U.S. 527 (2008)).

Indeed, Congress passed a series of modern laws intended to promote competition in the electricity sector and unbundle the services of the traditional vertically integrated monopoly, all as a means to advance the public interest. Thus, due to “[t]echnological advances [that] made it possible to generate electricity \*20 efficiently in different ways and in smaller plants” and through grids that were “unlike the local power networks of the past,” New York v. FERC, 535 U.S. 1, 7 (2002), Congress passed both (i) the 1978 Public Utility Regulatory Policies Act, Pub. L. No. 95-617, 92 Stat. 3117, which directed FERC to promulgate rules requiring monopoly utilities to purchase electricity from independent power production facilities, and (ii) the Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776, authorizing FERC to order individual monopoly utilities to provide transmission services to unaffiliated wholesale generators. See New York, 535 U.S. at 9. In short, the assumption that the vertically integrated utility monopoly automatically serves the public interest has been undermined by public policy promoting competition in electricity services.

Distributed solar technology further subverts the economic and public interest assumptions justifying the traditional vertically integrated electricity monopoly. Distributed solar technology, with a relatively low barrier of entry, is de-centralized and can be owned or leased by consumers who are otherwise captive to the local utility monopoly. Ari Peskoe, Unjust, Unreasonable, and Unduly Discriminatory: Electric Utility Rates and the Campaign Against Rooftop Solar, 11 Tex. J. Oil Gas & Energy L. 211, 215 (2016). Distributed solar generation thus dispels the assumption that electricity service necessarily requires large economies of scale. John Farrell, Inst, for Local Self-Reliance, Is Bigger Best in Renewable Energy? 2-4 (2016), available at \*21 https://ilsr.org/wp-content/uploads/2016/12/Is-BiggerBest-in-Renewable-Energy-Report-Final.pdf. As such, distributed solar generation also fundamentally ruptures the business model of the vertically integrated monopoly, obviating the need for power companies like SRP to continuously construct infrastructure as their engine of profit generation. Peskoe, 11 Tex. J. Oil Gas & Energy L. at 228-32.

Taken together, these changes in public policy and technology, particularly distributed solar generation, undermine the assumption that electricity companies require deference to their monopoly power in order to serve the public interest.

B. Monopoly Power Companies Opposing Distributed Solar Generation Are Acting Against The Public Interest

1. Discriminatory rates against rooftop solar are widespread

Across the United States, both public and private electric utility companies have responded to competition from distributed solar generation with a range of discriminatory tactics, chief among them being the imposition of retail rate structures that serve to reduce solar power's cost advantage over grid-supplied energy. See Michael Wara, Competition at the Grid Edge: Innovation and Antitrust Law in the Electricity Sector, 25 N.Y.U. Envtl. L.J. 176, 189 (2017). In the last few years alone, these types of rate cases seeking to penalize rooftop solar customers have amounted to hundreds \*22 and have occurred in the majority of U.S. states. Id. at 194-99; see also N.C. Clean Energy Tech. Ctr., The 50 States of Solar Report: Q4 2017 and 2017 Annual Report (2018), available at https://nccleantech.ncsu.edu/wp-content/uploads/Q4-17\_SolarExecSummary\_Final.pdf (documenting over 100 policy actions negatively targeting distributed generation customers in over 35 states in 2017 alone).7

Power utilities have imposed discriminatory retail rate structures on distributed solar customers in several forms. First, utilities have implemented either new or increased fixed monthly bill charges that are discriminatorily high for customers with distributed solar generation, known as a “fixed charge.” For example, Santee Cooper, a state-owned public power utility \*23 in South Carolina, imposed a fixed charge of $4.40/kW as well as further stand-by charges on distributed solar customers, regardless of the amount of energy used by the customer. See Santee Cooper, Distributed Generation Rider DG-17 (2015), available at https://www.santeecooper.com/pdfs/rates/ratesadjustment/dg-17-rider.pdf; see also, e.g., Bd. of Dir. of Sacramento Mun. Util. Dis., Resolution No. 15-07-06 (Sacramento Mun. Util. Dist. July 16, 2015) (imposing higher fixed charges and time-of-use rates on solar customers); Kan. City Power & Light, Docket No. 15-WSEE-115-RTS (Mo. Corp. Comm'n Sep. 24, 2015) (Order Approving Stipulation and Agreement) (approving a 21% increase of fixed charges on distributed energy customers); Conn. Light & Power, Docket No. 14-05-06 (Conn. Pub. Util. Regulatory Authority Dec. 17, 2014) (Order Amending Rate Schedules) (also imposing a 20% increase of fixed charges on distributed energy customers).

Second, utility companies have imposed electricity charges on solar customers that vary as a function of the consumer's peak demand for energy, known as a “demand charge.” See, e.g., NSTAR Elec. Co., D.P.U. 17-05-B (Mass. Dept. of Pub. Util. Jan. 5, 2018) (Order Establishing Eversource's Rate Structure) (approving mandatory demand charges specifically on residential distributed solar customers).

