## 1

#### The United States federal government should

#### recognize and enforce awards for arbitration of disputes over blockchain contracts and governance, including over anticompetitive conduct, in arbitral forums specified in blockchain frameworks,

#### require those forums to have arbitrators with requisite software development experience.

#### Recognizing and enforcing arbitration awards for blockchain disputes under US law solves and spills over globally

Michaelson and Jeskie ’21 [Peter L. Michaelson; Sandra A. Jeskie; June 2021; Arbitrator, mediator and attorney with Michaelson ADR Chambers LLC; Partner at Duane Morris, working in Philadelphia and California offices, and is an arbitrator and mediator in complex disputes involving technology, intellectual property, and complex commercial matters; Alternatives; “Blockchain and Smart Agreement Disputes Call for Arbitration’s Strengths,” vol. 39, p. 91-94]

Article II of the 1958 New York Convention on the Enforcement of Foreign Arbitral Awards (the “Convention”) requires that, for international enforcement under the Convention, agreements to arbitrate be in writing. It defines the term “agreement in writing“ to be “an arbitral clause in a contract or an arbitration agreement, signed by the parties or contained in an exchange of letters or telegrams.”

Smart Legal contracts are, however, nothing more than software code, which usually only a programmer fully understands. It would therefore be nearly impossible to meet the Convention’s consent-to-arbitrate requirements without an analogous text-based contract as a companion to a Smart Legal Contract.

Arbitral Seat

The framework for the arbitration is established by the arbitral seat. Selection of the seat will have practical and legal consequences. For example, the law of the seat provides the procedural law for the arbitration, including a tribunal’s authority, powers, and duties. It also establishes the court where an award may be challenged.

Because smart agreements are geographically distributed by nature, it is important to consider the practical and legal effect a seat may have on the dispute being arbitrated. Given the novelty of smart agreements, parties should fully consider how the arbitral seat may affect the dispute and specifically whether smart agreements are legal, enforceable and arbitrable in the seat and where awards can be enforced. Once consideration is given to those factors, the seat can be specified accordingly.

Enforceability & Validity

Unless and until there is sufficient participant confidence and legal clarity on Smart Legal Contract enforceability—whether in the United States or elsewhere—parties intending for their underlying transactions to have a legally binding effect should consider incorporating arbitral clauses, governance and/or automatic enforcement mechanisms to limit circumstances in which they will require judicial intervention, and/or to facilitate enforcement of arbitral or judicial decisions.

Internationally, arbitral awards rendered in any signatory member state are enforceable, under the Convention provisions and subject to its conditions, in about 160 other signatory member states.

As the concept of awards for Smart Legal Contracts, produced through automated blockchain technology, is novel, a question invariably arises as to whether these awards constitute a valid award for purposes of enforcement under the Convention and particularly by national courts of its member states.

Article I of the Convention is silent on any specific form an arbitral award must take, including whether it must be in written form or not, or in a specific format, to be signed by the arbitrators. Hence, it is likely that, under the Convention itself, a blockchainbased award, authenticated in code, may be considered valid, though the authors are not presently aware of any ruling from a court or other forum which addresses the issue. Sara Hourani, “The Legal Reality of the Recognition and Enforcement of Cross Border Blockchain based Arbitral Awards: Beyond Futuristic Idealism?” Off the Chain (May 18, 2019).

Assuming the Convention per se presents no evident limitation to recognizing and enforcing such awards, then the focus shifts from the Convention to national legislation, which might recognize and enforce such an award, or not.

In that regard, the Convention contains provisions that refer judges back to the application of relevant domestic law. For example, a national court may refuse to recognize and/or enforce an arbitral award if, under Article V(1) (e), it has not yet become binding on the parties or has been set aside or suspended by the competent court at the seat of arbitration—or if, under Article V(2)(b), it lies contrary to that nation’s public policy.

Consequently, Article V may limit recognition and enforcement of blockchain-based Smart Legal Contract awards that are only authenticated in code, if those awards are invalid under applicable national law at their seats of arbitration or their places of enforcement.

So far, the current legal framework under the Convention appears to allow for recognizing and enforcing blockchain-based arbitral awards if they are valid under the law at the seat of arbitration and/or the place of enforcement.

Clearly, over time, some jurisdictions may be more willing than others to recognize and enforce these novel forms of arbitral awards. In that regard, Article VII(1) encourages other multilateral or bilateral state agreements on the recognition and enforcement of arbitral awards to take precedence over the provisions of the Convention to encourage recognition and enforcement of foreign arbitral awards, potentially motivating agreements among member states to specifically validate blockchain-based awards. It remains to be seen, once appropriate jurisprudence starts appearing from the former jurisdictions, just how open they will be and what conditions, if any, they will impose.

#### The CP is the most effective method for resolving disputes over blockchain agreements and establishes governing rules

Michaelson and Jeskie ’21 [Peter L. Michaelson; Sandra A. Jeskie; June 2021; Arbitrator, mediator and attorney with Michaelson ADR Chambers LLC; Partner at Duane Morris, working in Philadelphia and California offices, and is an arbitrator and mediator in complex disputes involving technology, intellectual property, and complex commercial matters; Alternatives; “Blockchain and Smart Agreement Disputes Call for Arbitration’s Strengths,” vol. 39, p. 91-94]

After introducing the types of agreements that use blockchain technology in Part 1 at “A Guidebook to Arbitrating Disputes Involving Blockchains and Smart Agreements,” 39 Alternatives 57 (April 2021) (available at https://bit.ly/3etKfPf), and last month’s Part 2 discussing the disputes that can arise, and jurisdiction, enforceability, and antitrust issues (“Where the Disputes Lie: When Blockchain Technology Will Need Help Sorting Out Its Contracts,” 39 Alternatives 81 (May 2021) (available at https://bit.ly/3f0MubT)), in this concluding Part 3, the authors focus on arbitrating blockchain technology disputes.

If traditional courts and arbitral tribunals lack jurisdiction to hear these disputes, then who or what will?

Arbitration is the only viable approach for blockchain-based disputes. Once blockchain technology achieves sufficient widespread commercial use, disputes involving blockchain technology will inevitably arise. What is needed is a fast, inexpensive, transparent, and reliable arbitral system, having decentralized jurisdiction across an entire blockchain, that renders ultimate judgments.

Currently, there are no uniform standard arbitration procedures for arbitrating disputes involving smart agreements. Sara Hourani, “The Legal Reality of the Recognition and Enforcement of Cross Border Blockchain-based Arbitral Awards: Beyond Futuristic Idealism?” (May 18, 2019) (available with account at http://bit.ly/3jA8iNw). These technologies are simply too new.

Developmental efforts are underway in the field to provide fully automated arbitral platforms for use with blockchains. One example, which relies on game theory, is the “Kleros” platform, which executes on the Ethereum network as an autonomous organization. Clement Lesage et al., Kleros, Short Paper v. 1.0.7 (Sept. 2019) (available at https://bit.ly/3cYoW8e).

Another approach that recognizes the necessity of human decisionmakers is embodied in the “CodeLegit” arbitration library. That library provides a set of coded provisions that can be incorporated into a Smart Legal Contract to principally integrate a traditional arbitral proceeding into the contract and allow either party to pause, resume, modify, and end the contract.

A resulting award is then applied as input to the Smart Legal Contract to establish a new transaction on the blockchain to self-enforce the award. Morgane Guyonnet, CodeLegit White Paper on Blockchain Arbitration, (available at http://bit.ly/370b1uv). See also http:// codelegit.com/blog/.

Such platforms ultimately may prove useful in efficiently and cost effectively resolving simple, straightforward disputes where rulebased economic analyses suffice. Many legal disputes, however, require, to reach a “just” result, subjective analysis by skilled, knowledgeable human decision-makers familiar with the industry and commerce at issue, the technology, and the underlying law, who render decisions not dictated reflexively by rules or algorithmic predictions but on their own wisdom accumulated through years of experience. There, automated platforms may prove to be inadequate.

An effective practical approach for blockchain administrators may well be to impose a contractual framework onto all their participants to which each participant would assent as a condition for joining the blockchain. That framework would: specify a certain arbitral forum (e.g., CPR [which publishes Alternatives], the American Arbitration Association/ International Centre for Dispute Resolution, the World Intellectual Property Organization or other institution) to which participants would bring their disputes for resolution. The institution would have sufficient power to enforce all resulting resolutions, define a specific process, set forth a governing rule set, and define or reference governing substantive law.

## 2

#### The FTC will enforce ‘right to repair’ now---it spurs growth and innovation, particularly in agriculture.

Minter ’21 [Adam; July 11; Columnist and author; Bloomberg, “Americans Must Reclaim Their Right to Repair,” <https://www.bloomberg.com/opinion/articles/2021-07-11/americans-must-reclaim-their-right-to-repair>]

When the Apple II personal computer was shipped in 1977, it came with a [detailed manual](https://archive.org/details/Apple_II_Mini_Manual/page/n49/mode/2up) for upgrading and repairing the device. Parts were readily available from Apple Inc. (and, later, other manufacturers), and if Apple owners didn’t want to fix or upgrade at home, they could find plenty of small, competitive repair businesses to do the work for them.

That was then. These days, Apple’s products arrive sealed shut, often with [proprietary screws](https://www.ifixit.com/News/9905/bit-history-the-pentalobe). Service manuals, circuit-board schematics and repair parts are [reserved](https://www.ifixit.com/News/43179/apple-endangers-our-business-model-gets-a-repairability-point-for-it) for Apple’s technicians, shops and a handful of “authorized” partners. With no access to parts, manuals or indie repair shops, consumers pay much more to keep their devices running.

President Joe Biden’s new executive order to promote competition encourages the Federal Trade Commission to end such anti-competitive repair monopolies. It’s a contentious move. Apple and the makers of other technological products from farm tractors to [35mm cameras](https://www.ifixit.com/News/1349/how-nikon-is-killing-camera-repair) argue that their repair monopolies are good for consumers. But as these monopolies have grown, their toll on consumers, the environment and American productivity and innovation has risen. Biden’s recognition of a “right to repair” can help lower these costs and, at the same time, spur new kinds of growth across the economy.

Repair has always been a part of American life. The first prairie farmers had no option but to repair their own carts and plows. When mechanization came along, farmers became expert technicians — so skilled that companies often consulted them on tractor designs. During the past 15 years, as computers have been integrated into expensive farm equipment, that relationship has broken down. The handful of remaining implement manufacturers make sure that only dealerships, with specialized software tools, can diagnose problems. Those same tools are often also needed to install parts and authorize repairs.

The costs to farmers can be significant. Paying a Deere & Co dealership to plug in a computer to clear an error code on a tractor or combine can cost [hundreds of dollars](https://www.vice.com/en/article/xykkkd/why-american-farmers-are-hacking-their-tractors-with-ukrainian-firmware) — not including transporting the tractor to the dealership. Worse, by limiting access to crucial diagnostic and repair tools, manufacturers cause significant delays during harvest, planting and other busy periods. At certain times, a piece of equipment immobilized for even a few hours can cost a farmer thousands of dollars.

As farmers lose money, farm manufacturers with parts and service businesses [profit handsomely](https://uspirg.org/feature/usp/deere-headlights). From 2013 to 2019, Deere & Co annual sales of new equipment declined 19%, to $23.7 billion, while sales of parts increased 22%, to $6.7 billion. Harvester manufacturers aren’t the only ones who’ve spotted a growth market in restricting access to repair. In 2019, Apple’s Tim Cook [conceded](https://www.apple.com/newsroom/2019/01/letter-from-tim-cook-to-apple-investors/) that lower-cost iPhone battery replacements had negatively impacted new iPhone sales. More expensive repairs, on the other hand, lead customers to think they may as well buy a new phone.

That’s bad for the buyers of Apple’s expensive new phones and even worse for lower-income consumers who rely on secondhand devices. Lack of competition in repair markets raises the cost of owning older devices, and ultimately accelerates their untimely, wasteful disposal.

The first calls to roll back manufacturer restrictions on repair, in the early 2010s, were focused on cars. But the problem now encompasses everything from phones to farm equipment. Since 2014, [32 states](https://www.repair.org/legislation) have considered so-called Fair Repair bills. Earlier this year, the New York legislature became the [first](https://states.repair.org/states/newyork/) to pass one.

But manufacturers have pushed hard to defeat such legislation. In 2017, Apple warned Nebraska lawmakers that Fair Repair “would make it very easy for hackers to relocate to Nebraska.” [TechNet](http://technet.org/), a trade group that represents Apple, Amazon Inc. and Google, has [warned](https://www.bloomberg.com/news/articles/2021-05-20/microsoft-and-apple-wage-war-on-gadget-right-to-repair-laws) several states that Fair Repair legislation would somehow jeopardize the safety of devices. (TechNet did not respond to requests for examples of such consumer safety threats.)

The federal government has not bought these arguments. In May, the Federal Trade Commission [reported](https://www.ftc.gov/news-events/blogs/business-blog/2021/05/nixing-fix-report-explores-consumer-repair-issues) that “many of the explanations manufacturers gave for repair restrictions aren’t well-founded.” Biden’s executive order now encourages the FTC to “limit powerful equipment manufacturers from restricting people’s ability to use independent repair shops or do DIY repairs.”

#### The plan trades off.

Nylen ’20 [Leah; December 10; Antitrust journalist; Politico, “FTC suffering a cash crunch as it prepares to battle Facebook,” <https://www.politico.com/news/2020/12/10/ftc-cash-facebook-lawsuit-444468>]

The agency that just launched a landmark antitrust suit to break up Facebook is so strapped for cash that its leaders have discussed shrinking their staff and warned against taking on more cases.

In a series of emails to all Federal Trade Commission staff, obtained by POLITICO, Executive Director David Robbins said the agency would face a period of “belt tightening” to cut costs — and that filing fewer cases and trimming litigation expenses must be on the table.

“[W]e will either need to bring fewer expert intensive cases or significantly decrease our litigation costs (e.g. experts, transcripts, litigation support contractors, etc.),” Robbins said in an Oct. 29 email.

The emails offer an increasingly dire portrait of the money woes facing the FTC, which has launched a record amount of litigation in the past year even as the pandemic has caused a sharp reduction in the corporate merger filing fees that normally supply about half its budget. The crunch also raises the possibility that the FTC may not have the cash it needs to win its case against Facebook, which is gearing up for an expensive fight, or to take on additional companies like Amazon.

#### Extinction.

Castellaw ’18 [John; March 14; Lieutenant General in the United States Marine Corps, member of the Center for Climate and Security’s Advisory Board, teaching fellow in the College of Business and Global Affairs at the University of Tennessee; Senate Committee on Foreign Relations, “Why Food Security Matters,” <https://www.foreign.senate.gov/imo/media/doc/031418_Castellaw_Testimony.pdf>]

Food Security Is Critical to Our National Security

The United States faces many threats to our National Security. These threats include continuing wars with extremist elements such as ISIS and potential wars with rogue state North Korea or regional nuclear power Iran. The heated economic and diplomatic competition with Russia and a surging China could spiral out of control. Concurrently, we face threats to our future security posed by growing civil strife, famine, and refugee and migration challenges which create incubators for extremist and anti-American government factions. Our response cannot be one dimensional but instead must be nuanced and comprehensive, employing “hard” as well as “soft” power in a National Security Strategy combining all elements of National Power, including a Food Security Strategy.

An American Food Security Strategy is an imperative factor in reducing the multiple threats impacting our National wellbeing. Recent history has shown that reliable food supplies and stable prices produce more stable and secure countries. Conversely, food insecurity, particularly in poorer countries, can lead to instability, unrest, and violence. Food insecurity drives mass migration around the world from the Middle East, to Africa, to Southeast Asia, destabilizing neighboring populations, generating conflicts, and threatening our own security by disrupting our economic, military, and diplomatic relationships. Food system shocks from extreme food-price volatility can be correlated with protests and riots. Food price related protests toppled governments in Haiti and Madagascar in 2007 and 2008. In 2010 and in 2011, food prices and grievances related to food policy were one of the major drivers of the Arab Spring uprisings.

These conclusions are based on my decades of experience while serving as a Marine around the world and from a lifetime as a steward of the soil on my family farm in Tennessee. I see food security strategy in military terms as either being “defensive” or “offensive”. “Defensive” includes those actions we take to protect our agricultural infrastructure including crops, livestock and the food chain here in the United States. Conversely, the “Offensive” side of food security takes the initiative to deal with food security issues overseas and this is where I will spend most of my time today.

There is a good reason for our success on the “defensive” here at home in ensuring our own food security. As my good friend and former Tennessee Deputy Agriculture Commissioner Louis Buck points out to me, American agriculture has always been about public/private enterprise. The Morrill Act of 1862 – showing our Country’s foresight and confidence in the future even in the dark days of our Civil War – created our Land Grant University model of teaching, research and extension. And equally importantly, we have a private sector that values individual initiative, unleashing an unparalleled vitality. With that vitality driving innovation, our farmers and ranchers leverage the expertise and information from the public sector to manage risks and seek profits from deployed capital. But above all, American farmers and ranchers are our “citizen soldiers” on the front lines here at home fighting to guarantee our food security.

America is also blessed with fertile soil, water availability, moderate climate, and the advanced technology to successfully utilize our abundance. Whether I walk the corn fields of Indiana or the cotton fields of Tennessee, I see agricultural technology in use that is amazing. Soon after I retired from the Marines and came home to the family farm, I climbed into the cab of a self-propelled sprayer. Settling into the seat was like strapping into the cockpit of one of the aircraft I flew, except the sprayer had more computing power and better data links. All these factors, public and private, natural and manmade, hard work and innovation, combine to provide the American people with the widest choices in the world of wholesome foods to eat and clothes to wear.

## 3

#### The United States federal government should

#### utilize sector-specific regulation for developing procompetitive blockchain policies,

#### require open blockchain standards,

#### mandate that dominant blockchain networks offer open and non-discriminatory access to users who meet reasonable and fair membership criteria, and

#### direct the Federal Trade Commission to engage in cooperative discussions in international organizations over data privacy policies in the areas of artificial intelligence and machine learning.

#### The CP employs sector specific regulation that enhances blockchain competition without expanding the scope of antitrust law

Weinstein ’21 [Samuel; 2/19/21; Associate Professor of Law, Benjamin N. Cardozo School of Law; Georgia Law Review; “Blockchain Neutrality,” vol. 55, p. 499-592]

In doing so, the Article draws a distinction between antitrust and competition policy. The former term is used here to refer to enforcement of federal and state antitrust statutes, particularly the Sherman and Clayton Acts.25 This Article treats the latter term as a broader concept encompassing not only decisions about antitrust enforcement priorities, but a wider set of choices made by Congress, the executive branch, sector regulators, and state and local governments that establish the terms on which competition takes place in various markets.26 It argues that concerns among some scholars and practitioners that blockchain threatens effective antitrust enforcement are premature.27 Despite the technology’s disruptive nature, the substantive antitrust challenges blockchain poses are not novel and can be addressed using current law and enforcement strategies. Indeed, the transparency blockchain offers may simplify discovery and prosecution of antitrust violations. Rather than locating and sifting through hundreds of thousands of documents to prove a price-fixing conspiracy, enforcers may find the relevant evidence permanently recorded on a cartel’s blockchain. The ability of blockchain users to mask their identities by employing pseudonyms may raise some technical enforcement challenges, but pseudonymity does not guarantee anonymity.28 Violators typically can be identified, and remedies can attach.29

In contrast, this Article contends that blockchain presents new and difficult competition policy issues that will require innovative regulatory solutions. Because blockchain-related technologies have applications across industries, multiple regulators may be positioned to make blockchain competition policy. Even if the details differ between regulatory regimes, the question these regulators will face should be similar: how to manage markets where incumbents are under attack by new competitors using blockchainbased systems to decentralize and deconcentrate industries. Agencies charged with developing blockchain-related competition policy must grapple with at least three fundamental challenges: (1) balancing the benefits of the increased competition that blockchain networks will make possible against concerns for marketplace and consumer safety; (2) determining how much market decentralization to promote or tolerate; and (3) deciding whether and how to promote standardization, open-access, and nondiscrimination requirements on blockchain networks.