SRP's new rate structure exemplifies both of these discriminatory rate practices, as SRP imposed both a fixed distribution charge of up to $37.88 per month and increased demand charges ranging from $30 to $125 \*24 per month for all residential distributed solar customers. J.A. 33 (¶ 108). These rate changes resulted in an increase of approximately 65% in energy fees (or $600 per year) for a typical solar customer, as opposed to a 3.9% increase in energy fees for a non-solar customer. See J.A. 8-9 (¶ 5); see also, e.g., Wis. Electric Power Co., Docket No. 5-UR-107 (Wis. Public Service Comm'n Dec. 23, 2014) (Final Decision) (approving application to impose high demand charges, fixed charges, and time-of-use rates on distributed solar customers).

2. Discriminatory rates against rooftop solar harm consumers and the environment

Wide-scale discriminatory rates targeting solar power deployment undermine the very public objectives that power utility monopolies were created to serve because they harm both consumers and the environment.

First, rates that stifle the deployment of rooftop solar harm consumers by diminishing the economic and social value they receive through generating their own power. Due to technological advances, the cost of residential solar has dropped precipitously and is cost-comparable, if not lower, than the average price of power purchased from the utility grid. See, e.g., Gideon Weissman & Brett Fanshaw, Shining Rewards: The Value of Rooftop Solar Power for Consumers and Society (2016), available at https://environmentamerica.org/sites/environment/files/reports/AME%20ShiningRewards%C20Rpt%C20Oct16%201.1.pdf; Mark Muro & Devashree \*25 Saha, Rooftop Solar: Net Metering is a Net Benefit, Brookings Institution (May 23, 2016), available at https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/. Further, distributed solar generation can serve to democratize power ownership by increasing local control over power decisions, returning economic benefits directly to the served community and promoting a more equitable distribution of economic and social benefits across racial and economic lines. See generally Local Clean Energy All. & Center for Social Inclusion, Democratizing Our Energy Future (2015), available at http://www.localcleanenergy.org/files/Climate%20Justice%C20Energy%20Platform.pdf.

Second, discriminatory rates inhibiting distributed solar generation stave off the public health benefits associated with phasing out fossil fuel combustion from power plants. Nearly 40% of Americans are exposed to toxic air pollution from fossil fuel power plants that often reaches dangerous levels, resulting in the increased incidence of asthma and chronic bronchitis and leading to hundreds of thousands of premature deaths per year. See Am. Lung Ass'n, State of the Air 9 (2017), available at http://www.lung.org/assets/documents/healthy-air/state-of-the-air/state-of-the-air-2017.pdf. Critically, these public health impacts are disproportionately borne by communities of color and low-income, who more often live in closer proximity to fossil fuel power plants. Id. at 41; see also National Ass'n for the Advancement of Colored People & Clean Air Task Force, Fumes Across the Fence-Line: The Health Impacts of Air Pollution from Oil and Gas Facilities \*26 (2017), available at http://www.naacp.org/wp-content/uploads/2017/11/Fumes-Across-the-Fence-Line\_NAACP\_CATF.pdf. Accordingly, obstructing distributed solar generation directly exacerbates the country's systemic public health disparities by perpetuating reliance on fossil fuel power.

Finally, these discriminatory rates hinder the country's urgently needed transition to clean energy in order to combat climate change. More than 60% of America's electricity still derives from fossil fuels. U.S. Energy Info. Admin., Electricity Explained (May 10, 2017), available at https://www.eia.gov/energyexplained/index.cfm?page=electricity\_in\_the\_united\_states. As a result, the electricity sector is the single largest source of GHG emissions in the country, accounting for nearly one-third of total U.S. GHG emissions in 2015. U.S. Envtl. Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2015 ES-24 (2017), available at https://www.epa.gov/sites/production/files/2017-02/documents/2017\_executive\_summary.pdf.

Accordingly, discriminatory ratemaking against the deployment of distributed solar energy, like that implemented by SRP, undermines the inherent public interest in “aggressive and sustained greenhouse gas emission reductions” in order to avoid some of the worst impacts of climate change. Jerry Melillo et al., U.S. Global Change Research Program, Climate Change Impacts in the United States: The Third National Climate Assessment 13 (2014), available at http://s3.amazonaws.com/nca2014/low/NCA3\_Climate\_Change\_Impacts\_in\_the\_United%20States\_LowRes.pdf?download \*27 =1 (“2014 Climate Assessment”). Indeed, the public harms caused by climate change are immense: the increased extinction of species and ocean acidification; the rapid loss of Arctic sea ice and the collapse of Antarctic ice shelves; declining global food and water security; and the heightened frequency of heat waves and other extreme weather events, including contribution to the three unprecedented hurricanes that ravaged the Gulf Coast, Florida, and Puerto Rico in 2017. See generally 2014 Climate Assessment; see also Michael Mann et al., What We Know About the Climate Change-Hurricane Connection, Scientific American (Sept. 8, 2017), available at https://blogs.scientificamerican.com/observations/what-we-know-about-the-climate-change-hurricane-connection/.

For all these reasons, it could not be clearer that by obstructing the realization of these consumer and environmental benefits, utility rates which improperly discourage the transition to renewable energy sources like rooftop solar are contrary to the public interest.

C. Allowing Public Power Companies To Obtain Interlocutory Appeal Of State-Action Immunity Rulings Will Only Encourage More Discriminatory Rates Contrary To The Public Interest

The central premise of SRP's asserted right to interlocutory appeal is that it is necessary to allow public power entities to focus their attention on “advancing the public interest” without potential exposure to \*28 antitrust liability. Pet. Br. at 35. However, because SRP and other utilities' decisions targeting distributed solar generation are arguably contrary to the public interest, SRP raises no “particular value of a high order” warranting immediate appeal under the collateral-order doctrine. Mohawk Indus., Inc. v. Carpenter, 558 U.S. 100, 605 (2009).

Instead, allowing interlocutory appeal in these circumstances will serve to further encourage power companies to unfairly obstruct distributed solar development in a manner contrary to antitrust laws, with the expectation that they can avoid liability by invoking the state-action defense and, at minimum, significantly delay antitrust litigation by immediately appealing adverse rulings. By requiring SRP to defend its rates - including its purported entitlement to the state-action defense - like any other litigant, the Court will level the playing field in an area where it has become increasingly apparent that competition, rather than the perpetuation of insulated monopoly power, will best serve the public interest.

Such a result would also be consistent with this Court's precedents recognizing that power companies are not immune from competition and antitrust laws. In Otter Tail Power Co. v. United States, 410 U.S. 366 (1973), the Court decisively held that the Federal Power Act does not “immunize” power companies from “antitrust regulation.” Id. at 374-75 (permitting the federal government to seek antitrust remedies against a power utility which, among other things, refused to sell power to municipalities and transfer competitors' \*29 power over its lines). As the Court has explained, a power company's “franchise to exist as a corporation and to function as a public utility … creates no right to be free of competition.” Tenn. Electric Power Co. v. Tenn. Valley Auth., 306 U.S. 118, 139 (1939) (overruled in part on other grounds); see also Alabama Power Co. v. Ickes, 302 U.S. 464, 480 (1938) (holding that power utilities do not “possess” any inherent legal “right to be immune from lawful … competition”). These findings are grounded in the recognition that “[t]he public interest is far broader than the economic interest of a particular power supplier.” Otter Tail Power Co., 410 U.S. at 380 n.10. Accordingly, Amici urge the Court to recognize that, at least with respect to monopoly practices serving to obstruct distributed solar generation, the state-action defense and interlocutory appeal of adverse immunity rulings should be disfavored.

## Biz Con

### 1AR – UQ

#### Fed interest rate hikes will kill growth – not just inflation now, but future fed changes – drop

Marcos 12/31 [Coral Murphy Marcos and Emily Flitter, Business Reporters for NYT. “The Fed’s Moves Pumped Up Stocks. In 2022, It May Pull the Plug.” https://www.nytimes.com/2021/12/31/business/stock-market-2022.html]

For two years, the stock market has been largely able to ignore the lived reality of Americans during the pandemic — the mounting coronavirus cases, the loss of lives and livelihoods, the lockdowns — because of underlying policies that kept it buoyant.

Investors can now say goodbye to all that.

Come 2022, the Federal Reserve is expected to raise interest rates to fight inflation, and government programs meant to stimulate the economy during the pandemic will have ended. Those policy changes will cause investors, businesses and consumers to behave differently, and their actions will eventually take some air out of the stock market, according to analysts.

“It’s going to be the first time in almost two years that the Fed’s incremental decisions might force investors or consumers to become a little more wary,” said David Schawel, the chief investment officer at Family Management Corporation, a wealth management firm in New York.

At year’s end, the overarching view on Wall Street is that 2022 will be a bumpier ride, if not quite a roller coaster. In a recent note, analysts at J.P. Morgan said that they expected inflation — currently at 6.8 percent — to “normalize” in coming months, and that the surge of the Omicron variant of the coronavirus was unlikely to lower economic growth.

LPL Financial, a brokerage, had a similar take, saying interest rates will move “modestly higher” in 2022.

The S&P 500 stock index had a great run in 2021, rising more than 25 percent — on top of its 16 percent gain during the first year of the pandemic. The index hit 70 new closing highs in 2021, second only to 1995, when there were 77, said Howard Silverblatt, an analyst at S&P Dow Jones Indices. Shares on Friday fell slightly.

The market continued to rise through political, social and economic tensions: On Jan. 7, the day after a pro-Trump mob stormed the U.S. Capitol, the S&P set another record. Millions of amateur investors, stuck at home during the pandemic, piled into the stock market, too, buying up shares of all kinds of companies — even those that no one expects will earn money, like the video game retailer GameStop.

What to Know About Inflation in the U.S.

Inflation, Explained: What is inflation, why is it up and whom does it hurt? We answered some common questions.

The Fed’s Pivot: Jerome Powell’s abrupt change of course moved the central bank into inflation-fighting mode.

Fastest Inflation in Decades: The Consumer Price Index rose 6.8 percent in November from a year earlier, its sharpest increase since 1982.

Why Washington Is Worried: Policymakers are acknowledging that price increases have been proving more persistent than expected.

The Psychology of Inflation: Americans are flush with cash and jobs, but they also think the economy is awful.