This Article focuses on the financial-services industry, where blockchain-based technologies might fundamentally alter the way business is conducted. Cryptocurrencies like Bitcoin are the leading edge of this transformation, but they likely are just the first step in remaking the financial sector. Bigger changes may be coming in capital markets and equities and derivatives trading. Blockchain technologies are enabling firms to raise significant amounts of capital directly from the public. Several companies already have used ICOs to raise over $100 million each, 30 more than an average initial public offering (IPO) raises, and, in 2019, companies used blockchain-based IEOs to raise $1.7 billion.31 These new funding models might endanger traditional sources of capital formation: if businesses can use token sales to raise public money directly, fewer reasons exist to pay VCs and Wall Street for these services. Blockchains are also being used to build equities and derivatives trading and clearing platforms that can reduce or eliminate the need for traditional dealers and big banks in these markets.32 These platforms allow individual users to trade directly with one another from their personal terminals.33

Together, these blockchain-based services potentially could compete for large chunks of incumbent financial institutions’ most profitable businesses. This development could have significant economic and social consequences. The financial services sector represents seven percent of U.S. GDP,34 and Wall Street banks—for many decades—have been among the most important private institutions in the country.35 The outsized profits these institutions garner have played a role in the nation’s growing income inequality,36 and their gatekeeper function has limited which firms can raise money and who can trade in financial products. Blockchain-based networks offer the opportunity to reshape this financial-services landscape.

Because they oversee financial markets—including capital markets and equities and derivatives trading—sector regulators, especially the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC), likely will play a significant role in determining whether blockchain realizes its transformative potential. In doing so, they must determine how to balance enhanced blockchain competition against marketplace and consumer safety, how to manage market decentralization, and whether to promote standardization, open-access, and nondiscrimination on blockchain networks.

Of these issues, perhaps the most pressing is how to weigh the prospects for increased blockchain-related competition and its many benefits against threats to consumer safety and systemic soundness arising from blockchain networks. In antitrust cases, agencies and courts typically reject safety-related justifications for competition restrictions.37 Sector regulators view this balance differently. Despite statutory mandates to promote competition,38 the SEC and CFTC strongly favor consumer safety and systemic risk prevention over competition concerns.39 These agencies have been active in the blockchain space, especially with regard to ICOs and cryptocurrencies.40 Considering their regulatory priorities, it is unsurprising that the agencies’ focus to date has been on fraud prevention and classification and registration of financial products and entities.41 Less attention is being paid to broader competition issues. This approach is not balanced; it tilts heavily toward harm prevention.

This Article argues that sector regulators should promote the increased competition that blockchain-based networks make possible, rather than focusing solely on the need to ameliorate the potential systemic risk and fraud-related harms those networks may engender. FCC regulation of the telephony system and, later, the Internet provides a useful model for the financial regulatory agencies in this regard. Net neutrality rules and earlier FCC regulations struck a balance between promoting innovation and competition and protecting the public from unsafe practices.42 These rules prohibited networks from discriminating against downstream competitors except when their applications were harmful or fraudulent.43 A similar approach makes sense for the SEC and CFTC as they grapple with emerging blockchain-related competition-policy issues. In general, the agencies should think systematically about how to encourage blockchain-based competition. A narrow focus on fraud and registration requirements misses the forest for the trees.

Market decentralization poses related but distinct challenges for regulators. Among blockchain’s most lauded attributes is its potential to democratize and decentralize markets.44 In theory, blockchain technology offers the possibility for markets to become more competitive by reducing the power of gatekeeper firms—including platform companies—and by creating the potential for new competitors to emerge. This decentralization may have noneconomic benefits too, including spreading opportunity beyond elite institutions and offering market access to underserved populations. But decentralization also raises challenges for regulators. The more decentralized a market becomes, the more problematic it is for regulators to monitor market participants.45 In financial markets, decentralization can create significant difficulties. One only has to recall the role derivatives products played in the 2008 financial crisis to be reminded of the risks posed by widespread, unregulated financial contracts. Presently, the CFTC and SEC can monitor much of the world’s riskiest financial activity by keeping tabs on the largest regulated banks.46 Decentralization through blockchain will likely complicate that task and may compromise consumer safety and systemic stability.

Nonetheless, because the benefits of decentralization in the financial markets may be significant, this Article argues that regulators should resist the temptation to implement policies that favor incumbent big banks simply because they are already heavily regulated. Instead, the agencies should promote decentralization while developing ways to address the safety and fraud threats it poses. The use of regulatory nodes on private (permissioned) blockchain networks, which grant the agencies direct access to all the information on a blockchain, may be one way to achieve this goal.47

The third key competition policy challenge blockchain technologies raise for regulators is how to handle standardization, open-access, and non-discrimination issues on blockchain networks. These issues might arise in a variety of ways. To the extent that permissioned blockchains become necessary to compete in certain markets, firms controlling those networks might discriminate against rivals and otherwise harm competition. Or public (permissionless) blockchain networks might institute rules favoring execution of certain transactions over other transactions. Intellectual property rights and standard setting also could play a key role in how blockchain-based competition develops. Blockchainrelated patent holders could use their rights strategically to limit competition and establish (or retain) market power. Anticompetitive abuses of the standard-setting process for blockchain technologies is also a risk.

To maximize blockchain-based competition, this Article contends that regulators (or, if necessary, Congress) should require or encourage open blockchain standards and mandate that dominant blockchain networks offer open and non-discriminatory access to users who meet reasonable and fair membership criteria. Like netneutrality rules for the Internet (before they were overturned),48 this approach will increase competition and innovation on blockchain networks and make it more difficult for the big banks that currently dominate financial services to continue to do so.49

#### Only the CP alone balances competition with consumer safety and systemic risk – that’s impossible under antitrust law – the impact is financial fraud

Weinstein ’21 [Samuel; 2/19/21; Associate Professor of Law, Benjamin N. Cardozo School of Law; Georgia Law Review; “Blockchain Neutrality,” vol. 55, p. 499-592]

Regulators making blockchain competition policy must confront three key challenges: (1) weighing the benefits of increased competition against threats to safety and soundness; (2) determining what is an acceptable degree of market decentralization; and (3) deciding how to handle standardization, open access, and non-discrimination issues on blockchain networks. How financial regulators meet these challenges will determine in large part whether blockchain technology will disrupt financial markets.

1. Competition v. Safety & Soundness. There will be instances, especially in the financial sector, where regulators will need to consider how much competition is desirable and if “excessive” competition might compromise other important policy goals, particularly consumer safety and systemic soundness. A boom in derivatives trading facilitated by public blockchain-based exchanges might lower prices for entering these contracts but create regulatory headaches for the SEC and CFTC in their efforts to limit systemic risk.203 A similar logic may apply to financial fraud. A spike in ICOs, for example, may appear beneficial from a competition standpoint but also might open the door to widespread fraud that could stress the regulatory agencies’ enforcement capabilities.204

Antitrust courts and enforcement agencies typically reject safety and soundness justifications for restraints on competition. In its 1978 decision in National Society of Professional Engineers v. United States, the U.S. Supreme Court stated that a party’s attempt to justify a competitive restraint based on “the potential threat that competition poses to the public safety” amounted to “nothing less than a frontal assault on the basic policy of the Sherman Act.”205 That case involved a challenge to the National Society of Professional Engineers’ canon of ethics, which barred members from participating in competitive bidding for their services.206 Under the canon, members agreed not to negotiate or “even to discuss the question of fees” until after being chosen for a particular job.207 If a prospective client insisted on receiving pricing information, the canon mandated that the member withdraw from consideration for the contract. 208 This policy made it difficult, or even impossible, for potential clients to compare prices for engineering services. The Court had no trouble determining that the agreement, on its face, was a restraint of trade under section 1 of the Sherman Act.209 The Society, however, asserted that the restraint was justified because, in its absence, engineers would be tempted to make low bids on jobs and “do inferior work with consequent risk to public safety and health.”210

#### Fraud funds terrorists.

Frank S. Perri 10. Frank S. Perri, J.D., CFE, CPA. "The Fraud-Terror Link:". No Publication. xx-xx-xxxx. https://www.fraud-magazine.com/article.aspx?id=4294967888

The threat of terrorism has become the principal security concern in the United States since 9/11. Some might perceive that fraud isn’t linked to terrorism because white-collar crime issues are more the province of organized crime, but that perception is misguided. Terrorists derive funding from a variety of criminal activities ranging in scale and sophistication – from low-level crime to organized narcotics smuggling and fraud. CFEs need to know the latest links between fraud and terror.

Credit card fraud, wire fraud, mortgage fraud, charitable donation fraud, insurance fraud, identity theft, money laundering, immigration fraud, and tax evasion are just some of the types of fraud commonly used to fund terrorist cells. Such groups will also use shell companies to receive and distribute illicit funds. On the surface, these companies might engage in legitimate activities to establish a positive reputation in the business community.

Financing is required not just to fund specific terrorist operations but to meet the broader organizational costs of developing and maintaining a terrorist organization and to create an enabling environment necessary to sustain their activities. The direct costs of mounting individual attacks have been relatively low considering the damage they can yield.

“Part of the problem is that it takes so little to finance an operation,” said Gary LaFree, director of the University of Maryland’s National Consortium for the Study of Terrorism and Responses to Terrorism.2 For example, the 2005 London bombings cost about $15,600.3 The 2000 bombing of the USS Cole is estimated to have cost between $5,000 and $10,000.4 Al-Qaida’s entire 9/11 operation cost between $400,000 and $500,000, according to the final report of the National Commission on Terrorist Attacks Upon the United States.5

Terrorist groups require significant funds to create and maintain an infrastructure of organizational support, sustain an ideology of terrorism through propaganda, and finance the ostensibly legitimate activities needed to provide a veil of legitimacy for their shell companies.6 However, don’t think that only large operations are needed for terrorists to carry out attacks; small semi-autonomous cells in many countries are often just as capable of conducting disruptive activities without extensive outside financial help – they just conduct smaller-scale frauds.7

Even though the nexus between fraud and terrorism is undisputed, there’s concern at state and local levels that law enforcement professionals lack specialized knowledge on how to detect the fraud-terror link because they’re more apt to investigate and prosecute violent crimes.8

A critical lack of awareness about terrorists’ links to fraud schemes is undermining the fight against terrorism. Fraud analysis must be central, not peripheral, in understanding the patterns of terrorist behavior.9

#### Causes extinction---nuclear escalation.

Matthew Bunn & Nickolas Roth 17. \*Professor of practice at the Harvard Kennedy School. \*\*Research associate at the Belfer Center’s Project on Managing the Atom at Harvard University and research fellow at the Center for International and Security Studies at the University of Maryland. “The effects of a single terrorist nuclear bomb.” Bulletin of the Atomic Scientists, http://thebulletin.org/effects-single-terrorist-nuclear-bomb11150

The escalating threats between North Korea and the United States make it easy to forget the “nuclear nightmare,” as former US Secretary of Defense William J. Perry put it, that could result even from the use of just a single terrorist nuclear bomb in the heart of a major city. At the risk of repeating the vast literature on the tragedies of Hiroshima and Nagasaki—and the substantial literature surrounding nuclear tests and simulations since then—we attempt to spell out here the likely consequences of the explosion of a single terrorist nuclear bomb on a major city, and its subsequent ripple effects on the rest of the planet. Depending on where and when it was detonated, the blast, fire, initial radiation, and long-term radioactive fallout from such a bomb could leave the heart of a major city a smoldering radioactive ruin, killing tens or hundreds of thousands of people and wounding hundreds of thousands more. Vast areas would have to be evacuated and might be uninhabitable for years. Economic, political, and social aftershocks would ripple throughout the world. A single terrorist nuclear bomb would change history. The country attacked—and the world—would never be the same. The idea of terrorists accomplishing such a thing is, unfortunately, not out of the question; it is far easier to make a crude, unsafe, unreliable nuclear explosive that might fit in the back of a truck than it is to make a safe, reliable weapon of known yield that can be delivered by missile or combat aircraft. Numerous government studies have concluded that it is plausible that a sophisticated terrorist group could make a crude bomb if they got the needed nuclear material. And in the last quarter century, there have been some 20 seizures of stolen, weapons-usable nuclear material, and at least two terrorist groups have made significant efforts to acquire nuclear bombs. Terrorist use of an actual nuclear bomb is a low-probability event—but the immensity of the consequences means that even a small chance is enough to justify an intensive effort to reduce the risk. Fortunately, since the early 1990s, countries around the world have significantly reduced the danger—but it remains very real, and there is more to do to ensure this nightmare never becomes reality. Brighter than a thousand suns. Imagine a crude terrorist nuclear bomb—containing a chunk of highly enriched uranium just under the size of a regulation bowling ball, or a much smaller chunk of plutonium—suddenly detonating inside a delivery van parked in the heart of a major city. Such a terrorist bomb would release as much as 10 kilotons of explosive energy, or the equivalent of 10,000 tons of conventional explosives, a volume of explosives large enough to fill all the cars of a mile-long train. In a millionth of a second, all of that energy would be released inside that small ball of nuclear material, creating temperatures and pressures as high as those at the center of the sun. That furious energy would explode outward, releasing its energy in three main ways: a powerful blast wave; intense heat; and deadly radiation. The ball would expand almost instantly into a fireball the width of four football fields, incinerating essentially everything and everyone within. The heated fireball would rise, sucking in air from below and expanding above, creating the mushroom cloud that has become the symbol of the terror of the nuclear age. The ionized plasma in the fireball would create a localized electromagnetic pulse more powerful than lightning, shorting out communications and electronics nearby—though most would be destroyed by the bomb’s other effects in any case. (Estimates of heat, blast, and radiation effects in this article are drawn primarily from Alex Wellerstein’s “Nukemap,” which itself comes from declassified US government data, such as the 660-page government textbook The Effects of Nuclear Weapons.) At the instant of its detonation, the bomb would also release an intense burst of gamma and neutron radiation which would be lethal for nearly everyone directly exposed within about two-thirds of a mile from the center of the blast. (Those who happened to be shielded by being inside, or having buildings between them and the bomb, would be partly protected—in some cases, reducing their doses by ten times or more.) The nuclear flash from the heat of the fireball would radiate in both visible light and the infrared; it would be “brighter than a thousand suns,” in the words of the title of a book describing the development of nuclear weapons—adapting a phrase from the Hindu epic the Bhagavad-Gita. Anyone who looked directly at the blast would be blinded. The heat from the fireball would ignite fires and horribly burn everyone exposed outside at distances of nearly a mile away. (In the Nagasaki Atomic Bomb Museum, visitors gaze in horror at the bones of a human hand embedded in glass melted by the bomb.) No one has burned a city on that scale in the decades since World War II, so it is difficult to predict the full extent of the fire damage that would occur from the explosion of a nuclear bomb in one of today’s cities. Modern glass, steel, and concrete buildings would presumably be less flammable than the wood-and-rice-paper housing of Hiroshima or Nagasaki in the 1940s—but many questions remain, including exactly how thousands of broken gas lines might contribute to fire damage (as they did in Dresden during World War II). On 9/11, the buildings of the World Trade Center proved to be much more vulnerable to fire damage than had been expected. Ultimately, even a crude terrorist nuclear bomb would carry the possibility that the countless fires touched off by the explosion would coalesce into a devastating firestorm, as occurred at Hiroshima. In a firestorm, the rising column of hot air from the massive fire sucks in the air from all around, creating hurricane-force winds; everything flammable and everything alive within the firestorm would be consumed. The fires and the dust from the blast would make it extremely difficult for either rescuers or survivors to see. The explosion would create a powerful blast wave rushing out in every direction. For more than a quarter-mile all around the blast, the pulse of pressure would be over 20 pounds per square inch above atmospheric pressure (known as “overpressure”), destroying or severely damaging even sturdy buildings. The combination of blast, heat, and radiation would kill virtually everyone in this zone. The blast would be accompanied by winds of many hundreds of miles per hour. The damage from the explosion would extend far beyond this inner zone of almost total death. Out to more than half a mile, the blast would be strong enough to collapse most residential buildings and create a serious danger that office buildings would topple over, killing those inside and those in the path of the rubble. (On the other hand, the office towers of a modern city would tend to block the blast wave in some areas, providing partial protection from the blast, as well as from the heat and radiation.) In that zone, almost anything made of wood would be destroyed: Roofs would cave in, windows would shatter, gas lines would rupture. Telephone poles, street lamps, and utility lines would be severely damaged. Many roads would be blocked by mountains of wreckage. In this zone, many people would be killed or injured in building collapses, or trapped under the rubble; many more would be burned, blinded, or injured by flying debris. In many cases, their charred skin would become ragged and fall off in sheets. The effects of the detonation would act in deadly synergy. The smashed materials of buildings broken by the blast would be far easier for the fires to ignite than intact structures. The effects of radiation would make it far more difficult for burned and injured people to recover. The combination of burns, radiation, and physical injuries would cause far more death and suffering than any one of them would alone. The silent killer. The bomb’s immediate effects would be followed by a slow, lingering killer: radioactive fallout. A bomb detonated at ground level would dig a huge crater, hurling tons of earth and debris thousands of feet into the sky. Sucked into the rising fireball, these particles would mix with the radioactive remainders of the bomb, and over the next few hours or days, the debris would rain down for miles downwind. Depending on weather and wind patterns, the fallout could actually be deadlier and make a far larger area unusable than the blast itself. Acute radiation sickness from the initial radiation pulse and the fallout would likely affect tens of thousands of people. Depending on the dose, they might suffer from vomiting, watery diarrhea, fever, sores, loss of hair, and bone marrow depletion. Some would survive; some would die within days; some would take months to die. Cancer rates among the survivors would rise. Women would be more vulnerable than men—children and infants especially so. Much of the radiation from a nuclear blast is short-lived; radiation levels even a few days after the blast would be far below those in the first hours. For those not killed or terribly wounded by the initial explosion, the best advice would be to take shelter in a basement for at least several days. But many would be too terrified to stay. Thousands of panic-stricken people might receive deadly doses of radiation as they fled from their homes. Some of the radiation will be longer-lived; areas most severely affected would have to be abandoned for many years after the attack. The combination of radioactive fallout and the devastation of nearly all life-sustaining infrastructure over a vast area would mean that hundreds of thousands of people would have to evacuate. Ambulances to nowhere. The explosion would also destroy much of the city’s ability to respond. Hospitals would be leveled, doctors and nurses killed and wounded, ambulances destroyed. (In Hiroshima, 42 of 45 hospitals were destroyed or severely damaged, and 270 of 300 doctors were killed.) Resources that survived outside the zone of destruction would be utterly overwhelmed. Hospitals have no ability to cope with tens or hundreds of thousands of terribly burned and injured people all at once; the United States, for example, has 1,760 burn beds in hospitals nationwide, of which a third are available on any given day. And the problem would not be limited to hospitals; firefighters, for example, would have little ability to cope with thousands of fires raging out of control at once. Fire stations and equipment would be destroyed in the affected area, and firemen killed, along with police and other emergency responders. Some of the first responders may become casualties themselves, from radioactive fallout, fire, and collapsing buildings. Over much of the affected area, communications would be destroyed, by both the physical effects and the electromagnetic pulse from the explosion. Better preparation for such a disaster could save thousands of lives—but ultimately, there is no way any city can genuinely be prepared for a catastrophe on such a historic scale, occurring in a flash, with zero warning. Rescue and recovery attempts would be impeded by the destruction of most of the needed personnel and equipment, and by fire, debris, radiation, fear, lack of communications, and the immense scale of the disaster. The US military and the national guard could provide critically important capabilities—but federal plans assume that “no significant federal response” would be available for 24-to-72 hours. Many of those burned and injured would wait in vain for help, food, or water, perhaps for days. The scale of death and suffering. How many would die in such an event, and how many would be terribly wounded, would depend on where and when the bomb was detonated, what the weather conditions were at the time, how successful the response was in helping the wounded survivors, and more. Many estimates of casualties are based on census data, which reflect where people sleep at night; if the attack occurred in the middle of a workday, the numbers of people crowded into the office towers at the heart of many modern cities would be far higher. The daytime population of Manhattan, for example, is roughly twice its nighttime population; in Midtown on a typical workday, there are an estimated 980,000 people per square mile. A 10-kiloton weapon detonated there might well kill half a million people—not counting those who might die of radiation sickness from the fallout. (These effects were analyzed in great detail in the Rand Corporation’s Considering the Effects of a Catastrophic Terrorist Attack and the British Medical Journal’s “Nuclear terrorism.”) On a typical day, the wind would blow the fallout north, seriously contaminating virtually all of Manhattan above Gramercy Park; people living as far away as Stamford, Connecticut would likely have to evacuate. Seriously injured survivors would greatly outnumber the dead, their suffering magnified by the complete inadequacy of available help. The psychological and social effects—overwhelming sadness, depression, post-traumatic stress disorder, myriad forms of anxiety—would be profound and long-lasting. The scenario we have been describing is a groundburst. An airburst—such as might occur, for example, if terrorists put their bomb in a small aircraft they had purchased or rented—would extend the blast and fire effects over a wider area, killing and injuring even larger numbers of people immediately. But an airburst would not have the same lingering effects from fallout as a groundburst, because the rock and dirt would not be sucked up into the fireball and contaminated. The 10-kiloton blast we have been discussing is likely toward the high end of what terrorists could plausibly achieve with a crude, improvised bomb, but even a 1-kiloton blast would be a catastrophic event, having a deadly radius between one-third and one-half that of a 10-kiloton blast. These hundreds of thousands of people would not be mere statistics, but countless individual stories of loss—parents, children, entire families; all religions; rich and poor alike—killed or horribly mutilated. Human suffering and tragedy on this scale does not have to be imagined; it can be remembered through the stories of the survivors of the US atomic bombings of Hiroshima and Nagasaki, the only times in history when nuclear weapons have been used intentionally against human beings. The pain and suffering caused by those bombings are almost beyond human comprehension; the eloquent testimony of the Hibakusha—the survivors who passed through the atomic fire—should stand as an eternal reminder of the need to prevent nuclear weapons from ever being used in anger again. Global economic disaster. The economic impact of such an attack would be enormous. The effects would reverberate for so far and so long that they are difficult to estimate in all their complexity. Hundreds of thousands of people would be too injured or sick to work for weeks or months. Hundreds of thousands more would evacuate to locations far from their jobs. Many places of employment would have to be abandoned because of the radioactive fallout. Insurance companies would reel under the losses; but at the same time, many insurance policies exclude the effects of nuclear attacks—an item insurers considered beyond their ability to cover—so the owners of thousands of buildings would not have the insurance payments needed to cover the cost of fixing them, thousands of companies would go bankrupt, and banks would be left holding an immense number of mortgages that would never be repaid. Consumer and investor confidence would likely be dramatically affected, as worried people slowed their spending. Enormous new homeland security and military investments would be very likely. If the bomb had come in a shipping container, the targeted country—and possibly others—might stop all containers from entering until it could devise a system for ensuring they could never again be used for such a purpose, throwing a wrench into the gears of global trade for an extended period. (And this might well occur even if a shipping container had not been the means of delivery.) Even the far smaller 9/11 attacks are estimated to have caused economic aftershocks costing almost $1 trillion even excluding the multi-trillion-dollar costs of the wars that ensued. The cost of a terrorist nuclear attack in a major city would likely be many times higher. The most severe effects would be local, but the effects of trade disruptions, reduced economic activity, and more would reverberate around the world. Consequently, while some countries may feel that nuclear terrorism is only a concern for the countries most likely to be targeted—such as the United States—in reality it is a threat to everyone, everywhere. In 2005, then-UN Secretary-General Kofi Annan warned that these global effects would push “tens of millions of people into dire poverty,” creating “a second death toll throughout the developing world.” One recent estimate suggested that a nuclear attack in an urban area would cause a global recession, cutting global Gross Domestic Product by some two percent, and pushing an additional 30 million people in the developing world into extreme poverty. Desperate dilemmas. In short, an act of nuclear terrorism could rip the heart out of a major city, and cause ripple effects throughout the world. The government of the country attacked would face desperate decisions: How to help the city attacked? How to prevent further attacks? How to respond or retaliate? Terrorists—either those who committed the attack or others—would probably claim they had more bombs already hidden in other cities (whether they did or not), and threaten to detonate them unless their demands were met. The fear that this might be true could lead people to flee major cities in a large-scale, uncontrolled evacuation. There is very little ability to support the population of major cities in the surrounding countryside. The potential for widespread havoc and economic chaos is very real. If the detonation took place in the capital of the nation attacked, much of the government might be destroyed. A bomb in Washington, D.C., for example, might kill the President, the Vice President, and many of the members of Congress and the Supreme Court. (Having some plausible national leader survive is a key reason why one cabinet member is always elsewhere on the night of the State of the Union address.) Elaborate, classified plans for “continuity of government” have already been drawn up in a number of countries, but the potential for chaos and confusion—if almost all of a country’s top leaders were killed—would still be enormous. Who, for example, could address the public on what the government would do, and what the public should do, to respond? Could anyone honestly assure the public there would be no further attacks? If they did, who would believe them? In the United States, given the practical impossibility of passing major legislation with Congress in ruins and most of its members dead or seriously injured, some have argued for passing legislation in advance giving the government emergency powers to act—and creating procedures, for example, for legitimately replacing most of the House of Representatives. But to date, no such legislative preparations have been made. In what would inevitably be a desperate effort to prevent further attacks, traditional standards of civil liberties might be jettisoned, at least for a time—particularly when people realized that the fuel for the bomb that had done such damage would easily have fit in a suitcase. Old rules limiting search and surveillance could be among the first to go. The government might well impose martial law as it sought to control the situation, hunt for the perpetrators, and find any additional weapons or nuclear materials they might have. Even the far smaller attacks of 9/11 saw the US government authorizing torture of prisoners and mass electronic surveillance. And what standards of international order and law would still hold sway? The country attacked might well lash out militarily at whatever countries it thought might bear a portion of responsibility. (A terrifying description of the kinds of discussions that might occur appeared in Brian Jenkins’ book, Will Terrorists Go Nuclear?) With the nuclear threshold already crossed in this scenario—at least by terrorists—it is conceivable that some of the resulting conflicts might escalate to nuclear use. International politics could become more brutish and violent, with powerful states taking unilateral action, by force if necessary, in an effort to ensure their security. After 9/11, the United States led the invasions of two sovereign nations, in wars that have since cost hundreds of thousands of lives and trillions of dollars, while plunging a region into chaos. Would the reaction after a far more devastating nuclear attack be any less?