Wall Street also remained bullish on business prospects in China despite Beijing’s growing tension with the United States and tightening grip on Chinese companies. Waves of coronavirus variants, from Delta to Omicron, and a global death toll that crossed five million did not deter the stock market’s rise; its recovery after each bout of panic was faster than the previous one.

“2021 was a terrific year for the equity markets,” said Anu Gaggar, the global investment strategist for Commonwealth Financial Network, in an emailed note. “Between federal stimulus keeping the economy going, easy monetary policy from the Fed keeping markets liquid and interest rates low, and the ongoing medical improvement leading to surprising growth, markets have been in the best of all possible worlds.”

Editors’ Picks

Helping to Reveal a Still-Shuttered World

Hiro Made Fashion Photography Otherworldly

Each N.F.L. Team’s Playoff Path: Week 17

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The past year also seemed promising at first for new stock offerings, and nearly 400 private companies raised $142.5 billion in 2021. But investors had sold off many of the newly listed stocks on the New York Stock Exchange or Nasdaq by the end of the year. The Renaissance IPO exchange-traded fund, which tracks initial public offerings, is down about 9 percent for the year.

Shares of Oatly, which makes an oat-based alternative to dairy milk, soared 30 percent when the company went public in May but are now trading 60 percent lower than their opening-day closing price. The stock-trading start-up Robinhood and the dating app Bumble, two other big public debuts, were down about 50 percent for 2021.

ImageA wholesale dealer car auction in Carleton, Mich. The stock market appeared slow to react to rising prices this year, like those for used cars.

A wholesale dealer car auction in Carleton, Mich. The stock market appeared slow to react to rising prices this year, like those for used cars.Credit...Sarah Rice for The New York Times

The first sign that the stock market could end its recent bull run appeared in the second half of 2021 when prices of household goods, gasoline and much more began to rise, sparked by supply chain disruptions stemming from the pandemic. Prices for used cars skyrocketed amid a global computer chip shortage. As Covid-19 vaccination rates improved, businesses trying to reopen had to raise wages to attract and retain employees. Consumer prices climbed 5.7 percent in November from a year earlier — the fastest pace since 1982.

But even when “inflation” had become a buzzword worthy of a headline in The Onion, the stock market appeared slow to react to price increases.

“The market is on the side that inflation is transitory,” said Harry Mamaysky, a professor at Columbia Business School. “If it’s not and the Fed needs to go in and raise interest rates to tame inflation, then things could get a lot worse in terms of markets and economic growth.”

And that is what the Fed has signaled it will do in 2022.

When interest rates go up, borrowing becomes more expensive for both consumers and companies. That can hurt profit margins for companies and make stocks less attractive to in

vestors, while sapping consumer demand because people have less money to spend if their mortgage and other loan payments go up. Over time, that tends to deflate the stock market and reduce demand, which brings inflation back under control.

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“I expect 2022 to be a bumpier ride because the returns are not going to come as easy as they did in 2021 or most of 2020,” said Greg McBride, an analyst at Bankrate, a personal finance company. “Even if the economy continues to grow, there will be concerns about valuations as the Fed tightens policy, and that will lead to some heightened volatility.”

Higher interest rates could also dampen investor enthusiasm for stocks because bonds would pay a higher return than they have in recent years. In fact, LPL Financial forecast that the yield on the 10-year Treasury note, one of the most widely tracked government bonds, will rise to between 1.75 percent to 2 percent by the end of 2022.

Inflation F.A.Q.

Card 1 of 6

What is inflation? Inflation is a loss of purchasing power over time, meaning your dollar will not go as far tomorrow as it did today. It is typically expressed as the annual change in prices for everyday goods and services such as food, furniture, apparel, transportation costs and toys.

What causes inflation? It can be the result of rising consumer demand. But inflation can also rise and fall based on developments that have little to do with economic conditions, such as limited oil production and supply chain problems.

Where is inflation headed? Officials say they do not yet see evidence that rapid inflation is turning into a permanent feature of the economic landscape, even as prices rise very quickly. There are plenty of reasons to believe the price burst will fade, but some concerning signs suggest it could last.

Is inflation bad? It depends on the circumstances. Fast price increases spell trouble, but moderate price gains could also lead to higher wages and job growth.

How does inflation affect the poor? Inflation can be especially hard to shoulder for poor households because they spend a bigger chunk of their budgets on necessities — food, housing and especially gas.

Can inflation affect the stock market? Rapid inflation typically spells trouble for stocks. Financial assets in general have historically fared badly during inflation booms, while tangible assets like houses have held their value better.

Mr. McBride said the values of many stocks were being supported by extremely low yields on Treasury bonds, especially the 10-year yield, which has held to about 1.5 percent.

“If that yield moves up, investors are going to re-evaluate how much they’re willing to pay for per dollar of earnings for stocks,” he said. Even if corporate profits — which were strong in 2021 — continue to grow in 2022, he added, they are unlikely to expand “at a pace that continues to justify the current price of stocks.”

Image

Meat, poultry, fish and egg prices in U.S. cities are up 15 percent since the start of 2020, according to the Bureau of Labor Statistics.

Meat, poultry, fish and egg prices in U.S. cities are up 15 percent since the start of 2020, according to the Bureau of Labor Statistics.Credit...Philip Cheung for The New York Times

Still, what ultimately happens to the stock market in 2022 depends on whether the Fed’s plans to cut inflation by gently tightening monetary policy work as intended.

In addition to an expected rate increase, the Fed is winding down a pandemic-era program that was meant to provide a backstop to the market. In the spring of 2020, the Fed started buying bonds to inject extra cash into the financial system and help companies stay afloat during severe drop-offs in their businesses. The Fed announced in December that it would quicken the pace of pulling back on that aid, set to finish in March.

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“The nightmare scenario is: The Fed tightens and it doesn’t help,” said Aaron Brown, a former risk manager of AQR Capital Management who now manages his own money and teaches math at New York University’s Courant Institute of Mathematical Sciences. Mr. Brown said that if the Fed could not orchestrate a “soft landing” for the economy, things could start to get ugly — fast.

And then, he said, the Fed may have to take “very aggressive action like a rate hike to 15 percent, or wage and price controls, like we tried in the ’70s.”

By an equal measure, the Fed’s moves, even if they are moderate, could also cause a sell-off in stocks, corporate bonds and other riskier assets, if investors panic when they realize that the free money that drove their risk-taking to ever greater extremes over the past several years is definitely going away.

Sal Arnuk, a partner and co-founder of Themis Trading, said he expected 2022 to begin with something like “a hiccup.”

“China and Taiwan, Russia and Ukraine — if something happens there or if the Fed surprises everyone with the speed of the taper, there’s going to be some selling,” Mr. Arnuk said. “It could even start in Bitcoin, but then people are going to start selling their Apple, their Google.”

#### Omicron does and will kill biz con

Wiseman 1/2 [Paul Wiseman, ANNE D'INNOCENZIO, AP Business Writers. “Omicron casts a new shadow over economy's pandemic recovery”. 1/2/22. https://www.bendbulletin.com/business/omicron-casts-a-new-shadow-over-economys-pandemic-recovery/article\_7d5e8a38-7287-5f6f-8126-c2cca9dc2d2a.html]

Just as Americans and Europeans were eagerly awaiting their most normal holiday season in a couple of years, the omicron variant unleashed a fresh round of fear and uncertainty — for travelers, shoppers, party-goers and their economies as a whole.

The Rockettes canceled their Christmas show in New York. Some London restaurants emptied out as commuters avoid the downtown. Broadway shows canceled performances. The National Hockey League suspended its games. Boston moved to require diners, revelers and shoppers to show proof of vaccination to enter restaurants, bars and stores.

A heightened sense of anxiety began to erode the willingness of some people and some businesses to carry on as usual in the face of the extraordinarily contagious omicron variant, which has fast become the dominant version of the virus in the United States.

Other people are still traveling, spending and congregating as they normally do, though often with more caution. Holiday air travel was robust. Many stores and restaurants still enjoy solid sales. And omicron has yet to keep audiences away from movie theaters in significant numbers. Record audiences across all demographics flocked to theaters for the new “Spider-Man.”

“The movie theater has not yet been hindered by omicron,” said Steve Buck, the chief strategy officer of EntTelligence.

At the same time, no one knows what omicron will ultimately mean for the health of Western economies, which have endured a wild ride of downturns and recoveries since early 2020.

“These mutations keep coming,’’ said Robin Brooks, chief economist at the Institute of International Finance. “What is the probability that sometime we get a really nasty one? No one has any idea. This thing is mutating, and it’s very, very hard to say.’’

Will omicron cause outbreaks at factories and ports, disrupt operations and worsen supply-chain bottlenecks that have forced up prices and contributed to the hottest U.S. inflation in decades?

Will it mean people will hunker down at home and spend less on services — meals, concerts, hotel stays — which could weaken the economy but potentially defuse inflationary pressures?

Will return-to-office plans for white-collar workers be put on hold indefinitely, deepening the hit to many cities’ downtown businesses?

Or will omicron prove a blip that scarcely slows what has become a surprisingly strong recovery from the short but intense pandemic recession?

Spooked by uncertainty and fear of the worst-case scenarios, stock markets around the world sold off for days before rebounding the week of Christmas.

“We don’t know whether this is good or bad for growth or inflation in the medium term,’’ said Megan Greene, global chief economist at the Kroll Institute. “We just don’t have enough data yet.’’

Unable to assess its longer-term consequences, businesses, consumers and policymakers have struggled to respond to the omicron threat.

During the shopping season, Danielle Ballantyne, a Chicago dietitian, had planned to visit some stores and seek inspiration for holiday gifts. But as omicron spread, she scrapped that idea in favor of staying home and shopping online. “From what I have been hearing in the news,” Ballantyne said in an interview before Christmas, “omicron is more contagious. So I am trying to be more selective in where I go in terms of big public spaces.’’

At its stores in big cities like New York and Chicago, the clothier Untuckit reported a 15% drop in traffic, similar to what it experienced when the delta variant started spreading over the summer.

“It impacts people’s perception of comfort and safety and their willingness to go out,’’ said Aaron Sanandres, CEO of the company.