## 4

#### Growth will rebound due to self-sustaining corporate performance.

Van der Welle ’21 [Peter; July 7; Strategist within the Global Macro team, M.A. in Economics from Tilburg University; Robeco, “How capex holds the key to a self-sustaining economic recovery,” <https://www.robeco.com/latam/en/insights/2021/07/how-capex-holds-the-key-to-a-self-sustaining-economic-recovery.html>]

Title:

How capex holds the key to a self-sustaining economic recovery.

Capital expenditure to fix supply shortages and meet burgeoning demand is seen figuring strongly in the post-Covid recovery.

[Author and summary omitted].

Companies are expected to invest heavily in new equipment and capacity as they seek to meet the pent-up demand released from economic reopening.

“The world is emerging from the pandemic, and much of the focus has been on the release of huge pent-up demand for goods and services that have been inaccessible for much of the past year,” says Peter Van der Welle, strategist with Robeco’s multi-asset team.

“But there is a bigger issue regarding the ability of companies to supply these goods and services, due to the supply side constraints that have emerged through economic reopening. We believe this is powering a resurgence in capital expenditure by companies, and those which are investing in new equipment to meet greater demand will be the more sought after stocks.”

Capex intentions

Van der Welle says this trend can already be seen in the US Federal Reserve’s Capex Intentions Index, which shows that steep year-on-year increases in capital expenditures are planned.

“So, that's promising for a near-term rebound in the capex cycle,” he says. “The market has already picked up on that theme because you can see a clear outperformance of capex-intensive stocks compared to the broader market year to date.”

Fiscal dominance

Van der Welle says five elements support the multi-asset team’s view that capex will rise from here onwards. “The first is the overarching macroeconomic picture in that we are increasingly moving towards an environment of fiscal dominance and away from one that has been monetary-led via quantitative easing,” he says.

“Central banks have pursued very easy monetary policies, but they have hit the nominal lower bounds with regard to policy rates.”

“This is a hard constraint because real rates are difficult for central banks to push even lower than they are nowadays, given the strong consensus among both central bankers and market participants that inflation is transitory.”

Big spending plans

For stimulus, fiscal policy is better suited to address the negative supply shock that Covid-19 has posed. Fiscal dominance can be seen in the huge infrastructure spending planned in the US, with the USD 1.9 trillion American Rescue Plan already in motion, and the USD 2 trillion American Jobs Plan going through Congress. In Europe, the disbursement of the EUR 750 billion EU Recovery Fund is due to start later in July.

“An era of fiscal dominance is able to say goodbye to the secular stagnation thesis, which holds that the economy is suffering from under-investment,” says Van der Welle. “Under-investment due to insufficient demand, which was the biggest problem after the global financial crisis, has become less likely.”

“We saw very subdued consumption growth both in the US and elsewhere between 2009 and 2019. That story is reversing in the US. Households’ income has been supported by fiscal policy during the Covid-19 recession, while burgeoning consumer demand in the reopening phase could prove to be more sticky as employment prospects continue to improve in the medium term.”

Tobin’s Q looks good

A third reason to expect higher capex is driven by ‘Tobin’s Q’ – the market value of a company divided by its assets' replacement cost. If this ratio is above one, then corporates have an incentive to invest directly in the underlying assets rather than buying another company at market value to acquire the same assets.

The Tobin’s Q ratio is currently at 1.7 for the US. “So it's very expensive to do M&A, and it is wiser for corporates to invest in the underlying capital goods themselves,” Van der Welle says.

“We should therefore expect a gradual move away from M&A activity towards companies making direct investments in capital goods.”

Supply-side constraints

The fourth element is the severe supply-side constraints seen in the global economy, as capacity shut down during the pandemic.

“This is reflected in the ISM Prices Paid Index, which reached an all-time high in June in reflection of rampant shortages of raw materials and labor,” says Van der Welle.

“Clearly the issue today following the pandemic is not demand related, but supply related. This will also trigger more awareness to push the productivity frontier and incentivize capital expenditure.”

Less reliance on labor

The fifth element is the partial substitution from labor to capital in the US against the backdrop of lingering labor shortages.

“A decline in the labor force participation rate shows that people are not quickly returning to the labor force, as they have been disincentivized by the subsidies and pay checks they have gained from the stimulus plans, and/or structural changes in their work/life balance due to the pandemic,” says Van der Welle.

“When the cost of labor becomes more expensive, substituting labor with capital becomes more attractive for employers. Typically, the inflection point for capex intentions becoming positive is when unit labor costs rise by more than 2% year on year, which is the case today.”

Capex will lengthen the earnings cycle

Regarding earnings, there is a significant relationship between capex intentions and productivity, though the lag from intending to invest to actually getting a realized productivity gain is quite long – up to several years.

Higher capex that eventually brings higher productivity growth will sustain the earnings cycle, Van der Welle says. Higher productivity gives corporates more pricing power because they suppress unit labor costs, and that means profit margins can stay elevated for longer.

#### Business confidence is high.

LBCI ’22 [Leeds Business Confidence Index, a business confidence survey administered by the University of Colorado-Boulder; January 6; Boulder, “The Leeds Business Confidence Index (LBCI) Q1 2022,” <https://www.colorado.edu/business/sites/default/files/attached-files/lbci_q1_2022_final.v2.pdf>]

Business confidence remained elevated ahead of Q1 2022, rising slightly from Q4 2021. All components of the index increased ahead of the first quarter. The index increased 1.9 points from Q4 2021 to Q1 2022 and grew another 1.4 points ahead of Q2 2022. While panelists expressed concerns about inflation, supply chain issues, worker constrains, and COVID-19 variants, they also expressed optimism about increased demand and COVID-19. A vast majority of respondents noted inflation issues impacting their business. More than 68% of respondents expect to increase wages in response to higher inflation, and most do not expect inflation to moderate in the second half of 2022 or in 2023.

#### The plan tumbles business confidence based on unworkable theoretical models.

Baye ’20 [Michael Baye, James Cooper, Kenneth Elzinga, Deborah Garza, Thomas Hazlett, Benjamin Klein, Tad Lipsky, Scott Masten, Maureen Ohlhausen, James Rill, Vernon Smith, Robert Willig, Joshua Wright, and John Yun, with some professors omitted for convenience; May 20; Former Director of the FTC’s Bureau of Economics, Bert Elwert Professor of Business at Indiana University; Former Acting and Deputy Director of the FTC’s Office of Policy Planning; Economics Professor at the University of Virginia; Chair of the Antitrust Modernization Commission, Former Acting and Deputy Assistant Attorney General of the DOJ’s Antitrust Division; Former Chief Economist of the FCC, Economics Professor at Clemson University; Economics Professor at UCLA; Former Acting Director of the FTC’s Bureau of Competition, Former Deputy Assistant Attorney General of the DOJ’s Antitrust Division; Business Economics and Public Policy at the University of Michigan; Former Acting Chairman & Commissioner of the FTC; Former Assistant Attorney General of DOJ’s Antitrust Division; Nobel Laureate in Economics and Professor at Chapman University; Former Deputy Assistant Attorney General for Economics at the DOJ’s Antitrust Division, Economics and Public Affairs Professor at Princeton University; Former Commissioner of the FTC, Law Professor at George Mason University; Former Acting Deputy Assistant Director of the FTC’s Bureau of Economics, Law Professor at George Mason University; “Joint Submission Of Antitrust Economists, Legal Scholars, And Practitioners To The House Judiciary Committee On The State Of Antitrust Law And Implications For Protecting Competition In Digital Markets,” <https://laweconcenter.org/wp-content/uploads/2020/05/house_joint_antitrust_letter_20200514.pdf>]

We write because the modern antitrust debate has become characterized by sustained attacks on the integrity of antitrust institutions and by unsubstantiated dismissals of debate. This atmosphere has led to a variety of proposals for radical changes to the antitrust laws and their enforcement that we believe are unsupported by the evidence, counterproductive to promoting competition and consumer welfare, and offered with an unwarranted degree of certainty.

Vigorous debate and disagreement have long been a hallmark of antitrust scholarship and policy. Competition policy has been formed through an iterative process echoed in the courts’ evolving doctrine over more than a century.1 Today, however, efforts to sidestep the discussion, or to declare it over, and to force hasty and far-reaching changes have come to the fore. These proposals are numerous and include: (1) abandoning the consumer welfare standard;2 (2) overturning unanimous and supermajority judicial precedents, which are foundational to modern antitrust law; 3 (3) imposing obsolete and arbitrary market share tests to determine the legality of mergers;4 (4) shifting the burden of proof from plaintiffs to defendants to render large swaths of business behavior presumptively unlawful;5 (5) creating another federal regulator to oversee competition in digital markets;6 (6) breaking up major tech companies or their products without evidence of antitrust harm or that the remedy would make consumers better off; 7 and (7) imposing a general prohibition on all mergers either involving specific firms or during the current health crisis.8

Such proposals would abandon the legal and political traditions that helped transform antitrust from an unprincipled and incoherent body of law, marred by internal contradictions, into a workable system that contributes positively to American competitiveness and consumer welfare. It should be noted that we use the term “consumer welfare” throughout this letter, consistent with modern parlance about competition policy, to include the benefits of competition to the welfare of workers and other input suppliers, as well as consumers. Thus, the consumer welfare standard is not a narrowly circumscribed objective, but rather a prescription for the general social wellbeing generated by the competitive process. By contrast, many of the current proposals would (1) undermine the rule of law; (2) undo the healthy evolution of antitrust law in the courts over time; (3) require antitrust agencies to micromanage the economy by picking winners and losers; (4) abandon a focus on consumer welfare in favor of vague and politically-oriented goals; and (5) undermine successful American businesses and their competitiveness in the global economy at the worst-imaginable time.

The assertions about the state of antitrust law and policy that purportedly justify these radical changes are not supported by the evidence. A more accurate reading of the evidence supports the following view of the American economy and the role of antitrust law:

1. The American economy—including the digital sector—is competitive, innovative, and serves consumers well. Debate about whether the antitrust laws should be fundamentally re-written originated from a concern that markets have recently become more concentrated and that competition had decreased as a result. The popular narrative, that increases in concentration have caused harm to competition throughout the economy, does not withstand close scrutiny. In reality, most markets in the American economy—including digital markets—are competitive, and thriving, and create huge benefits for consumers.
2. Structural changes in the economy have resulted from increased competition. The economic data show that intense competition, winner-take-all rivalry, and the adoption of new successful technologies in relevant antitrust markets were major economic forces that led to structural changes (i.e., increased national-level concentration) in the economy. The existence of these structural changes does not itself support changes in the law.
3. Lax antitrust enforcement has not allowed systematic increases in market power. There is little evidence to support the view that anemic antitrust enforcement has led to a systematic rise in market power in the American economy. The evidence is especially weak as it relates to digital markets.
4. Existing antitrust law is adequate for protecting competition in the modern economy. Antitrust law has developed incrementally through the common law approach. A strength of antitrust law is that it can incorporate learning about new business practices and economics to protect competition in an evolving economy. The existing antitrust laws and enforcement framework, when correctly applied, are more than adequate to deter anticompetitive conduct today, including in new and growing digital markets.
5. History teaches that discarding the modern approach to antitrust would harm consumers. Many of the radical reforms being proposed today seek to return antitrust to what it was in the 1960s. But antitrust during that time was based primarily on per se rules that prohibited economic analysis and fact-based defenses. This created a body of law, fundamentally marred by internal contradiction, that frequently protected individual competitors over consumers and did not focus on the central goal of protecting competition. Congress has considered and rejected radical proposals to overhaul antitrust in the past and should do so again.