#### Economy is dead – postdated

Jeffry Bartash 12-18, Reporter, MarketWatch, "Sticky Inflation, Bigger Paychecks, Fading Stimulus," MarketWatch, 12/18/2021, <https://www.marketwatch.com/story/sticky-inflation-bigger-paychecks-fading-stimulus-how-the-u-s-economy-is-shaping-up-for-2022-11639758215>.

Americans are likely to face more big surprises in 2022. MarketWatch spoke with a handful of economists around the country about the big questions facing the U.S. as it enters a third year of the pandemic. Here’s what they had to say.

Omicron

The pandemic is still the biggest influencer of the economy by far.

“The virus is still boss. There is no guarantee that a worse variant won’t come along,” said corporate economist Robert Frick of Navy Federal Credit Union in northern Virginia. “Everyone wants to put the pandemic behind them, but it’s still the major factor.”

The good news is, the U.S. economy has largely adapted to the coronavirus and managed to keep expanding. “I do think wave upon wave, people are learning to live with this,” Federal Reserve Chairman Jerome Powell said last week.

The problem? No one knows what’s next. Take the omicron. It’s spreading faster than any other variant and is igniting a panic in Europe.

Omicron appears less deadly, but the U.S. will very learn soon just how much damage it can do by watching what happens in the United Kingdom, where it spread earlier and more rapidly.

End of stimulus

The Biden White House’s ambitious $2 trillion social-spending plan called Build Back Better appears stalled and might not pass at all.

Some economists contend the end of fiscal stimulus could lead to withdrawal symptoms in 2022. “We have been living off the government for two years now,” said Joel Naroff of Naroff Economic Advisors in Holland, Pa.

Still, most economists think the U.S. is primed to grow a frothy 3% to 4%.

How come? Americans amassed big savings during the pandemic, for one thing. Wages are also rising as at the fastest pace in decades because of a major labor shortage, putting even more money in people’s pockets.

Businesses, for their part, are investing heavily in technology to get around the labor shortage and to boost production.

“Just re-stocking the shelves is going to contribute significantly to U.S. growth,” said Luke Tilley, chief economist at Wilmington Trust in Philadelphia. “That’s an undercovered story.”

Inflation

The biggest increase in U.S. inflation in 2021 in almost 40 years caught Wall Street DJIA and Washington by big surprise. The yearly rate of inflation hit 6.8% by one measure and 5% by another.

The Fed is now scrambling

to get ahead of the problem and reassure investors that price pressures will subside in the next year.

Pretty much every economist thinks inflation will slow, and slow sharply, next year. But few are on board with the Fed’s forecast that the rate of inflation will ease to 2.6% in 2022.

“I do think we will see inflation pressures ease over time, but I don’t think we are heading back to the sub-2% inflation rates that we have been accustomed to,” said Jim Baird, chief investment officer of Plante Moran Financial Advisors in Southfield, Mich.

Naroff agrees. “What is the new trend? The Fed keeps saying 2%. I don’t think that’s realistic.”

Interest rates

The combination of higher inflation and the Fed moving to phase out its own massive monetary stimulus for the economy is bound to nudge interest rates higher in 2022.

The central bank appears on track in 2022 to raise a key short-term rate its kept near zero during the pandemic for the first time since 2018.

Higher borrowing costs are likely to exert a small drag on the economy. The 30-year mortgage rate, for example, could climb to 3.75% from around 3% right now. Car loans could also become more costly.

Frick thinks higher rates will kill off the frenzy of home refinancing and restrain home sales. On the flip side, savers who took a beating during the pandemic could finally make a little money on CDs and bank deposits if inflation nosedives.

“A lot of people are being crushed by low rates and high inflation,” Frick said.

Labor shortage

Six months ago, just about every forecaster expected the millions of people who lost a job or left the labor force early in the pandemic to return to work. It didn’t happen.

Now many wonder if several million workers have left the labor force for good. Lots of baby boomers retired and record stock market gains have made it easier for them to stay at home.

“A lot of people have permanently removed themselves from the labor market,” Tilley said.

If he’s right, the labor shortage is not going way. But it’s not all a bad thing. Businesses might struggle to fill a near record number of open jobs, but workers will have more money in their pockets to spend.

Rising wages

One of the silver linings of the pandemic-induced labor shortage is that workers are reaping the bigger increase in paychecks in decades. Average hourly wages, for instance, have climbed almost 5% in the past year.

By contrast, wage gains barely grew more than 2% a year in the prior decade.

That’s not a bad thing, economists say. After all, corporate profits are at an all-time high. They can afford to pay more.

Even more important, consumer spending is the main engine of U.S. growth. It accounts for about 70% of all economic activity.

“Businesses are going to complain about it, but in the long run that is great for the economy,” Frick said. “People were getting used to a sub -2% economy. If we want to get back to 3%, we need to pay people more.”

Supply shortages

A series of bottlenecks — clogged ports, lack of warehouse space, too few truck drivers — have spawned the biggest supply shortages in decades. The gridlock is expected to fade eventually, but the problems will persist well into 2022.

The coronavirus is still a major disruptor, for one thing, and there’s too many weak links in the chain, so to speak, to iron out the problems quickly. Even the Fed can’t do much.