#### Changing the legal standards of antitrust spills over to crush otherwise surging corporate growth.

Thierer ’21 [Adam; February 25; Senior Research Fellow with the Mercatus Center at George Mason University; The Hill, “Open-ended antitrust is an innovation killer,” <https://thehill.com/opinion/technology/540391-open-ended-antitrust-is-an-innovation-killer>]

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

Sen. [Amy Klobuchar](https://thehill.com/people/amy-klobuchar) (D-Minn.) is leading one charge. Klobuchar, who chairs the Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights, [recently introduced](https://www.klobuchar.senate.gov/public/_cache/files/e/1/e171ac94-edaf-42bc-95ba-85c985a89200/375AF2AEA4F2AF97FB96DBC6A2A839F9.sil21191.pdf) the “Competition and Antitrust Law Enforcement Reform Act.” This sweeping measure seeks to expand the powers and budgets of antitrust regulators at the Federal Trade Commission and the Department of Justice. It also includes new filing requirements and potentially hefty civil fines.

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

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

Critics of merger and acquisition (M&A) activity by large tech firms include not only Sen. Klobuchar but also Republicans such as Sen. [Josh Hawley](https://thehill.com/people/joshua-josh-hawley) (R-Mo.). Hawley recent [offered an amendment](https://www.axios.com/josh-hawley-big-tech-merger-ban-1467081d-216c-45a2-9d09-9416dfbde330.html) to a budget bill that would preemptively prohibit mergers and acquisitions by dominant online firms. Klobuchar and Hawley believe that M&A skews the market in favor of today’s largest firms, entrenching their market power and discouraging innovation.

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

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

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

Those who worry about today’s largest tech giants becoming supposedly unassailable monopolies should consider how similar fears were expressed not so long ago about other tech titans, many of which we laugh about today. Just 14 years ago, headlines [proclaimed](https://www.technewsworld.com/story/55185.html) that “MySpace Is a Natural Monopoly,” and [asked](https://www.theguardian.com/technology/2007/feb/08/business.comment), “Will MySpace Ever Lose Its Monopoly?” We all know how that “monopoly” ceased to exist.

At the same time, pundits [insisted](https://www.marketwatch.com/story/apple-should-pull-the-plug-on-the-iphone) “Apple should pull the plug on the iPhone,” since “there is no likelihood that Apple can be successful in a business this competitive.” The smartphone market of that era was viewed as completely under the control of BlackBerry, Palm, Motorola and Nokia. A few years prior to that, critics lambasted the merger of AOL and TimeWarner as a new [corporate “Big Brother”](http://www.ojr.org/ojr/workplace/1017966109.php?__cf_chl_jschl_tk__=67a5f6a101935b8e3586ca48216d31ba6d4e03de-1612467283-0-AXvbGCtUx-p_N4T-8_2m8OHezQUhQ9kelg9-pVuD6IzKvFfXrllJujU9ERvjqjyIsAeCovUw9bfZqq75_NYasBM87SnQT_027hDJOhjXeowzK1QQH_7vcmr1tS4XgCGC_NNx6UGbAvVgcJNFhSkqkVKKeRJ-BjdDA7Vus-gwmr7wQXcS7KKfTtHyqxdRfureL9alpZHU2IJcbbdYaZpTjTrfcJHCKa8pIZcdiScjaRJmON9X1Ip20Vuv7tyDHbZSvcrn88WrY_9N_qBpKvZhQ4PAe90w5Fx5iHjjNIzoNMKSpToTFGLbPdqawgge9PVubSQbkS7xXDXxCBMA2Sh-Y_U) that would decimate digital diversity and online competition.

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

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

#### Extinction---recovery caps numerous geopolitical crises.

Baird ’20 [Zoe; October 2020; C.E.O. and President of the Markle Foundation, Member of the Aspen Strategy Group and former Trustee at the Council on Foreign Relations, J.D. and A.B. from the University of California at Berkeley; Domestic and International (Dis)order: A Strategic Response, “Equitable Economic Recovery is a National Security Imperative,” Ch. 13]

A strong and inclusive economy is essential for American national security and global leadership. As the nation seeks to return from a historic economic crisis, the national security community should support an equitable recovery that helps every worker adapt to the seismic shifts underway in our economy.

Broadly shared economic prosperity is a bedrock of America’s economic and political strength—both domestically and in the international arena. A strong and equitable recovery from the economic crisis created by COVID-19 would be a powerful testament to the resilience of the American system and its ability to create prosperity at a time of seismic change and persistent global crisis. Such a recovery could attack the profound economic inequities that have developed over the past several decades. Without bold action to help all workers access good jobs as the economy returns, the United States risks undermining the legitimacy of its institutions and its international standing. The outcome will be a key determinant of America’s national security for years to come.

An equitable recovery requires a national commitment to help all workers obtain good jobs—particularly the two-thirds of adults without a bachelor’s degree and people of color who have been most affected by the crisis and were denied opportunity before it. As the nation engages in a historic debate about how to accelerate economic recovery, ambitious public investment is necessary to put Americans back to work with dignity and opportunity. We need an intentional effort to make sure that the jobs that come back are good jobs with decent wages, benefits, and mobility and to empower workers to access these opportunities in a profoundly changed labor market.

To achieve these goals, American policy makers need to establish job growth strategies that address urgent public needs through major programs in green energy, infrastructure, and health. Alongside these job growth strategies, we need to recognize and develop the talents of workers by creating an adult learning system that meets workers’ needs and develops skills for the digital economy. The national security community must lend its support to this cause. And as it does so, it can bring home the lessons from the advances made in these areas in other countries, particularly our European allies, and consider this a realm of international cooperation and international engagement.

Shared Economic Prosperity Is a National Security Asset

A strong economy is essential to America’s security and diplomatic strategy. Economic strength increases our influence on the global stage, expands markets, and funds a strong and agile military and national defense. Yet it is not enough for America’s economy to be strong for some—prosperity must be broadly shared. Widespread belief in the ability of the American economic system to create economic security and mobility for all—the American Dream— creates credibility and legitimacy for America’s values, governance, and alliances around the world.

After World War II, the United States grew the middle class to historic size and strength. This achievement made America the model of the free world—setting the stage for decades of American political and economic leadership. Domestically, broad participation in the economy is core to the legitimacy of our democracy and the strength of our political institutions. A belief that the economic system works for millions is an important part of creating trust in a democratic government’s ability to meet the needs of the people.

The COVID-19 Crisis Puts Millions of American Workers at Risk

For the last several decades, the American Dream has been on the wane. Opportunity has been increasingly concentrated in the hands of a small share of workers able to access the knowledge economy. Too many Americans, particularly those without four-year degrees, experienced stagnant wages, less stability, and fewer opportunities for advancement.

Since COVID-19 hit, millions have lost their jobs or income and are struggling to meet their basic needs—including food, housing, and medical care.1 The crisis has impacted sectors like hospitality, leisure, and retail, which employ a large share of America’s most economically vulnerable workers, resulting in alarming disparities in unemployment rates along education and racial lines. In August, the unemployment rate for those with a high school degree or less was more than double the rate for those with a bachelor’s degree.2 Black and Hispanic Americans are experiencing disproportionately high unemployment, with the gulf widening as the crisis continues.3

The experience of the Great Recession shows that without intentional effort to drive an inclusive recovery, inequality may get worse: while workers with a high school education or less experienced the majority of job losses, nearly all new jobs went to workers with postsecondary education. Inequalities across racial lines also increased as workers of color worked in the hardest-hit sectors and were slower to recover earnings and income than White workers.4

The Case for an Inclusive Recovery

A recovery that promotes broad economic participation, renewed opportunity, and equity will strengthen American moral and political authority around the world. It will send a strong message about the strength and resilience of democratic government and the American people’s ability to adapt to a changing global economic landscape. An inclusive recovery will reaffirm American leadership as core to the success of our most critical international alliances, which are rooted in the notion of shared destiny and interdependence. For example, NATO, which has been a cornerstone of U.S. foreign policy and a force of global stability for decades, has suffered from American disengagement in recent years. A strong American recovery—coupled with a renewed openness to international collaboration—is core to NATO’s ability to solve shared geopolitical and security challenges. A renewed partnership with our European allies from a position of economic strength will enable us to address global crises such as climate change, global pandemics, and refugees. Together, the United States and Europe can pursue a commitment to investing in workers for shared economic competitiveness, innovation, and long-term prosperity.

The U.S. has unique advantages that give it the tools to emerge from the crisis with tremendous economic strength— including an entrepreneurial spirit and the technological and scientific infrastructure to lead global efforts in developing industries like green energy and biosciences that will shape the international economy for decades to come.

## 5

#### Dollar heg is high, but the plan’s unbridling of crypto offsets it.

Lee '21 -Citing Fed Reserve Report [Isabelle, 10/7, "The rise of cryptocurrencies could challenge the dominance of the US dollar, new Fed paper says," https://markets.businessinsider.com/news/currencies/cryptocurrency-us-dollar-dominance-digital-asset-china-federal-reserve-europe-2021-10]

The US dollar's dominant role in global markets should continue, but the rapid rise of cryptocurrencies could threaten that status, according to a new paper by Federal Reserve economists.

Private digital currencies, such as bitcoin and ether, as well as government-backed ones, may reduce reliance on the US dollar, economists Carol Bertaut, Bastian von Beschwitz, and Stephanie Curcuru, wrote in their paper, "The International Role of the US Dollar."

They cited changing consumer and investor preferences while new products could shift the balance of perceived costs and benefits.

"That said, it is unlikely that technology alone could alter the landscape enough to completely offset the long-standing reasons the dollar has been dominant," the paper added.

The research paper comes as the Fed is expected to publish soon a separate, highly anticipated report on whether the US should issue central bank digital currency.

But key Fed officials are at odds. While Fed Chair Jerome Powell has expressed some openness towards CBDCs, other Fed officials, such as Vice Chair Randal Quarles, have been more skeptical.

Quarles in July said while public interest in a digital dollar has reached "fever pitch," the US dollar is already highly digitized, an arrangement he said, "serves the nation and the economy well."

In addition to digital currencies, the research paper from the Fed economists highlighted two other near-term challenges may affect the US dollar's international status.

One is the continuing integration of Europe, a large economy with robust institutions and free trade, they said. In particular, the economists pointed to the European Union's decision to issue a jointly-backed debt during the height of the pandemic.

"If fiscal integration progresses and a large, liquid market for EU bonds develops, the euro could become more attractive as a reserve currency," they said. "This integration could potentially be accelerated by enhancements to the EU's sovereign debt market infrastructure and introducing a digital euro."

Another possible risk is the accelerating growth of China, a nation whose GDP is expected to exceed the US's in nominal terms by 2030s, the economists said.

Nevertheless, they are bullish the US dollar will remain attractive.

"Absent any large-scale political or economic changes which damage the value of the US dollar as a store of value or medium of exchange ... the dollar will likely remain the world's dominant international currency for the foreseeable future," they added.

#### The international order hinges on the success of American dollar hegemony; it can weather current storms but cannot handle takeoff of cryptocurrency.

Smith '19 - Assistant Professor of International Studies at the University of Nottingham Ningbo China [Nicholas Ross, "International Order in the Coming Cryptocurrency Age: The Potential to Disrupt American Primacy and Privilege?" Volume 4, Issue 1 (The Fate of the Liberal International Order and Rising Powers), Aug. 2019, pp. 77-97]

Introduction: Cryptocurrency & American Primacy

A significant body of literature in the field of International Relations (IR) has emerged over the past decade proclaiming the coming end of American primacy – whether due to American decline, the rise of China and other emerging powers, or a combination of both – and with it, the end of the liberal international order (LIO) as we currently know it. Indeed, since the election of Donald Trump in late 2016, cracks have seemingly begun to appear in the LIO as the United States no longer seems as committed (or perhaps even capable) to safeguard the order. However, this article argues that the apparent strain on the LIO, and the United States’ broader international power position, is mostly superficial at this stage – ostensibly limited to the areas of diplomacy – and in its more substantive areas, especially finance, the order remains largely resolute while continuing to privilege the United States over the rest. The United States’ exorbitant privilege of being the kingpin of international finance, especially thanks to having the US dollar as the unrivaled global reserve currency, makes any hypothesis of the imminent collapse of American primacy and the status quo international order premature. However, this article argues that the emergence of independent cryptocurrencies has the potential to challenge the United States’ privileged position because they represent a decentralized and stateless phenomenon; presenting a blueprint for a fundamentally different monetary and financial system. In addition to the natural counter-hegemonic traits of independent cryptocurrencies, this article also hypothesizes that potential revisionist powers like China and Russia might also attempt to weaponize (although not without domestic and functional issues) them against the United States in order to minimize American primacy and privilege. While the prospects of the cryptocurrencies disrupting the United States’ primacy and privilege remain hypothetical and murky, it is, nevertheless, argued that this is an area rising powers could target in order to push for a new, less American-dominated international order. (1)

The end of the United States’ (liberal) international order?

There is a growing consensus in the discipline of IR that we are currently witnessing the end of an era (Flockhart 2016; Acharya 2017; Duncombe & Dunne 2018; Peterson 2018).1 The LIO built by the United States at the end of the Second World War, which was later (practically) universalized at the end of the Cold War, is on its last legs, and we are on the cusp of a new, more chaotic orderless era. Of course, the end of the American-led LIO has been hypothesized for some time. The putative decline of the United States coupled with the rise of China and other emerging powers (such as India, a resurgent Russia under Putin, or even the EU’s potential for deeper integration post-Brexit) has led to terms such as post-American world, G-Zero world, and multipolarity (or multi-order) gaining widespread usage in the mainstream coverage of international affairs in recent years (see Bremmer and Roubini 2011; Layne 2012; Zakaria 2008). Such prognostications have accelerated since the election of Donald Trump as President of the United States in late 2016, as his foreign policy – at least rhetorically – no longer seems to care about liberalism or the United States’ position as arbiter of the LIO, rather prioritizing an “America-first” aim (Peterson 2018; Posen 2018).

The problem with these prognostications about the imminent collapse of the liberal international order is that they assume that the defining characteristic of the LIO is liberalism. This article prescribes to the school of thought that the liberal aspect of the United States’ post-WWII international order was more of a superficial framing device rather than anything substantial and that, in reality, the real substance of engineering the order was the promotion, and then maintenance, of the United States’ international primacy (Barnett 2019; Lind & Wohlforth 2019; Patrick 2019).2 This is not to say that the order did not have any liberal characteristics – as Lind and Wohlforth (2019) contend, the order is not ideologically bound and can reflect the prominent ideologies of a given time – nor that the order has not been, on the whole, good for international politics. But, any consideration of the state of the LIO needs to focus on the substantive, not superficial areas. As Stokes (2018, 134) argues, proclaiming the order finished is naïve because it is “highly unlikely that the agency of Trump will overcome the deep structures and path dependencies that incline towards systemic maintenance” and that even if there is some deviation away from the order, “American elites will seek to ‘snap back’ to the status quo ante, given the goods the United States still derives from its hegemony.”

Arguably, the key substantive area of the LIO is not diplomatic (i.e. the embedding of multilateral institutions, fora, and frameworks) but financial. The globalization of finance since the end of the Second World War (and especially since the 1970s) has reached unprecedented levels and all of this has been managed by a system largely created by the United States – a structure which undeniably benefits it above the rest (Layne 2012; Stokes 2018; Kitchen & Cox 2019). The key aspect of this financial hegemony is the status of the US dollar as the undisputed global reserve currency. Former French President Valéry Giscard d’Estaing described the hegemony of the American dollar as representing an “exorbitant privilege” to the United States over the rest of the world (Eichengreen 2011). The crux of this argument was that when the US dollar was enshrined as the global reserve currency, the United States could no longer suffer a balance of payments crisis as its imports were purchased in their own currency. In other words, it gave the United States an exclusive ability to run up a massive current account deficit at an incredibly cheap rate by simply printing more money or issuing debt (Eichengreen 2011).

This strategic worth of the United States’ advantage of being the kingpin of international finance has not been lost on its foreign policy-makers either. The role of the United States’ financial hegemony in its various grand strategies since the end of the Second World War is clear (Stokes 2014). For instance, the Marshall Plan(1), the Washington Consensus (to name but a few), and, more recently (albeit unfulfilled) the pivot to Asia, all used the United States’ financial clout to help it pursue clear strategic aims (Walt 2011; Stokes 2014). Given the importance of economic sources of power in today’s heavily integrated international system, it is plausible to even make the case that the United States’ financial clout is its single most useful source of power – more so than its clear military might (Keohane & Nye 1973; Wigell, Scholvin & Aaltola 2018). Furthermore, this position of financial hegemony (and the ongoing exorbitant privilege) provides the United States with significant insulation from hegemonic decline (Stokes 2018; Smith 2019).

Since the advent of the US dollar as the global reserve currency in 1971, the United States has, unsurprisingly (given the inherent privilege it awards them), transitioned from the world’s largest creditor state to the world’s largest debtor state. For example, as of late 2018, the United States’ net international investment position (NIIP) has ballooned to nearly negative $10 billion while its net investment income (NII), thanks to its exorbitant privilege, was positive $167 billion – generally such an indebted country would have a significant negative NII too (Bureau of Economic Analysis n.d.). Essentially, the United States’ NIIP and NII statistics, according to Steil and Smith (2017), demonstrated that “basically, foreigners are willing to accept a trivial return to hold dollar-denominated assets.” Consequently, since Nixon’s decision to scrap the gold standard in 1971 turned the United States into a proverbial “gold mine” as it acquired much more financial power (Ward 2018).

In contrast to the United States’ privileged position of being able to maintain an extremely indebted position, the challengers to its financial power position, most notably China, have a clear competitive disadvantage. In contrast to the United States’ ever-increasing levels of debt, China has become the world’s largest creditor state, ballooning its NIIP to positive $1.7 trillion (Steil & Smith 2017). China’s incentive for being a creditor state is that it permits them to influence international trade and finance through offering cheap loans – either to advantage their own companies internationally or to grow ties with resource-rich countries in the global south (Fukuyama 2016). However, in doing so, China has had to accept a negative NII of negative $80 billion in 2017 – the world’s worst NII. The problem for China has been that occupying such an unfair position comparatively to the United States – what Steil and Smith (2017) call an “exorbitant detriment” – has become increasingly difficult given China’s economic wobbles over the past couple of years, especially as it begins a transition from an industrialised country to a post-industrial one (Steil & Smith 2017).

Of course, there are disadvantages to having the world’s reserve currency. For some, the United States’ high levels of debt are problematic, not only because of the risk associated with being so indebted but also because it has propelled an enormous trade deficit. Notably, this trade deficit has been a major concern of Trump’s first term in office, leading to the United States adopting a number of ostensibly mercantile policies – most significantly towards China – in an effort to balance its trade (Tankersley 2018). Furthermore, China’s long-held strategy of buying of US dollars – it is the world’s largest holder of dollar-denominated central bank reserves – gives it some leverage over the United States that it can use in times of disagreement (Setser 2008). Nevertheless, this article argues that the advantages of having the world’s reserve currency – part of what Zbigniew Dumienski (2018) terms “fiat power” – still outweigh the disadvantages as it pertains to international political power. This is partly because, as Drezner (2009, 53) argues, “the power of credit has been inflated beyond its true worth” and that, against great powers, and especially a superpower, using credit is “of limited use” as a foreign policy tool.

From the perspective of dissatisfied rising powers, there is clearly a perception that diminishing the United States’ “exorbitant privilege” is an important component in realizing their long-term grand strategies which loosely coalesce around diminishing the United States’ primacy and privilege. China, for instance, has ramped up its efforts to try and level the financial playing field with the United States in recent years. Firstly, in 2013 China launched its Belt and Road Initiative (BRI), a development strategy aimed at linking China (as the envisaged metropole) with Eurasia (the envisaged periphery) through the building of massive trade infrastructure projects (Ferdinand 2016). This was later followed by the launching of the Asian Infrastructure Investment Bank (AIIB) in 2014, which was seen by the United States as a challenge to its Bretton Woods institutions related to international development, the IMF and World Bank (Liao 2015). These combined initiatives represented a Chinese grand strategy designed to “change the global governance economic order” (Hanlon 2017). On top of these two initiatives, China, also, has a longer, more ambitious goal: internationalizing the renminbi, perhaps to the point where it can challenge the US dollar (Lee 2014, p.42).

Russia, too, has sought to undermine the United States’ international financial position in recent years. For instance, Russia has easily been the most enthusiastic member of the BRICS grouping – a group of five “emerging powers”: Brazil, Russia, India, China, and South Africa. The BRICS group largely came to fruition due to a mutual perception amongst its members that the LIO is unfairly tilted towards American interests. Thus, through undertaking dialogue and promoting cooperation beyond the scope of the multilateral structures put in place by the United States, the BRICS grouping has been very much about challenging the status quo, and, in particular, targeting the United States’ financial clout. For instance, at the 2018 BRICS Business Forum in Johannesburg, South Africa, Vladimir Putin emphasized the need for more BRICS cooperation in the realm of international finance as “the United States has global economic power due to the dollar being used as the international currency, which makes global countermeasures extremely important now in order to partially move beyond the dollar and create a non-dollar economy” (TASS 2018).

The idea that the United States’ privileged financial position, underpinned by its dollar hegemony, is in terminal decline has certainly gained some popularity in the last year or two, partly due to the aforementioned increased focus of China and Russia towards challenging it. However, a similar surge in proclaiming the United States’ exorbitant privilege dead occurred after the onset of the global financial crisis in 2007 (Calleo 2009; Layne 2012). Yet, as Fichtner (2017, 3) demonstrated, “contrary to conventional wisdom, Anglo-America’s share in financial wealth has increased since the financial crisis” to a point where it “permeates almost every political economy in the world and influences political and economic decision-making.” Furthermore, the main challenger to the US dollar in recent years, the Euro, suffered a significant material and credibility plunge due to the eurozone crisis and there are lingering doubts as to its long-term viability (Maggiori, Neiman & Schreger 2019).

Consequently, a fair assessment is that the United States’ dollar hegemony is far more resilient than most have expected as it has withstood, to date, both significant external challenges and a global financial crisis. Norrloff (2014) argues the collapse of the United States’ dollar hegemony cannot happen without a significant shift in the international system – i.e. the emergence of a legitimate challenger. However, as it currently stands, such a shift is not likely to occur in the short-to-medium term future because China, and the rest, are simply too far off to challenge the United States’ primacy. Consequently, the United States’ insulated position as the prime unit of international politics and the arbiter of the LIO, and its privileged position of having the US dollar as the global reserve currency (which in turn gives it more international power), represents a kind of unique self-reinforcing bulwark (in the current system at least) against hegemonic decline.

#### Extinction

Joshua Zoffer 20, Investor at Cove Hill Partners, Fellow at New America, JD Candidate at Yale University Law School, AB from Harvard University, “To End Forever War, Keep the Dollar Globally Dominant”, The New Republic, 2/3/2020, https://newrepublic.com/article/156417/end-forever-war-keep-dollar-globally-dominant

In early 2016, Obama Treasury Secretary Jack Lew cautioned that the dollar’s dominance as a global currency rested, in part, on the U.S. government’s reluctance to fully weaponize it. If foreign markets and governments “feel that we will deploy sanctions without sufficient justification or for inappropriate reasons,” he warned, “we should not be surprised if they look for ways to avoid doing business in the United States or in U.S. dollars.” Lew’s case stemmed from the more fundamental view that the dollar’s international role is “a source of tremendous strength for our economy, a benefit for U.S. companies and a driver of U.S. global leadership”—in other words, a role worth keeping. This view is emblematic of American financial governance since the Second World War. U.S. economic analysts, especially at the Treasury, have jealously guarded the dollar’s role and the many benefits it offers: the ability to run large deficits at low cost and disproportionate influence over the structure of the global economy, among others. Yet in their recent article in The New Republic, David Adler and Daniel Bessner argue the U.S. should abandon these advantages. In their view, the dollar’s role has encouraged American militarism and should be relinquished to curb such behavior. Dollar hegemony is not without cost, but to renounce it would be a profound mistake. Adler and Bessner’s view neglects the sizable economic benefits the dollar’s role confers on the U.S., as well as its possible use as an antidote to military adventurism. It ignores the enormous good that can be done with deficit spending, much of which has gone to the American military but could instead fund progressive programs. And it elides the inability of the U.S. and its global trading partners to shift away from dollar dominance without creating worldwide financial distress. Adler and Bessner are right that the U.S. has misused its privilege, but Washington should not abandon it; rather, American leaders should seek to transform it. Generations of American policymakers have been right to protect the dollar’s key currency role for economic reasons. Most notably, dollar hegemony affords the U.S. the ability to run large and prolonged budget and balance-of-payments deficits. The dollar represents 62 percent of allocated foreign exchange reserves, is used to invoice and settle roughly half of world trade, and accounts for 42 percent of global payments. Because governments, banks, and businesses worldwide need lots of dollars, the world market always stands ready to absorb new U.S.-dollar-denominated debt without charging higher interest rates. Adler and Bessner correctly point out that the rest of the world considers the dollar’s role as the world’s reserve currency to be an “exorbitant privilege,” a term coined in the 1960s by then French Finance Minister Valéry Giscard D’Estaing. The ability to spend beyond its means has enabled the U.S. to fund its impressive military might, whether one views that power as the fountainhead of Pax Americana or the source of illegitimate military adventurism. But these economic benefits go beyond just deficits. The demand for dollars also pushes up the dollar’s value against other currencies, enhancing American purchasing power and offering consumers access to imports on the cheap. The dollar’s role also means American firms rarely need to do business in foreign currencies, reducing transaction costs and exchange-rate risks. More broadly, America’s central economic role gives it outsize influence at crucial moments. At the height of the financial crisis that began in 2008, the Federal Reserve was able to inject vital liquidity into the global financial system by selectively offering dollar swap lines to trusted foreign central banks. Dollar hegemony enabled the U.S. to act swiftly, effectively, and on its own terms. In addition, the dollar’s role offers a potent alternative to kinetic military action as a means of pursuing foreign policy objectives. The dollar’s broad use means access to dollar liquidity—which in turn requires access to the U.S. financial system—is essential for foreign governments and businesses. For foreign banks, especially, being cut off from dollar access is essentially a death sentence. That makes sanctions that do so a powerful tool in the international arena. In 2005, for example, the U.S. used the dollar to strike a devastating blow against North Korea without firing a single shot or even formally enacting sanctions. Using authority provided by Section 311 of the Patriot Act, the Department of the Treasury crippled Banco Delta Asia, a bank accused of facilitating illegal activity by the North Korean government, by merely threatening to cut off its access to the American financial system. Deposit outflows began within days; within weeks the bank was placed under government administration to avoid a full collapse. Pyongyang was hit hard, as other banks ceased their business with it to avoid meeting the same fate. Similarly, though the Trump administration has worked hard to undo it, the Joint Comprehensive Plan of Action with Iran to limit the development of nuclear weapons was made possible, in part, by painful dollar sanctions that brought Iran to the table. Far from being a proximate cause of military conflict, the dollar’s central global role has often been used to contain adversaries without military intervention. Still, skeptics are right to point out that the dollar’s role has indirectly funded American interventionism and that dollar sanctions have been overused, provoking the ire of American allies. But these facts suggest we should use our dollar power to forge a more progressive U.S. order, not abandon the advantage altogether. America’s exorbitant privilege need not fund warships and missiles: The same low-interest borrowing could be used to fund a new universal health care system, expand access to higher education, or pursue any number of large-scale social policy objectives, including financing global public goods that no other country or consortium of countries is prepared to fund, such as climate change mitigation.

# 1nr

## BizCon

## Dollar Heg

## FTC

### Uniqueness---2NC

#### They’re rolling out enforcement---it’s a priority AND will solve innovation.

Gordon ’21 [Marcy; July 21; Journalist, graduate of the University of Florida; Washington Post, “Agency pledges tough action to buttress ‘right to repair’,” <https://www.washingtonpost.com/politics/agency-eyes-right-to-repair-rules-to-aid-consumers-shops/2021/07/21/3654d32a-ea31-11eb-a2ba-3be31d349258_story.html>]

Americans would be freer to repair their broken cellphones, computers, videogame consoles and even tractors themselves, or to use independent repair shops, under changes being eyed by federal regulators.

The regulators maintain that restrictions have steered consumers into manufacturers’ and sellers’ repair networks or led them to replace products before the end of their useful lives.

As the Federal Trade Commission and the Biden administration see it, that raises issues of anti-competitive conduct.

The FTC is moving toward writing new rules targeting the restrictions. On Wednesday, the five FTC commissioners unanimously adopted a policy statement supporting the “right to repair” that pledges beefed-up enforcement efforts and could open the way to new regulations.

“These types of (repair) restrictions can significantly raise costs for consumers, stifle innovation, close off business opportunity for independent repair shops, create unnecessary electronic waste, delay timely repairs and undermine resiliency,” FTC Chair Lina Khan said. “The FTC has a range of tools it can use to root out unlawful repair restrictions, and today’s policy statement would commit us to move forward on this issue with new vigor.”

The policy statement commits the agency to prosecute repair restrictions that violate current antitrust or consumer protection laws. A 1975 law, for example, requires that if a product has a warranty — which is not mandatory — the warranty must avoid using disclaimers in an unfair or deceptive way. It also prohibits tying a warranty to the use of a specific service provider or product, unless the FTC has issued a waiver in that case.

Unavailable parts, instruction manuals and diagnostic software and tools, product design restrictions and locks on software embedded in devices have made many consumer products harder to fix and maintain, regulators and industry critics say. Do-it-yourself repairs often require specialized tools, hard-to-obtain parts and access to diagnostic software that’s guarded by manufacturers.

The repair restrictions often fall most heavily on minority and low-income consumers, the regulators say. An FTC report to Congress in May noted that many Black-owned small businesses make equipment repairs, and repair shops often are owned by entrepreneurs from poor communities.

For minority and low-income consumers, the repair restrictions are especially acute for cellphones, the report says. Those consumers often have cellphones but no broadband access for computers at home, increasing their dependence on the phones.

Industry critics say the [coronavirus](https://www.washingtonpost.com/coronavirus/?itid=lk_inline_manual_15) pandemic worsened the effects of repair restrictions for all consumers as computers became essential for working remotely, schooling children at home and visiting relatives on screens — while many large chain stores stopped offering on-site repairs.

“Manufacturers, be warned: It’s time to clean up your act and let people fix their stuff,” Nathan Proctor, a director of U.S. Public Interest Research Group’s right-to-repair campaign, said in a statement Wednesday. “With unanimous support from commissioners, there’s a new sheriff in town. The FTC is ready to act to stop many of the schemes used to undermine repair.”

#### They’re litigating non-compliance and on drawing on resources throughout the agency.

FTC ’21 [Federal Trade Commission; July 2021; U.S. agency, tasked with enforcing antitrust and consumer protection law; Federal Trade Commission, “Policy Statement of the Federal Trade Commission on Repair Restrictions Imposed by Manufacturers and Sellers,” <https://www.ftc.gov/system/files/documents/public_statements/1592330/p194400repairrestrictionspolicystatement.pdf>]

While unlawful repair restrictions have generally not been an enforcement priority for the Commission for a number of years,4 the Commission has determined that it will devote more enforcement resources to combat these practices.5 Accordingly, the Commission will now prioritize investigations into unlawful repair restrictions under relevant statutes such as the Magnuson-Moss Warranty Act6 and Section 5 of the Federal Trade Commission Act.7

First, the Commission urges the public to submit complaints and provide other information to aid in greater enforcement of the Magnuson-Moss Warranty Act and its implementing regulations. While current law does not provide for civil penalties or redress, the Commission will consider filing suit against violators of the Magnuson-Moss Warranty Act to seek appropriate injunctive relief. The Commission will also closely monitor private litigation to determine whether the Commission may wish to investigate a pattern of unfair or deceptive acts or practices or file an amicus brief. Further, the Commission will explore rulemaking, as appropriate.

Second, the Commission will scrutinize repair restrictions for violations of the antitrust laws. For example, certain repair restrictions may constitute tying arrangements or monopolistic practices—such as refusals to deal, exclusive dealing, or exclusionary design—that violate the Sherman Act.8 Violations of the Sherman Act also violate the prohibition on unfair methods of competition codified in Section 5 of the Federal Trade Commission Act.

Third, the Commission will assess whether repair restrictions constitute unfair acts or practices, which are also prohibited by Section 5 of the Federal Trade Commission Act. In addition, the Commission will analyze any material claims made to purchasers and users to ascertain whether there are any prohibited deceptive acts or practices, in violation of Section 5 of the Federal Trade Commission Act.

Finally, the Commission will bring an interdisciplinary approach to this issue, using resources and expertise from throughout the agency to combat unlawful repair restrictions. The FTC will also closely coordinate with state law enforcement and policymakers to ensure compliance and to update existing law and regulation to advance the goal of open repair markets.

#### The FTC is maximizing resources---the ‘full range’ of tools will be available.

Fung ’21 [Brian; July 22; Technology reporter; CNN, “The FTC vows to 'root out' illegal repair restrictions on phones, fridges, tractors and more,” <https://www.cnn.com/2021/07/22/tech/ftc-right-to-repair/index.html>]

US regulators are vowing to make it easier for consumers and independent service shops to repair commercial products like smartphones without having to rely on those products' manufacturers, effectively backing a principle known as "right to repair."

On Wednesday, the Federal Trade Commission led by Chair Lina Khan voted unanimously to condemn restrictions imposed by manufacturers on products that make them more difficult to repair independently. The decision commits the FTC to investigating restrictions that may be illegal under both the nation's antitrust laws as well as a key consumer protection law governing product warranties, the Magnuson-Moss Warranty Act.

In a statement, FTC Chair Lina Khan vowed to use the agency's full range of tools to "root out" illegal repair restrictions.

The move is a shot across the bow of companies like Apple ([AAPL](https://money.cnn.com/quote/quote.html?symb=AAPL&source=story_quote_link)), which for years has been criticized by [right-to-repair advocates](https://www.ifixit.com/News/43179/apple-endangers-our-business-model-gets-a-repairability-point-for-it) for shipping products with unremovable memory or batteries, or sealing devices with special glue. Apple didn't immediately respond to a request for comment on the vote.

Beyond the use of adhesives that make it harder to access the insides of a device, the policy statement calls out restrictions that limit the availability of spare parts only to a manufacturer's preferred servicers. It zeroes in on "software locks" and copy-protection technology as well as restrictive user licensing language. And it blasts "unlawful, overbroad" patent and trademark lawsuits that have allegedly been weaponized to restrict independent repairs.

"Restricting consumers and businesses from choosing how they repair products can substantially increase the total cost of repairs, generate harmful electronic waste, and unnecessarily increase wait times for repairs," the FTC's new [policy statement](https://www.ftc.gov/system/files/documents/public_statements/1592330/p194400repairrestrictionspolicystatement.pdf) said. "In contrast, providing more choice in repairs can lead to lower costs, reduce e-waste by extending the useful lifespan of products, enable more timely repairs, and provide economic opportunities for entrepreneurs and local businesses."

Wednesday's vote doesn't just place more pressure on the tech industry. Makers of everything from tractors to hospital equipment have been accused of similar tactics.

In remarks ahead of the vote, FTC Commissioner Rohit Chopra said the agency had received reports of hospitals that were prevented from fixing ventilators during the pandemic as a result of manufacturer restrictions, making the right-to-repair issue a matter of life and death.

"The nation started this school year with a vast laptop shortage; we were reportedly five million short at one point," Chopra said in [prepared remarks](https://www.ftc.gov/system/files/documents/public_statements/1592354/final_chopra_prepared_remarks_on_right_to_repair.pdf). "The start to remote learning, already so astoundingly difficult, was worsened by unnecessary repair restrictions on refurbishing computers, leaving those students without computer access unable to learn."

The vote follows [an FTC report](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf) published in May that addressed the right-to-repair issue, finding that most of the justifications put forward by manufacturers for repair restrictions are "not supported by the record." Companies defending repair restrictions have cited the need to protect their intellectual property, promote safety and cybersecurity, and provide better quality of service.

Right-to-repair advocates have made strides globally in recent months, with the European Parliament [voting to back the movement](https://www.zdnet.com/article/eu-takes-a-leap-forward-in-supporting-consumer-right-to-repair-rules/) last year (after the European Commission [introduced a right-to-repair proposal](https://ec.europa.eu/environment/pdf/circular-economy/new_circular_economy_action_plan.pdf) a few months earlier). Even Apple co-founder Steve Wozniak [threw in his support in a recent video](https://www.cnn.com/2021/07/09/tech/apple-steve-wozniak-right-to-repair-intl-hnk/index.html#:~:text=Wozniak%2C%20who%20co%2Dfounded%20Apple,devices%20also%20has%20commercial%20value.&text=%22It's%20time%20to%20start%20doing,right%20to%20repair%20more%20fully.%22) message.

The FTC's vote also comes after the Biden administration issued a sweeping executive order this month on competition. The order specifically addresses right-to-repair and encourages the FTC to limit manufacturers' ability to restrict independent repairs.

"Powerful equipment manufacturers—such as tractor manufacturers—use proprietary repair tools, software, and diagnostics to prevent third-parties from performing repairs," said an accompanying White House [fact sheet](https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/09/fact-sheet-executive-order-on-promoting-competition-in-the-american-economy/). "For example, when certain tractors detect a failure, they cease to operate until a dealer unlocks them. That forcers farmers to pay dealer rates for repairs that they could have made themselves, or that an independent repair shop could have done more cheaply."

For its part, John Deere has said [in a statement](https://www.deere.com/en/our-company/news-and-announcements/newsroom/repair/) that it "supports a customer's right to safely maintain, diagnose and repair their equipment. When customers buy from John Deere, they own the equipment and can choose to personally maintain or repair the product." The company has added that it "does not support the right to modify embedded software due to risks associated with the safe operation of the equipment, emissions compliance and engine performance."

Wednesday's policy statement also commits the FTC to working with states "to advance the goal of open repair markets." Dozens of states are considering so-called right-to-repair legislation, according to the advocacy group US PIRG.

"Manufacturers, be warned: It's time to clean up your act and let people fix their stuff," said Nathan Proctor, senior campaign director for the group's right to repair initiative, in a statement. "With unanimous support from commissioners, there's a new sheriff in town. The FTC is ready to act to stop many of the schemes used to undermine repair, while support is increasing for new legislation to further crack down."

### Uniqueness---Thumpers---2NC

#### ‘Right to repair’ is top-of-the-docket---especially in agriculture AND resource allocation.

Kavi ’21 [Aishvarya; July 21; Reporter in the Washington Bureau, graduate of George Washington University; New York Times, “The F.T.C. votes to use its leverage to make it easier for consumers to repair their phones,” <https://www.nytimes.com/2021/07/21/us/politics/phones-right-to-repair-FTC.html>]

The Federal Trade Commission voted unanimously on Wednesday to push harder for the right of consumers to repair devices like smartphones, home appliances, cars and even farm equipment, arguing that large corporations have cost consumers by making such products harder to fix.