“You can raise interest rates to reduce demand, but you can’t raise interest rates to unload cargo ships or speed up production in Asia,” Baird said.

Many companies are plotting ways to secure more stable sources of supply. Some are even considering moving operations back to the U.S. from other countries like China. But that’s no quick fix, either.

“You can’t bring it all back to the U.S. very quickly,” Naroff said.

The unknown unknowns

Former U.S. Defense Secretary Donald Rumsfeld once quipped it was impossible to know what would happen in the future because of “unknown unknowns.”

Economists have been humbled by the past year — they were wrong a lot and missed many major developments. They will almost assuredly err again.

### 1AR – No Impact

#### No impact

Clary 15

Christopher Clary, PhD in Political Science from MIT and a Postdoctoral Fellow at the Watson Institute for International and Public Affairs at Brown, Economic Stress and International Cooperation: Evidence from International Rivalries, *MIT Political Science Department*, Research Paper No. 2015-8, p. 4

Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment

, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to downplay the seriousness of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to consider threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international economic cooperation. Leaders seek foreign aid, enhanced trade, and increased investment from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as capable of resolving economic difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. Collectively, these mechanisms make it much more likely that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this causal logic in greater detail, while also providing historical examples that these mechanisms recur in practice.

## FTC DA

### 1AR - Link

#### Everyone likes the gas probe

Bryan Koenig 11/17, staff at Law360, “Biden Urges FTC To Probe Oil And Gas Cos. Over Price Spikes,” Law360, 11/17/21, Lexis

Biden closed the letter by asking Khan to bring all the FTC's tools to bear against any wrongdoing it finds.

"I do not accept hard-working Americans paying more for gas because of anti-competitive or otherwise potentially illegal conduct," he said.

An FTC spokesperson said in a statement that the agency "is concerned about this issue, and we are looking into it."

The American Petroleum Institute lashed out at the letter Wednesday in a statement released through its Twitter account that tried to shift the blame to the Biden administration, particularly administration moves driven by climate change concerns against new pipelines and efforts to stop granting new leases for domestic oil and gas drilling on federal land.

"This is a distraction from the fundamental market shift that is taking place and the ill-advised government decisions that are exacerbating this challenging situation," API's senior vice president, Frank Macchiarola, said. "Demand has returned as the economy comes back and is outpacing supply."

"Further impacting the imbalance is the continued decision from the administration to restrict access to America's energy supply and cancel important infrastructure projects," Macchiarola continued. "Rather than launching investigations on markets that are regulated and closely monitored on a daily basis or pleading with OPEC to increase supply, we should be encouraging the safe and responsible development of American-made oil and natural gas."

The probe request drew some congressional support Wednesday during the confirmation hearing of Alvaro Bedoya, a privacy expert and Georgetown University Law Center scholar poised to become the FTC's new third Democrat, cementing Khan's majority.

Sens. Ben Ray Luján of New Mexico and Richard Blumenthal of Connecticut, both Democrats, expressed support for a new FTC probe.

Rising gas prices, Luján said, is "a concern that we all have."

"It's going to be important that the FTC do the work as President Biden has asked," he said. "I certainly hope that we can shed some light on this, bring attention to what's happening with the OPEC cartels, and help bring relief to the American people."

Blumenthal, in turn, called spiking prices "a challenging issue but one that has to be faced."

"This investigation is overdue, absolutely necessary, should be pursued vigorously and promptly. The present monopolistic practices of these companies need to be exposed for what they are," Blumenthal said.

Bedoya agreed with the need for an investigation.

"Gas prices matter for everyone," he told Blumenthal.

Bedoya also noted that the FTC has a petroleum market manipulation rule in place. "If confirmed senator, I would try to make sure that that is enforced rigorously," he said.

The FTC signaled a tougher posture on gasoline industry mergers as recently as September, when Competition Bureau chief Holly Vedova said the agency's approach to such tie-ups in recent years hasn't been enough.

Vedova, like Khan before her, argued that simply requiring merging companies to shed diesel and gasoline stations in "overlapping local markets" hasn't been sufficient. And she said that the FTC "has observed market-wide price signaling behavior among larger chain participants, both the targets of our investigations and other competitors."

To try and prevent anti-competitive tie-ups in the fuel industry and beyond, FTC Democrats recently pushed through the resurrection of "prior approval," where companies forced to ink merger clearance consent decrees with the agency will be required to get commission approval for deals in the future for at least a 10-year period.

#### New link cards is about tech – that debate is inevitable and passes – we read a card

Cat Zakrzewski 21, technology policy reporter, tracking Washington's efforts to regulate Silicon Valley companies, “Will Lina Khan bring a reckoning to Silicon Valley? She’ll face major challenges,” Washington Post, 6/17/21, https://www.washingtonpost.com/technology/2021/06/17/lina-khan-ftc-actions/

Amid this backdrop, Khan is likely to face immediate, intense pressure from anti-monopoly groups that have been calling for greater antitrust enforcement. Their expectations are incredibly high.

“The constituency that wanted her appointment to take place has expectations that are not merely stratospheric, they are out of this world,” Kovacic said. “She hasn’t even stepped foot in her office yet, and they are speaking as if she’s traveled to Mars.”