All five commissioners — two Republicans and three Democrats — voted to back a policy statement that promises to explore whether companies that make it harder for consumers to repair products are breaking antitrust or consumer protection laws, and to step up enforcement of the laws against violators.

“These types of restrictions can significantly raise costs for consumers, stifle innovation, close off business opportunity for independent repair shops, create unnecessary electronic waste, delay timely repairs and undermine resiliency,” said [Lina Khan](https://www.nytimes.com/2021/06/16/technology/lina-khan-big-tech.html), the commission’s chairwoman. “The F.T.C. has a range of tools it can use to root out unlawful repair restrictions, and today’s policy statement would commit us to move forward on this issue with new vigor.”

The commission’s vote on Wednesday falls in line with President Biden’s policies to prioritize initiatives to increase competition between large corporations and to limit their power. In an [executive order](https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/) this month, Mr. Biden encouraged the commission to crack down on companies that make it harder for consumers to get equipment or electronics repaired by third-party shops. It singled out manufacturers of farming equipment — the tractor manufacturer John Deere, for example — that use [license agreements](https://www.deere.com/assets/pdfs/common/privacy-and-data/docs/agreement_pdfs/english/2016-10-28-Embedded-Software-EULA.pdf) that block farmers from repairing their tractors on their own.

Wednesday’s vote was a victory for the “right to repair” movement, which has long been pushing for repair-friendly policies at the federal, state and local levels. Nathan Proctor, the senior director of the United States Public Interest Research Group’s Right to Repair campaign, celebrated the agency’s decision in a statement.

“They have pledged to assist states in making right to repair improvements, and to tackle illegal behavior from manufacturers,” Mr. Proctor said. “The F.T.C. is no longer on the sidelines.”

#### It’s top of the docket.

Goode ’21 [Lauren; July 7; Senior Writer, graduate for Clark University and Stanford University; Wired, “The FTC Votes Unanimously to Enforce Right to Repair,” <https://www.wired.com/story/ftc-votes-to-enforce-right-to-repair/>]

During an open commission meeting Wednesday, the Federal Trade Commission voted unanimously to enforce laws around the Right to Repair, thereby ensuring that US consumers will be able to repair their own electronic and automotive devices.

The [FTC’s](https://www.wired.com/tag/ftc/) endorsement of the rules is not a surprise outcome; the issue of Right to Repair has been a remarkably bipartisan one, and the FTC itself [issued a lengthy report](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf) in May that blasted manufacturers for restricting repairs. But the 5 to 0 vote signals the commission’s commitment to enforce both federal antitrust laws and a key law around consumer warranties—the [Magnuson Moss Warranty Act](https://www.ftc.gov/enforcement/statutes/magnuson-moss-warranty-federal-trade-commission-improvements-act)—when it comes to personal device repairs.

The vote, which was led by new FTC chair and known tech critic Lina Khan, also comes 12 days after President Joe Biden signed a broad executive order aimed at promoting competition in the US economy. The order addressed a wide range of industries, from banks to airlines to tech companies. But a portion of it encouraged the FTC, which operates as an independent agency, to create new rules that would prevent companies from restricting repair options for consumers.

“When you buy an expensive product, whether it's a half-a-million-dollar tractor or a thousand-dollar phone, you are in a very real sense under the power of the manufacturer,” says Tim Wu, special assistant to the president for technology and competition policy within the National Economic Council. “And when they have repair specifications that are unreasonable, there's not a lot you can do."

Wu added that [Right to Repair](https://www.wired.com/tag/repairs/) has become a "visceral example" of the enormous imbalance between workers, consumers, small businesses, and larger entities.

#### And prioritized by FTC enforcers.

Miller ’21 [Kirk; July 23; Managing Editor; Inside Hook, “The FTC Is Now Enforcing the ‘Right to Repair.’ What Does That Really Mean?” <https://www.insidehook.com/article/personal-tech/ftc-right-to-repair>]

So what’s next?

This isn’t a magic fix. Right now, the combination of the FTC vote and Biden’s executive order is basically to put emphasis on Right to Repair rules that are already in place in many states (or being considered). And it means enforcement of this ruling is now a priority.

As Wired notes, “The commission said today it would investigate repair restrictions both as potential violations of antitrust laws and from a consumer protection angle. The FTC is also encouraging the public to report warranty abuse—as defined by the Magnuson Moss Warranty Act of 1975, which prohibits manufacturers from telling consumers that a warranty is voided if the product has been altered or tampered with by someone other than the original manufacturer.”

### 2NC – AT: Blockchain Antitrust Turn

#### Blockchain lessens the burden of antitrust enforcement, and current law solves blockchain-enabled collusion---Schrepel’s wrong

Samuel N. Weinstein 21, Associate Professor of Law, Benjamin N. Cardozo School of Law, Winter 2021, “Blockchain Neutrality,” Georgia Law Review, 55 Ga. L. Rev. 499

A burgeoning body of legal scholarship has documented the spread and implications of blockchain, addressing how the technology works and its potential to upend various markets. 21 [\*507] Much of that scholarship has focused on the financial markets, especially the development of cryptocurrencies. 22 A handful of scholars have addressed the regulatory challenges blockchain presents, including in the financial services sector, 23 but this literature is still in its infancy. This is particularly true for antitrust and competition scholarship, which is especially sparse. 24 This Article addresses that gap in the blockchain literature.

[\*508] In doing so, the Article draws a distinction between antitrust and competition policy. The former term is used here to refer to enforcement of federal and state antitrust statutes, particularly the Sherman and Clayton Acts. 25 This Article treats the latter term as a broader concept encompassing not only decisions about antitrust enforcement priorities, but a wider set of choices made by Congress, the executive branch, sector regulators, and state and local governments that establish the terms on which competition takes place in various markets. 26 It argues that concerns among some scholars and practitioners that blockchain threatens effective antitrust enforcement are premature. 27 [BEGIN FOOTNOTE] See, e.g., Schrepel, supra note 24, at 335 ("In the face of blockchain, current antitrust law may well be eliminated."). [END FOOTNOTE] Despite the technology's disruptive nature, the substantive antitrust challenges blockchain poses are not novel and can be addressed using current law and enforcement strategies. Indeed, the transparency blockchain offers may simplify discovery and prosecution of antitrust violations. Rather than locating and sifting through hundreds of thousands of documents to prove a price-fixing conspiracy, enforcers may find the relevant evidence permanently recorded on a cartel's blockchain. The ability of blockchain users to mask their identities by employing pseudonyms may raise some technical enforcement challenges, but [\*509] pseudonymity does not guarantee anonymity. 28 Violators typically can be identified, and remedies can attach. 29

### Internal---2NC

#### Every new filing decreases enforcement by fifty percent---they’re already down to only essential cases.

Burke ’21 [Andrea and Henry; May 28; B.A. in Political Science and Labor Studies from the University of California at Los Angeles; Research Assistant, B.A. in Economics from the University of Maryland; Revolving Door Project, “Hobbled FTC Lacks Budget to Combat Corporate Buying Spree,” <https://therevolvingdoorproject.org/hobbled-ftc-lacks-budget-to-combat-corporate-buying-spree/>]

Our analysis also shows the declining budget coincided with stagnation in the number of full-time employees: from 2010 to 2019, the number of full-time employees of the FTC actually decreased by 31 from 1132 in FY 2010 to 1101 in FY 2019.

Hiring and retaining employees is another struggle for the beleaguered agency as they are forced to compete for attorneys with a private sector that offers ever higher salaries, particularly for young lawyers beginning their careers (oftentimes burdened by significant student loan debt). The FTC’s [2002 Congressional Budget Justification](https://www.ftc.gov/reports/fy-2002-congressional-justification-budget-summary) bemoaned the struggles the agency had retaining “human capital” in the competitive labor market. The agency’s struggles were explained to Congress, saying the FTC “currently faces significant competitive pressures from the private sector, particularly for attorneys, economists, and information technology professionals with experience in mergers and Internet-related issues. For example, the compensation for first-year attorneys in the private sector is often three times higher than that available to most Government agencies.” Since the pay associated with FTC employment for attorneys and economists (the GS scale 11 or above) has not increased in keeping with inflation in the ensuing years, one can only assume the agency’s woes have grown since despite the struggles not being voiced so openly by FTC leadership. The lowest GS-11 pay grade in 2002 when adjusted for inflation, is almost 10% higher than the lowest GS-11 pay grade in 2021, a significant decrease in purchasing power for the entry level staff that was already susceptible to the higher wages offered in the private sector in 2002.

So, while HSR filings have been steadily climbing over the past 10 years, the FTC’s ability to regulate these filings has actually decreased because of a decline in agency funding and lack of competitive hiring. Without the resources to handle the increase in merger filings, the FTC has been compelled to reduce the number of enforcement actions it takes, conserving staff resources for only the most important cases. This has resulted in a decline in enforcement actions per merger by nearly half over a short nine year time frame, ultimately benefiting the monopolistic corporations that bolster their power by buying up other companies.

#### FTC resources are limited---new initiatives trade off with existing priorities.

Wheeler ’21 [Tom; February 10; Visiting Fellow in Governance Studies at the Center for Technology Innovation, former Chairman of the Federal Communication Commission Brookings Institution, “A focused federal agency is necessary to oversee Big Tech,” <https://www.brookings.edu/research/a-focused-federal-agency-is-necessary-to-oversee-big-tech/>]

Because of the vast scope of its market oversight, the FTC has often been the agency to which Congress looked first for solutions. It is not unusual, however, for Congress to subsequently recognize the need for a new specialized agency. In 1934, for instance, FTC’s oversight of the securities market was transferred to the [Securities and Exchange Commission](https://en.wikipedia.org/wiki/U.S._Securities_and_Exchange_Commission) (SEC). In the mid-1990s, amidst a concern about auto safety, Congress looked beyond the FTC to create a new National Highway Traffic Safety Administration. In response to the 2008 financial crash, Congress moved what had been the FTC’s authority in consumer financial markets to a newly created Consumer Financial Protection Bureau.

The proposal to create a new digital agency is a continuation of such precedents. The vast scope of the FTC’s present responsibilities—as diverse as funeral director practices, robocalls, and labeling hockey pucks—means that the oversight of digital platform regulation must compete with the agency’s existing diverse responsibilities and limited resources.[[4]](https://www.brookings.edu/research/a-focused-federal-agency-is-necessary-to-oversee-big-tech/#footnote-4) A new digital agency would also help assure that resources would not be withdrawn from the FTC’s traditional activities.[[5]](https://www.brookings.edu/research/a-focused-federal-agency-is-necessary-to-oversee-big-tech/#footnote-5)

A new digital agency would not eliminate the FTC’s current activities, but rather augment them with regulatory oversight beyond the capabilities of the agency. One example of the need for new powers is the constraints on its competition authority that effectively limit the FTC to ex post enforcement against a specific company for a specific violation rather than ex ante rulemaking authority that is more widely applicable.[[6]](https://www.brookings.edu/research/a-focused-federal-agency-is-necessary-to-oversee-big-tech/#footnote-6)

Another reason for the creation of a new agency is the inherent muscle memory that has developed since the FTC’s industrial era creation. Every institution has its cultural commitments: a collection of thoughts, procedures, the results of formal and informal congressional interventions, and judicial decisions developed in the analog era to resolve the demands of an analog economy. The digital economy requires departure from such a hidebound precedent to create an all-digital-all-the-time agency staffed by specialists with digital DNA.

The new digital reality

The rationale for a focused specialized agency to oversee the dominant digital companies is rooted in how the forces that drive the digital economy differ from those of the industrial economy.

Assets behaving differently

The policies and practices of the industrial era were based on business activity that utilized hard assets such as coal, iron, and manufactured goods. The digital era is built around the soft assets of digital information. While data assets enjoy industrial-like scope and scale economies, they are different in many other ways. Those differences create such strong proclivities to market failure that a new kind of regulatory oversight is required.

As compared to industrial assets, information assets are incrementally inexpensive, inexhaustible, iterative, and non-rivalrous. Computers perform calculations and networks distribute the results at very low incremental costs. In the industrial economy, a ton of coal was exhausted by usage; in the digital economy, a file of data can be used repeatedly. The use of that data, in turn, creates new data that produce new products. Finally, data is non-rivalrous in that usage by one party does not preclude usage by another.

Added to these basic differences in the root assets of the digital economy are three additional factors: network effects, low marginal cost distribution, and “free” end user goods and services. Network effects are the ground zero of internet economics, increasing the value of a product or service as it connects with more people. This creates a propensity to “tip” toward a monopoly. Thanks to the internet, this phenomenon is reinforced as the marginal cost of delivering that product or service to an additional user approaches zero. Together, these forces permit the product or service to be given away, thus triggering further network effects that create barriers to new entrants while allowing monopoly pricing to those seeking access to users of the “free” service.

The economic model of the industrial era was constrained by assets that ultimately confronted diminishing marginal returns as costs rose and markets became saturated. The economic model of the internet era knows no such constraints, but rather is driven by an endless supply of data feeding boundless demands. At the heart of machine learning and artificial intelligence, for instance, is an unquenchable demand for more data. That demand is met by digital perpetual motion where data use begets data products that beget more data that beget more products. Such perpetual motion further tips the market to dominance by companies that, by controlling data, can feed its constant reproduction.

The difference between digital demand-driven economics and industrial economics is expressed in the following [illustration](https://hbr.org/2020/01/competing-in-the-age-of-ai) by Harvard business professors Marco Iansiti and Karim Lakhani:

Inexpensive, inexhaustible, iterative, and non-rivalrous assets that take advantage of low-margin, network effect-driven digital capabilities mean that there is even greater mass production in the information economy than there was in the industrial economy. This produces the next challenge: how the self-perpetuating, never-ending process in which data produces new products, which produce new data, speeds the pace of change far beyond anything experienced in the industrial economy—and beyond the capacity of industrial-era regulatory concepts.

The pace of change drives the demand for agility

Digital technology sped up the pace of change, removing the time buffer that policymakers once relied upon for identifying oversight needs. The existing regulatory approach was developed in a period where stable technology produced stable markets. As a result, the government was able to wait until market failures reached a certain scale before stepping in. Today, however, when a platform such as Facebook can [grow](https://www.fool.com/investing/2019/01/20/the-social-media-platforms-that-hit-100-million-us.aspx) from zero to 100 million users in under five years (and [one billion users](https://money.cnn.com/2012/10/04/technology/facebook-billion-users/index.html) only four years later), the speed of change exerts unprecedented pressure on policymakers to keep pace.

The digital companies responded to this pace of change by walking away from rigid industrial-era product and management concepts. Digital products and digital management are based on the principle of agility. The products are designed in anticipation of technology and market changes. Every time your smartphone updates its software is an example of such agility. Digital company management, similarly, became agile and less hierarchical in order to keep up with the pace of change.

The agile response to the pace of technological change permits dominant digital companies to maintain their dominance and fend off competition within their markets. The federal government’s oversight, based on bureaucratic and legal precedent, however, remains encased in the cement boots of industrial-era management. Rigid, slow-paced bureaucracies built to mirror the rules-based bureaucracies of industrial corporations are no match for the agility of digital companies.

Precisely at the time when the speed of change should be an impetus for the creation of broad, yet agile, ex ante behavioral rules, the existing governmental agencies are typically constrained to act through slow and arduous procedures on a limited ex post basis. A new digital agency with new agile procedures is necessary to bring public-interest oversight up to speed.

### Impact---2NC

#### Link alone turns case, zeroing enforcement and encouraging anticompetitive behavior.

Baker et al. ’20 [Jonathan, Bill Baer, Michael Kades, Fiona Morton, Nancy Rose, Carl Shapiro, Tim Wu; November 19; Professor of Law at American University, former Director of the Bureau of Economics at the Federal Trade Commission, Ph.D. in Economics from Stanford University, J.D. from Harvard University; Visiting Fellow in Governance Studies, former Assistant Attorney General for Antitrust at the U.S. Department of Justice and Director of the Bureau of Competition at the Federal Trade Commission, J.D. from Stanford University; Director of Markets and Competition Policy at the Equitable Growth Foundation, J.D. from the University of Wisconsin; Professor of Economics at ale University, Ph.D. in Economics from the Massachusetts Institute of Technology; Professor of Applied Economics, Ph.D. in Economics from the Massachusetts Institute of Technology; Professor of Business Strategy at the University of California, Berkeley; Special Assistant to the President for Technology and Competition Policy in the National Economic Council, J.D. from Harvard Law School; Washington Center for Equitable Growth, “Restoring competition in the United States,” <https://equitablegrowth.org/research-paper/restoring-competition-in-the-united-states/>]

The need for more resources

The agencies lack the resources to fulfill their mission after a decade in which they have seen their budgets largely frozen. Increasing resources alone will not solve today’s manifest market power problems, but substantially increasing resources is an important part of the solution.

The agencies require a significant increase in appropriations to begin the process of more effectively deterring anticompetitive conduct and mergers. Agencies strapped for resources are less likely to investigate complex cases and more willing to accept flawed settlements. Corporations are more likely to pursue questionable mergers or undertake potentially anticompetitive conduct if they think the agencies have little or no capacity to bring additional enforcement actions.

#### It’s the most likely scenario for war---sparks nuke escalation in Asia and the Middle East.

Cribb ’19 [Julian; October 3; Principal of Julian Cribb & Associates, Fellow of the Australian Academy of Technological Sciences and Engineering, former Director of National Awareness at the Commonwealth Scientific and Industrial Research Organisation; Food or War, “Food as an Existential Risk,” Ch. 6]

Weapons of Mass Destruction

Detonating just 50–100 out of the global arsenal of nearly 15,000 nuclear weapons would suffice to end civilisation in a nuclear winter, causing worldwide famine and economic collapse affecting even distant nations, as we saw in the previous chapter in the section dealing with South Asia. Eight nations now have the power to terminate civilisation should they desire to do so – and two have the power to extinguish the human species. According to the nuclear monitoring group Ploughshares, this arsenal is distributed as follows:

– Russia, 6600 warheads (2500 classified as ‘retired’)

– America, 6450 warheads (2550 classified as ‘retired’)

– France, 300 warheads

– China, 270 warheads

– UK, 215 warheads

– Pakistan, 130 warheads

– India, 120 warheads

– Israel, 80 warheads

– North Korea, 15–20 warheads.11

Although actual numbers of warheads have continued to fall from its peak of 70,000 weapons in the mid 1980s, scientists argue the danger of nuclear conflict in fact increased in the first two decades of the twenty-first century. This was due to the modernisation of existing stockpiles, the adoption of dangerous new technologies such as robot delivery systems, hypersonic missiles, artificial intelligence and electronic warfare, and the continuing leakage of nuclear materials and knowhow to nonnuclear nations and potential terrorist organisations.

In early 2018 the hands of the ‘Doomsday Clock’, maintained by the Bulletin of the Atomic Scientists, were re-set at two minutes to midnight, the highest risk to humanity that it has ever shown since the clock was introduced in 1953. This was due not only to the state of the world’s nuclear arsenal, but also to irresponsible language by world leaders, the growing use of social media to destabilise rival regimes, and to the rising threat of uncontrolled climate change (see below).12

In an historic moment on 17 July 2017, 122 nations voted in the UN for the first time ever in favour of a treaty banning all nuclear weapons. This called for comprehensive prohibition of “a full range of nuclear-weapon-related activities, such as undertaking to develop, test, produce, manufacture, acquire, possess or stockpile nuclear weapons or other nuclear explosive devices, as well as the use or threat of use of these weapons.”13 However, 71 other countries – including all the nuclear states – either opposed the ban, abstained or declined to vote. The Treaty vote was nonetheless interpreted by some as a promising first step towards abolishing the nuclear nightmare that hangs over the entire human species.

In contrast, 192 countries had signed up to the Chemical Weapons Convention to ban the use of chemical weapons, and 180 to the Biological Weapons Convention. As of 2018, 96 per cent of previous world stocks of chemical weapons had been destroyed – but their continued use in the Syrian conflict and in alleged assassination attempts by Russia indicated the world remains at risk.14

As things stand, the only entities that can afford to own nuclear weapons are nations – and if humanity is to be wiped out, it will most likely be as a result of an atomic conflict between nations. It follows from this that, if the world is to be made safe from such a fate it will need to get rid of nations as a structure of human self-organisation and replace them with wiser, less aggressive forms of self-governance. After all, the nation state really only began in the early nineteenth century and is by no means a permanent feature of self-governance, any more than monarchies, feudal systems or priest states. Although many people still tend to assume it is. Between them, nations have butchered more than 200 million people in the past 150 years and it is increasingly clear the world would be a far safer, more peaceable place without either nations or nationalism. The question is what to replace them with.

Although there may at first glance appear to be no close linkage between weapons of mass destruction and food, in the twenty-first century with world resources of food, land and water under growing stress, nothing can be ruled out. Indeed, chemical weapons have frequently been deployed in the Syrian civil war, which had drought, agricultural failure and hunger among its early drivers. And nuclear conflict remains a distinct possibility in South Asia and the Middle East, especially, as these regions are already stressed in terms of food, land and water, and their nuclear firepower or access to nuclear materials is multiplying.

It remains an open question whether panicking regimes in Russia, the USA or even France would be ruthless enough to deploy atomic weapons in an attempt to quell invasion by tens of millions of desperate refugees, fleeing famine and climate chaos in their own homelands – but the possibility ought not to be ignored.

That nuclear war is at least a possible outcome of food and climate crises was first flagged in the report The Age of Consequences by Kurt Campbell and the US-based Centre for Strategic and International Studies, which stated ‘it is clear that even nuclear war cannot be excluded as a political consequence of global warming’. 15 Food insecurity is therefore a driver in the preconditions for the use of nuclear weapons, whether limited or unlimited.

A global famine is a likely outcome of limited use of nuclear weapons by any country or countries – and would be unavoidable in the event of an unlimited nuclear war between America and Russia, making it unwinnable for either. And that, as the mute hands of the ‘Doomsday Clock’ so eloquently admonish, is also the most likely scenario for the premature termination of the human species.

Such a grim scenario can be alleviated by two measures: the voluntary banning by the whole of humanity of nuclear weapons, their technology, materials and stocks – and by a global effort to secure food against future insecurity by diverting the funds now wasted on nuclear armaments into building the sustainable food and water systems of the future (see Chapters 8 and 9).

# 2NC

## Arbitration cp

### 2NC – OV

#### The CP solves the whole aff using sectoral regulation and standard-setting rather than expanding antitrust law - that’s the 1NC Weinstein evidence

#### Solves advantage 1 in two ways:

#### By effectively regulating blockchain in procompetitive ways – the CP can encourage competition while also prioritizing consumer safety and systemic risk utilizing a model similar to the FCC’s regulation of the internet – ensures the CP solves better by inculcating innovation without letting the platform collapse

#### Through standard-setting – requiring open blockchain standards that mandate dominant blockchains offer open and non-discriminatory access to users who meet reasonable and fair membership criteria, the CP ensures that blockchains can’t engage in market dominance or unfairly exclude users

#### Solves advantage 2 in two ways:

#### Blockchain regulation, regardless of whether its done by the FTC, solves almost all of this advantage – their internal links are about FTC antitrust failures due to blockchain which the CP solves

#### Solves their FTC leadership scenario by having the FTC engage globally with international organizations on the data privacy implications of AI and machine learning which is what their 1AC Bellamy evidence is actually about

#### There are two net benefits –

#### The aff expands and antitrust law but the CP doesn’t – all of our antitrust DAs are net benefits

#### Utilizing antitrust instead of sectoral regulation for blockchain ensures that competition goals overdetermine policy and make it impossible for sectoral regulators like the SEC and CFTC to protect consumers and the financial system broadly from risky crypto behavior like fraud and speculation in derivatives markets – financial fraud funds terrorism, which goes nuclear and causes extinction

#### Analysis under antitrust laws precludes evaluating whether competition is good or bad – financial regulators can encourage competition while preventing fraud and protecting systemic risk in the financial system

Weinstein ’21 [Samuel; 2/19/21; Associate Professor of Law, Benjamin N. Cardozo School of Law; Georgia Law Review; “Blockchain Neutrality,” vol. 55, p. 499-592]

The Court conceded that vigorous competition sometimes may threaten consumer safety: the downward pricing pressure competition creates in some circumstances can lead suppliers to cut corners and market flawed or dangerous products.211 But the Sherman Act, the Court reasoned, embodies the idea that competition will result not only in lower prices, but also in higher quality goods and services.212 Even if competition occasionally leads to lower quality or risky goods, the “statutory policy” underpinning the Sherman Act “precludes inquiry into the question whether competition is good or bad.”213 The Court stressed that engineers’ frequent involvement in projects “significantly affecting the public safety” did not change the analysis: “[e]xceptions to the Sherman Act for potentially dangerous goods and services would be tantamount to a repeal of the statute.”214 In other words, the antitrust laws presume that competition will protect consumers both from higher prices and from unsafe goods and services.215

Financial regulatory agencies take a very different approach to the relationship between competition and safety and soundness. The SEC and CFTC have statutory mandates to consider competition in their work.216 Nonetheless, rather than assuming that unfettered competition will lead to higher quality and safer financial offerings, these agencies prioritize direct measures to fight fraud and preserve systemic soundness while often ignoring their competition mandates in regulating the markets they oversee.217 This disfavoring of competition considerations has not gone unnoticed. In a 2018 speech, SEC commissioner Robert J. Jackson, Jr. warned that the SEC had “forgotten a crucial part of our mission: to pursue the kind of vigorous competition that American investors deserve.”218 He asserted that the agency has “stood by while power in our financial markets has become more concentrated than ever before,” and he urged that the SEC “reclaim its historical role of ensuring competition” in U.S. capital markets.219 The CFTC in some instances has stated a commitment to promoting competition,220 but its enforcement record shows little tangible evidence that it devotes significant resources to independently pursuing competition cases; the vast majority of its enforcement efforts focus on investor protection and reducing systemic risk.221

The SEC’s and CFTC’s institutional cultures suggest that these agencies will favor traditional investor protection and systemic safety goals over maximizing competition when managing blockchain’s impact on financial markets. This approach risks forfeiting the opportunity blockchain networks offer for remaking the financial sector. Another regulatory model exists, however, that better addresses tensions between competition goals and public safety, and which provides useful precedent for blockchain competition policy: telecommunications and Internet regulation. While promoting a general policy of non-discrimination—which encourages competition—net neutrality principles allow for broadband providers to discriminate against harmful or fraudulent applications.222 Put another way, net neutrality prohibits discrimination against any third-party content or applications, unless they harm consumers or network infrastructure. The same principle animated earlier telecommunications regulations, such as the 1957 FCC order requiring AT&T to rescind tariff regulations to the extent that they barred customers from attaching to their phones “any . . . device which does not injure [AT&T’s] employees, facilities, the public in its use of [AT&T’s] services, or impair the operation of the telephone system.”223 Similarly, the FCC’s 1968 Carterfone decision invalidated a tariff AT&T had filed barring any non-AT&T equipment from being attached or connected to the phone system.224 The FCC found that the Carterfone, which allowed users to connect a telephone to a two-way radio by placing the telephone handset in a cradle on the Carterfone device, “fill[ed] a need[]” and did “not adversely affect the telephone system.”225 The Carterfone ruling opened the telephone equipment market to competition.226

Financial regulators should take a similar approach to rulemaking and enforcement for blockchain-based financial services networks. As a default, to encourage competition and innovation, regulation should require non-discrimination on blockchain networks while allowing networks to discriminate against applications that would harm the network or the public. Participants in a private, blockchain-based, derivatives-clearing network should have the authority to bar traders who are perpetrating a fraud or who represent unreasonable credit risks. That being said, close regulatory oversight of this authority is advisable. Considering the big banks’ penchant for using bogus or exaggerated safety and soundness considerations to disadvantage derivatives-trading rivals, the SEC and CFTC must carefully monitor exercise of alleged safety-based discrimination for competitive abuses. The burden should be on discriminating firms to produce a persuasive safety-based rationale for disadvantaging specific users or applications.

Further, as a general matter, the agencies should recognize the ways in which blockchain networks provide enhanced consumer safety as compared to incumbent technologies. Transactions and other data recorded on blockchains are more difficult to alter or manipulate than data stored on centralized systems, thereby offering users better protection against fraud.227 Regulators should weigh this enhanced security when considering rules governing blockchain competition.

### 2NC – AT: Perm do Both

#### 1. Permutation links to both the internal and external net benefits – includes antitrust so it links to the external net benefit and regulating blockchain with antitrust makes it impossible to evaluate specific cases using criteria other than competition – means it can’t solve things like financial fraud or systemic financial risk – that’s 1NC Weinstein and

Cappai 20 [Marco Cappai is a Research Fellow in EU Competition Law at University of Roma Tre and in Markets, Regulation and Law at LUISS, Italy, earned a Ph.D. in Economic and Consumer Law at University of Roma Tre, AND Giuseppe Colangelo is a Jean Monnet Professor of European Innovation Policy and Associate Professor of Law and Economics at University of Basilicata, Italy, also Adjunct Professor of Markets, Regulation and Law, and of Legal Issues in Marketing at LUISS and Bocconi University, Italy, “Navigating the Platform Age: the ‘More Regulatory Approach’ to Antitrust Law in the EU and the U.S.,” TTLF Working Papers No. 55, 2020]

Aside from debated questions concerning the ultimate goals of antitrust, competition is commonly accepted as the best regulator, meaning that an effective antitrust policy reduces the need for regulation. Indeed, it has been empirically observed that effective competition leads to lower prices, better quality (for existing products and services) and innovation (in new products and services).24 To this end, antitrust addresses the problem of market power through a flexible and horizontal system of proscriptions typically enforced with a backward looking procedure. In this sense, antitrust performs a prophylactic function by safeguarding the competitive process, instead of dictating market outcomes.

Conversely, regulation is prescriptive in nature. It favours forward-looking intervention based on a rigid set of (normally, sector-specific) clear-cut rules where the conduct required is identified from the outset. Hence, regulation ensures higher technical specialization and is more effective in addressing competition problems that result from structural market imperfections.

Furthermore, regulation has a wider scope than antitrust because it copes with a larger number of market defects and also pursues social aims. Indeed, in addition to the problem of market power, economic regulation deals with aspects such as externalities or spill-overs; information asymmetry; buyers’ inability to take care of their interests or to implement the exchange on their own; unfair allocation of resources and welfare.25

Considering their partial overlap in addressing market power, antitrust and economic regulation are often referred to as part of the same broad family.26 It follows that the choice between antitrust and regulation depends to a great extent on the trade-offs in the specific case concerned.27 Notably, it requires assessment of whether ex ante regulatory intervention in the market furnishes significant incremental benefits with respect to existing ex post antitrust policies of general applicability. This approach has, for instance, recently fuelled the debate on net neutrality regulation in the U.S.28 Indeed, according to a proportionality test, in a perfect scenario economic regulation should leave as much room as possible for competition law.29 Moreover, not only does the proportionality principle condition the choice between economic regulation and antitrust, but, once the former has been favoured, it also affects how regulation can impact on the market. Therefore, regulation should refrain from introducing artificial barriers to entry, such as excessive compliance and administrative costs; it should be transitory in time and in scope; and it should be as flexible as possible, especially when dynamic markets are involved.30

## Innovation Adv

### 1NC – Squo Solves/No Solvency

#### Decentralized permissionless blockchains are a low risk for anticompetitive behavior and its impossible to enforce antitrust laws against them

Pike and Capobianco ’20 [Chris; Gabriele; 2020; Partner and Managing Director (Head of Digital Markets) at Fideres, an economics firm that focuses on antitrust litigation exclusively from the complainant-side and an associate at the Centre for Competition Policy at the University of East Anglia; Junior Competition Expert at the Competition Division; OECD Blockchain Policy Series; “Antitrust and the trust machine,” https://www.oecd.org/daf/competition/antitrust-and-the-trust-machine-2020.pdf]

Permission-less blockchains both compete in, and are in effect, governed by markets. They have no formal governing body. Rather they exist as decentralised organisations, their governance controlled in effect by the validators that vote on whether to adopt the protocols that are proposed by developers and which then define the decision-making of the blockchain, rather than alternative protocols that would create a fork in the chain. These validators are therefore responsible for the service that the blockchain offers to the market.

However, these validators are numerous and their identities are pseudonymous. This means that, as a practical matter, it is extremely difficult to change the behaviour of the blockchain, since forcing the adoption of a protocol requires a degree of consensus amongst the validators of the chain. In effect, permission-less blockchains might therefore be seen as a huge employer-owned mutual (e.g. John Lewis), that can propose motions and vote on the firm’s detailed decision-making, while being unable to delegate decision-making to a board, nor even to recognise one another.4

Now, although we liken this governance framework to a market, the validators would appear unlikely to be considered to be independent contractors (as for example is claimed in the case of ride-sharing platforms), since they follow strict protocols in the gig-work they do for the blockchain. If they are workers or employees they would not face the risk of being accused of colluding with one another, however, this is being tested in the United American Corp. v. Bitmain, Inc. complaint.5

In a sense, they might be seen as a gig-working co-operative who collectively determine the blockchain’s offer to users (like Partners in a law firm), while individually having to follow the collectively determined protocols (like drivers on a ride-sharing platform). Like an oversized board, they may try to agree on the price that should be set. However, as noted, the prospects of countless pseudonymous validators successfully agreeing either to boycott validation of low-margin blocks, or to adopt new ‘price-raising’ protocols, appears far-fetched. Permission-less blockchains may therefore be seen as platforms which might potentially hold latent significant market power, but which are incapable of exercising that power.

As such, competition agencies would be well-advised not to spend time worrying about decentralised permission-less blockchains. Indeed, this form of blockchain offers a number of reasons for competition advocates to be cheerful (see Pike & Carovano, 2020).6 However, a caveat to this is that if – and it is a big if – if, somehow, a decentralised permission-less blockchain were to engage in anticompetitive behaviour, then big questions on practical enforcement arise.7

Firstly, how would you punish an entity with no assets, no bank account, no office, and such a large and pseudonymous board? Secondly, how would you stop the anticompetitive behaviour that was identified? Who would you instruct to change their behaviour. These would be extremely challenging questions. However, for now at least, they appear to be theoretical and not practical problems.

### 1NC – AT: Crypto Impact

#### No fintech impact – it’s a grift, which is why their cards are from techno-bloggers

Robinson 21 [Nathan James Robinson is an English-American journalist, political commentator, and editor-in-chief of Current Affairs magazine, which he founded in 2015. "Why Cryptocurrency Is A Giant Fraud." https://www.currentaffairs.org/2021/04/why-cryptocurrency-is-a-giant-fraud]

Many discussions of Bitcoin and cryptocurrency—I am going to use “Bitcoin” and “cryptocurrency” interchangeably for convenience, even though Bitcoin is just a specific cryptocurrency—begin with a long explanation of the blockchain technology that makes it possible. I think for the purposes of talking about what Bitcoin means and does, this is a mistake and a distraction—like having a discussion about the social effects of air travel by talking about how ailerons work. What matters for the purposes of our discussion is that it’s a made-up alternate system of money that, because it’s built on blockchain technology, can be transferred from one person to another without having to go through a bank or a payment processor. Because you don’t have to use a bank, and can easily transfer bitcoin from person to person, it is also “private,” in the sense that you don’t have to give anyone your credit card information or even your name to transfer funds. This makes it particularly attractive to criminals, because it’s sort of like the digital equivalent of cash: easy to hide, tough to trace. And because it’s not tied to a national government, Bitcoin can be used around the world without having to convert currency.

There are many who see this as revolutionary and important. “The popularity of this form of currency is expected to grow exponentially, as it is decentralized, safe, and anonymous,” reads one analysis. “The fact that a huge section of technology-savvy individuals and companies are favoring the decision of using different form of encrypted currencies clearly indicates that the future of Bitcoin or cryptocurrencies as a whole is going to be bright.” Across the internet, you can find blog posts and explainers that tout the benefits and possibilities of this new form of currency. Some people in positions of power agree: “This is the revolution,” said Rep. David Schweikert, a Republican member of the Congressional Blockchain Caucus. “We just have to sell it.”

I’ve been among those who have ignored cryptocurrency for a long time, but Vox has told me I am no longer allowed to, so I’ve read up on it. And I have to say, Schweikert is partly right: “selling it as a revolution” is a hugely important part of why cryptocurrency is succeeding. But as is generally the case when someone is trying to sell you something, the whole thing should seem extremely fishy. In fact, much of the cryptocurrency pitch is worse than fishy. It’s downright fraudulent, promising people benefits that they will not get and trying to trick them into believing in and spreading something that will not do them any good. When you examine the actual arguments made for using cryptocurrencies as currency, rather than just being wowed by the complex underlying system and words like “autonomy,” “global,” and “seamless,” the case for their use by most people collapses utterly. Many believe in it because they have swallowed libertarian dogmas that do not reflect how the world actually works.

Let’s start with the basic promise, that of being “decentralized, safe, and anonymous.” People like the word decentralized. I like it a lot myself. Nobody likes centralized authority. You know who liked things centralized? Stalin. But what does the word actually mean? In this instance, it means that financial transactions are peer to peer, rather than going through your bank or a processor like PayPal, and that there is no central bank altering the money supply, as there is with the U.S. dollar. Many of the pitches for Bitcoin begin by emphasizing its decentralized nature.

“Unlike services like Venmo and PayPal, which rely on the traditional financial system for permission to transfer money and on existing debit/credit accounts, bitcoin is decentralized: any two people, anywhere in the world, can send bitcoin to each other without the involvement of a bank, government, or other institution.” — CoinBase

“You Are in the Driver’s Seat — One of the best things about cryptocurrency is that, unlike virtually any other type of money retaining system (save for a wall safe or your wallet) you totally own it. Think about it: most traditional liquid asset systems – banks, credit unions, brokerage houses, or even high tech ones like PayPal – take control of your funds and leave you subject to their terms of service. If they decide that you have violated those terms, they can suspend your account. They can change their terms of service, and cause you to have to pay more or receive fewer funds for important transactions. With cryptocurrency, you retain all of the funds on hand, so to speak, digitally, with no third party involvement; the only one who can change the terms of your cryptocurrency use is YOU.” — Nasdaq

“[Cryptocurrencies] enable financial transactions quickly, inexpensively, and more securely. Decentralized crypto does everything that traditional fiat money does— and far more—because it is global and not subject to totalitarian government controls or any third-party interference.” — “How Does Cryptocurrency have Value and Why Should I Care?”

There are recurring themes and bits of rhetoric in the pro-crypto propaganda. (A term whose use is more than justified.) It’s about freedom. It’s about getting the government off your back. It’s about getting middlemen and third parties out of your transactions. It’s about control, autonomy, empowerment.