Breaking up major tech companies or bringing about other big changes to those companies’ operations may hinge on Congress overhauling competition laws. A bipartisan group of lawmakers last week introduced a series of bills that would outlaw many of the allegedly anticompetitive tactics that tech companies used to solidify their dominance. But it’s unclear whether they’ll all pass a bitterly divided Congress, as some Republicans raise concerns about them.

It seems likely the agency will see its funding grow under Khan, especially after the Senate passed legislation that would overhaul merger filing fees to provide more financing to antitrust enforcers. House lawmakers have introduced a similar proposal, which is less controversial than some of the other tech competition bills.

There remain many uncertainties about Khan’s tenure: She is coming into the FTC with a 3-2 Democratic majority, but it’s unclear how long that will last. Rohit Chopra (D) is awaiting his confirmation to the Consumer Financial Protection Bureau. When he leaves, it could be difficult for President Biden to build the bipartisan support needed to install another commissioner.

#### Second one is about Bedoya’s views – those are inevitable and not linked

Joseph Lord 12/1, Congressional Reporter for the Epoch Times, “Senate Commerce Committee Deadlocks on FTC Pick Bedoya,” The Epoch Times, 12-1-2021, https://www.theepochtimes.com/senate-commerce-committee-deadlocks-on-ftc-pick-bedoya\_4133298.html?welcomeuser=1

The Senate Commerce Committee deadlocked on a vote to confirm Alvaro Bedoya’s nomination to become one of the Federal Trade Commission’s (FTC) five commissioners.

On Dec. 1, the committee voted 14–14 on the nomination, but under Senate rules, it can proceed to the full Senate for a vote.

President Joe Biden nominated Bedoya in September to join the board of the FTC, which deals primarily with antitrust and consumer protection law.

Bedoya, a Georgetown University law professor, has focused much of his work on the connection between facial recognition technology and civil rights. More specifically, Bedoya has argued that facial recognition technology has often been used in a way that is biased against immigrants and other minorities.

If confirmed, Bedoya would join the FTC under newly installed Chair Lina Khan, and give Democrats a 3–2 majority.

Khan has been outspoken in supporting the use of antitrust law against tech giants. In his role, Bedoya would focus on the FTC’s goal of consumer protection.

Citing Bedoya’s “divisive views,” the committee’s ranking Republican member, Sen. Roger Wicker (R-Miss.), was one of the 14 Republicans to vote against the confirmation. Bedoya’s Twitter page showcases some of these “divisive views.”

On Twitter, Bedoya has given his endorsement to the Immigrant Defense Project, which markets itself as “promot[ing] fundamental fairness for immigrants accused or convicted of crimes.” More specifically, the organization has a focus on illegal and non-naturalized immigrants, describing one of its aims as “working to transform unjust deportation laws and policies.”

Bedoya has also opined on a litany of other issues, including abortion issues and Democrats’ multitrillion-dollar social spending bill.

“I will not vote to report the nomination of Mr. Bedoya to be the commissioner of the FTC,” Wicker said in his opening remarks. “I remain concerned about the frequency with which he has expressed divisive views on policy matters, rather than a more unified and measured tone.

“There has been a troubling trend of politicization at the FTC, which is different from how it has been in previous years. I fear Mr. Bedoya would not bring the cooperative spirit to the commission that we need at this time.”

Later in the session, Sen. Amy Klobuchar (D-Minn.) called for a vote on Bedoya’s nomination.

The committee, composed of 14 Democrats and 14 Republicans, voted along party lines. Even Sen. Kyrsten Sinema (D-Ariz.), who has struck a moderate tone against fellow Democrats on several occasions, joined with the party to vote for the nomination.

Given the current composition of the Senate, evenly split between 50 Democrats and 50 Republicans, Senate Majority Leader Chuck Schumer (D-N.Y.) and Minority Leader Mitch McConnell (R-Ky.) put in place a new procedural maneuver to allow deadlocked committees to be bypassed altogether.

Under the new rules, either leader can put forward a motion to bring matters straight to the Senate floor in the event of a tie in committee.

If Bedoya’s nomination is sent to the Senate floor under this procedure, Vice President Kamala Harris’s tie-breaking vote would push Bedoya’s nomination over the finish line—assuming that all 50 Senate Democrats unanimously support the nominee.

The evenly split Senate has already used the procedure to confirm Biden nominees.

In March, Xavier Becerra’s nomination to head the Department of Health and Human Services was evenly split in the Senate Finance Committee in another 14–14 vote.

But even if the procedure is invoked to bring Bedoya to a floor vote, his confirmation is far from guaranteed.

Moderate Sen. Joe Manchin (D-W.Va.), a self-described “conservative Democrat,” has been willing to break with his party on issues—including Biden nominees.

Early in Biden’s tenure in office, Manchin joined with Senate Republicans to strike down Biden’s nominee for White House budget director, Neera Tanden. Without Manchin’s support, Harris can’t cast a tie-breaking vote.

Manchin, who has emphasized the importance of unifying the divided nation, may also take issue with Bedoya’s views on divisive issues and could derail the nomination.