But if we get past the rhetoric and think about the implications for the average person, it’s not clear that we are actually meaningfully improving “freedom” in any but the most abstract, theoretical way. For the average currency user, why is it so important to get rid of banks and the government and these suspicious-sounding “third parties?” Yes, we all hate bankers, but is the tyranny of Venmo so oppressive that we should shed the U.S. dollar entirely and begin trading in an alternative currency? Yes, it’s true that if you bank with a credit union, you can think of it as “surrendering control of your assets to a credit union.” The crypto-enthusiasts raise the specter of violating the Terms of Service and having your account suspended. I don’t know about you, but this has not happened to me, ever. I’ve gone overdrawn and had to pay stupid fees (fees they hilariously euphemize as “overdraft protection”). I’ve had my debit card stop working because the bank thought a purchase was fraudulent and it wasn’t. But the main problems that people have with their banks and credit unions do not have to do with the bare fact that an institution is holding their money.

In fact, when we examine whether Bitcoin can function usefully as an alternative currency for the average person, we see that all of the grand claims for it fail entirely. Using it does not create greater security or safety for one’s finances. It does not free one from the oversight of the government. It is not convenient or free. Its volatility makes it functionally useless as a currency. Furthermore, these drawbacks are not fixable; they are products of the very concept itself. There is a reason that you are not using Bitcoin for transactions, even though it has been around since 2008. It is that while Bitcoin is based on an interesting technological innovation (blockchain), it is not a good idea for an alternate money system, due to its dependence on several libertarian illusions.

#### It causes devastating fraud and volatility – deters utility in other areas

Robinson 21 [Nathan James Robinson is an English-American journalist, political commentator, and editor-in-chief of Current Affairs magazine, which he founded in 2015. "Why Cryptocurrency Is A Giant Fraud." https://www.currentaffairs.org/2021/04/why-cryptocurrency-is-a-giant-fraud]

Safety Advantages of Bitcoin: Bitcoin already boasts several security benefits over traditional currency. When you buy something with a credit card, a third party pulls the funds from your account (known as a pull transaction). Bitcoin, on the other hand, uses push transactions, where you hand the payment over yourself. With pull transactions, hackers can pretend to be you and get your bank or credit card company to move money for them. With a push transaction, though, they need access to the money itself, not just your personal information. That’s not where Bitcoin’s safety features end, either. Bitcoin leverages the blockchain, so it’s decentralized and immutable. Some scholars suggest using Bitcoin to prevent identity theft because the system is so secure.

Fraud reduction – A payment made with bitcoin cannot be reversed after the fact. This is different from credit card payments, which can be reversed using chargebacks, a feature often exploited by fraudsters.

This really does essentially amount to lying. It depends on a confusing definition of “security” that misleads people into thinking they are somehow less likely to be scammed if they transact in cryptocurrency. In fact, because there are no trusted third-party institutions, if someone tricks you into a fraudulent transaction, there’s nothing you can do about it. Credit card payments, as noted above, can be stopped and reversed. But Bitcoin payments can’t. Once the money’s gone, it’s gone. This is touted as a feature because it helps merchants: if a customer gives the merchant money, the customer can’t take it back if they don’t like the merchant’s product. But most of us aren’t merchants. We’re consumers. The fact that transactions are “irreversible” may reduce the fraud risk for the merchants, but it has a flipside, which is increasing fraud risk for the customer. It’s not rational for consumers to surrender their right to stop a charge, and it’s not accurate to describe this as “fraud reduction.” In fact, it’s just shifting who suffers the consequences for fraud.

In fact, it turns out that there are a few advantages to having those “third party intermediaries” from whose tyranny cryptocurrency promises to help us escape. I grumble when my bank stops a payment on my credit card thinking it’s fraudulent, but I like that my bank has fraud protection. (Thanks, federal law, for putting a set of rules in place saying when banks are liable for fraud, thus incentivizing them to catch fraudsters.) Bitcoin’s decentralization means nobody is looking out for you. Nobody. Getting rid of a third-party institution that offers fraud protection is not making your payments “more secure,” it’s making them less secure. The use of “security” here means narrowly “it’s guaranteed that the person who is supposed to receive the money will in fact receive it.” But from the consumer’s perspective, the “security” of transactions is holistic, meaning that it doesn’t matter whether one aspect of the transaction is secure if there are many other aspects that are highly insecure. Often, if you look closely, there are serious qualifications and caveats about the “security” benefits—Bitcoin “can represent a safer alternative to fiat trading if the right conditions are met (namely implementing an effective blockchain analytics practice to remain safe from errant typologies that exist on the blockchain) [emphasis added.]” How likely are ordinary people to even learn what these words mean, let alone know whether they’re implementing them effectively?

Indeed, those without technical know-how are easy to steal from in the world of cryptocurrency. Bitcoin.org warns of scams including: “Blackmail, Fake Exchanges, Free Giveaways, Impersonation, Malware, Meet in Person, Money Transfer Fraud, Phishing Emails, Phishing Websites, Ponzi Schemes, Pyramid Schemes, Prize Giveaways, Pump and Dumps, Ransomware, and Scam Coins.” The same websites that tout the unbelievable security benefits of using Bitcoin, the way it can stop identity theft, then warn of Bitcoin identity theft. The “anonymity” of Bitcoin transactions may help you. But it may also help a scammer take advantage of you. For most everyday use, you don’t want anonymous transactions. You want there to be a record of what you paid and who you paid it to, so that they have a legal obligation to give you what you paid for, and it can be shown that they received the money.

### 1nc at: china digital currency

#### The “race” to Blockchain is just hype --- post-COVID decentralized currencies are inevitable, no major power will dominate

**Singer 20** [Andrew Singer, September 3, 2020, “Digital cold war? United States and China vie for blockchain supremacy,” https://cointelegraph.com/news/digital-cold-war-united-states-and-china-vie-for-blockchain-supremacy]

Two nations, two visions of the financial future: "The tech cold war is here — and the US isn't winning," wrote Ripple co-founder Chris Larsen in an opinion piece for The Hill recently. According to him, China has “a once-in-a-century opportunity to wrest away American stewardship of the global financial system, including its ultimate goal of replacing the dollar with a digital yuan." Western values of openness and freedom could be lost in this new financial order.

Others have sounded similar concerns. “There is a new space race. It is the cyberspace race of building and controlling the systems and governance that will power the digital economy,” wrote Perianne Boring, president of the Chamber of Digital Commerce. While the race includes other advanced technologies such as artificial intelligence, big data and the Internet of Things, blockchain is key, as China’s president, Xi Jinping, has noted. Alex Tapscott, co-author of the book Blockchain Revolution, told Cointelegraph:

“China is on the brink of launching its own digital currency while, at least on this issue, the United States is dragging its feet. The two visions for these central bank digital currencies (CBDCs) couldn't be more different. Whereas the U.S. wants to protect the U.S. dollar as global reserve currency, China wishes to export its own economic model around the world and tighten control at home.”

Overheated rhetoric?

Is this all just hype — scaremongering to gain some local advantage? Those raising the CBDC alarm may be overlooking some recent trends, such as de-globalization. According to an Aug. 14 report from Barclays: “The impact of COVID-related measures is likely to accelerate already established trends, such as de-globalisation”; i.e., the decreasing economic interdependence and integration among countries. That, in turn, could mean the question of who dominates the planet’s reserve currency will become increasingly moot.

Lone Fønss Schrøder, CEO of blockchain solution Concordium, told Cointelegraph that the threat to Western values from a new global CBDC — i.e., a digital yuan — is exaggerated: “I don’t think that’s a problem.” There’s been a tendency since the COVID-19 crisis for businesses and consumers to look for “deliverables” closer to home, Schrøder said. Rather than a new dominant world currency, a more likely solution is the rise and expansion of local currencies in a more decentralized world.

As a non-executive director of the board at Swedish home furnishings retailer IKEA, Schrøder recently participated in a board discussion around the question: Is the present COVID-hobbled global economy the new normal, or is it just a pause in globalization? She shared with Cointelegraph:

“It’s a big tendency — this producing and buying goods close to home — particularly among the younger generation. Not only do they want to support local businesses in an economic crisis, but they don’t want to waste the globe’s energy. They don’t want to sit in Sweden eating a piece of fruit that was grown on the other side of the world.”

According to Barclays’ report, the pandemic has revealed new globalization risks, “specifically related to China’s key role in ‘just in time’ global supply chains that rely on the timely delivery of intermediary goods for production to take place.” Multinational corporations are likely to rethink how to build resilience into their supply chains; that is, “less trade with China and diversifying production centres could follow, as well as attempts to re-shore some production to domestic suppliers.”

#### No impact to China “winning” the digital currency race --- US tech lead locked in

**Singer 20** [Andrew Singer, September 3, 2020, “Digital cold war? United States and China vie for blockchain supremacy,” https://cointelegraph.com/news/digital-cold-war-united-states-and-china-vie-for-blockchain-supremacy]

A digital yuan may not make a difference

Digitalizing the yuan by itself won’t necessarily ensure global financial dominance though. "Digitalization doesn't address the lack of free convertibility of the yuan," Andrew Collier, managing director of Hong Kong-based financial research company Orient Capital Research, told Nikkei Asian Review, adding that China’s competition with the dollar is more of a long-term strategy. That said, according to him, “the digitalization of the currency and other settlement systems gives an advantage to its (China's) institutions, which will be significant when the currency is liberalized" — even if it won’t immediately overturn the SWIFT interbank network.

Jason Brett, founder and CEO of Value Technology Foundation — a think tank focused on blockchain technology — told Cointelegraph that China launching a CBDC before the U.S. “absolutely does not guarantee global financial preeminence. If that was the case, the Bahamas should be dominating us with its Sand Dollar for years to come. Trading partners, weapons technology, all of this matters too.” He added:

“What is more unnerving about the Chinese launching a CBDC might be ways that the technology for their digital yuan may be used to surveil other countries in all of their transactions.”

In his opinion piece for The Hill, Larsen also noted that the Chinese government is subsidizing the vast amounts of energy needed to fuel the nation’s crypto mining industry, suggesting that China effectively controls Bitcoin (BTC). If the U.S. were to lose stewardship over the world’s financial system, including cryptocurrency, all sorts of dire scenarios could emerge, in his view. A U.S. defense payment to an ally could be blocked or reversed, for instance, or “U.S. banks could have their payments restricted if they run afoul of Chinese policy goals,” said Larsen.

Something similar was suggested by technology and risk management executive Jonathan Rosenoer in a recent Cointelegraph Magazine article: “By holding authorization keys, China could freeze transactions it doesn’t like or seize digital assets by locking customers’ mobile wallets at will.”

One tech sector among many

Others suggest that any financial damage that China could do to the U.S. would be limited. Tapscott told Cointelegraph that “losing global reserve status would significantly diminish U.S. hegemony in financial markets and reduce its power globally, but it would not cripple it entirely.”

Steve Mushero, an American tech entrepreneur who founded and serves as CEO of Shanghai-based ChinaNetCloud, told Cointelegraph that a U.S.–China cold war may be shaping up on many fronts — not only tech but also trade, economics and even human rights.

If one considers the tech sector alone, however, “China does very well in digital payments, and some parts of AI like people tracking, some logistics and gaming, and some consumer stuff like TikTok, but very little else.” In the broader tech world — which encompasses dozens if not hundreds of areas including aerospace, energy, water, weather, agriculture, satellites, autonomous ships, enterprise software, cloud computing, the chip market and others — “China has few, if any, players at all,” said Mushero, adding:

“Broadly the U.S. leads nearly all technologies and generally does not care nor need anyone else; however, individual companies like Apple and some others do, and no one wants to let a big competitor grow up unfettered abroad and then come ashore as Japanese companies did with consumer electronics [in the 1980s].”

Some worry that China’s authoritarian regime has the advantage of being able to throw vast sums of money at emerging technologies like blockchain and AI, but “The Chinese way is not necessarily better,” Brett told Cointelegraph. The U.S., like other democratic countries, may be slower to act, “but once it identifies an issue, it is able to rally together to beat back totalitarian regimes, just as we did in WWII.”

### 1nc at: econ

#### Econ Decline doesn’t cause war

**Clary 15** – Christopher Clary, PhD in Political Science from MIT, M.A. in National Security Affairs, Postdoctoral Fellow, Watson Institute for International Studies, Brown University, 2015 (“Economic Stress and International Cooperation: Evidence from International Rivalries,” April 25th, Available Online via SSRN Subscription)

Do economic downturns generate pressure for diversionary conflict?

Or might downturns encourage austerity and economizing behavior in foreign policy? This paper provides new evidence that economic stress is associated with conciliatory policies between strategic rivals. For states that view each other as military threats, the biggest step possible toward bilateral cooperation is to terminate the rivalry by taking political steps to manage the competition. Drawing on data from 109 distinct rival dyads since 19i9 50, 67 of which terminated, the evidence suggests rivalries were approximately twice as likely to terminate during economic downturns than they were during periods of economic normalcy. This is true controlling for all of the main alternative explanations for peaceful relations between foes (democratic status, nuclear weapons possession, capability imbalance, common enemies, and international systemic changes), as well as many other possible confounding variables. This research questions existing theories claiming that economic downturns are associated with diversionary war, and instead argues that in certain circumstances peace may result from economic troubles. I define a rivalry as the perception by national elites of two states that the other state possesses conflicting interests and presents a military threat of sufficient severity that future military conflict is likely. Rivalry termination is the transition from a state of rivalry to one where conflicts of interest are not viewed as being so severe as to provoke interstate conflict and/or where a mutual recognition of the imbalance in military capabilities makes conflict-causing bargaining failures unlikely. In other words, rivalries terminate when the elites assess that the risks of military conflict between rivals has been reduced dramatically. This definition draws on a growing quantitative literature most closely associated with the research programs of William Thompson, J. Joseph Hewitt, and James P. Klein, Gary Goertz, and Paul F. Diehl.1 My definition conforms to that of William Thompson. In work with Karen Rasler, they define rivalries as situations in which “[b]oth actors view each other as a significant political-military threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry.

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.

### 1nc at: competitiveness

#### No competitiveness impact – other countries solve AND resilience.

**Grabel 18** Ilene Grabel, International Finance Professor at the University of Denver. This book won the 2019 International Political Economy Section Best Book Award from the International Studies Association. [When Things Don't Fall Apart: Global Financial Governance and Developmental Finance in an Age of Productive Incoherence, The MIT Press, Print]//BPS

Discontinuities, Productive Incoherence, and the Global Crisis The years leading up to the global crisis, and the crisis itself, precipitated significant and sustained change in the conditions facing EMDEs. Most important among these are an emerging attitude of intellectual uncertainty, pragmatism, and empiricism in the economics profession; a new landscape within which the BWIs operate, where they must negotiate to achieve and sustain influence that now seems precarious, and where they confront demands for governance reforms from increasingly assertive former clients, and potential and actual competition from and cooperation with EMDE institutions; the lack of recovery in Europe, and the fragility of the recovery in the United States; the serious and deepening financial fragilities and slowdowns in growth in EMDEs; and the tarnished image of the Anglo- American financial model. The discontinuities that have emerged in the financial governance landscape can only be understood in the context of these unique circumstances.13 The global crisis spurred expansion in the membership and scope of existing transnational financial governance networks. The Leaders' G-20 replaced the Leaders' G-8 in 2008, and the mandate and membership of the Financial Stability Forum (FSF) was broadened (and the body was renamed the Financial Stability Board, or FSB). It is true that these net¬works have proven to be unimaginative, timid, and impotent, even if they are more inclusive than their predecessors (Helleiner 2014b; Blyth 2013a; Payne 2010; Vestergaard and Wade 2012b).14 Nonetheless, these groups should not be dismissed prematurely, since their future is not fore¬ordained. Indeed, they may emerge over time as forums in which EMDE policymakers are able to promote serious dialogue, build relationships and coalitions, learn from one another, and refine their capacities to maneuver on the international stage and within multilateral institutions (Woods and Martinez-Diaz 2009). Both the continuity and discontinuity views of the G-20 and FSB (and financial governance more generally) are represented in Helleiner's work. The Status Quo Crisis (Helleiner 2014b) sustains the continuity view. Hel¬leiner argues there that the central roles of the U.S. Federal Reserve and the U.S. dollar have not just been unchallenged but have actually been strength¬ened by the crisis. In this account, formation of the G-20 and the FSB (and other initiatives) has not altered the global financial governance architec¬ture to any appreciable degree. Helleiner's book nevertheless concludes with brief speculation about the potential for transformation over the medium term. In other work, both prior to and following his 2014 book, Helleiner speculates that the pressures unleashed by the crisis could ultimately result in more decentralized and fragmented international financial governance. Not least, he and Pagliari argue that current trends in financial regulation point in the direction of "cooperative regulatory decentralization" (see Helleiner 2009; Helleiner and Pagliari 2011). More recently and less equivocally, Hel¬leiner (2016b) argues that policymakers are in fact "stumbling incremen¬tally" toward such a regime—one that involves both increased multilateral cooperation and deepening decentralization—and that the G-20 and the FSB have begun to make more meaningful commitments. The global crisis has had more immediate and significant effects on the IMF. These effects have been complex and uneven (Grabel 2011). On the one hand, the crisis has restored the IMF's relevance, coffers, and central role as first responder to financial distress, just when long-standing critics might have hoped for new institutional arrangements to manage crises that would have displaced or demoted the Fund. In important respects, IMF assistance to countries in distress has followed its well-rehearsed script: many condi- tionality programs continue to stress contractionary macroeconomic policy adjustments, privatization, and liberalization (Gabor 2010; Kentikelenis, Stubbs, and King 2016; Nelson 2014a; Weisbrot 2015). Moreover, EMDEs have secured only very modest commitments for increases in their IMF voting shares. Today the United States and Europe continue to exercise dispropor¬tionate influence at the institution (Lesage et al. 2013). The other side of the ledger is not blank, however. Today there are prom¬ising signs that the neoliberal ideas and prescriptions of important economists and departments at the Fund are being challenged by the global crisis in ways that most observers did not anticipate. In response, IMF economists are learning to live with significant departures from the old script. Most notable in this regard, Fund leadership, research staff, and staff working with countries in distress have moved further and more consistently in the direction of normalizing the use of controls over capital inflows, and even on outflows (Grabel 2011; 2015b; 2017; Chwieroth 2015; 2014; Gal¬lagher 2014; Moschella 2014). There is also evidence of change—uneven and inconsistent though it may be—concerning the IMF's approach to fis¬cal policy during the crisis (Ban 2015; Grabel 2011). Fund economists have developed conditionality programs that, while still harsh, display greater flexibility than was the norm during previous crises. While the Fund con¬tinues to advocate fiscal retrenchment, it also now routinely emphasizes the need for "pro-poor spending" to protect the most vulnerable during crises. The IMF's crisis response strategy is marked by ad hoc measures that reflect important ambiguities within the institution. Strikingly absent here is the unyielding attachment to a global strategy of neoliberalism that marked its interventions over the past several decades. The IMF's geography of influence during the global crisis has been trans¬formed substantially as well. Some of its former clients have emerged as important lenders. At the same time, the institution's client base has largely shifted to the European periphery, and in Europe the IMF appears to be the weakest leg of the European "Troika." Indeed, there is substantial evi¬dence of tension between the IMF and European authorities over important matters such as debt sustainability in Greece—which became particularly evident during the summer of 2015, when a third assistance package for the country was being negotiated—and the most severe forms of austerity in peripheral European economies.15 In a different vein, but in keeping with the idea of discontinuities at the IMF, in 2015 China achieved a long-sought goal of having the IMF include its currency in the SDR. In addition, though the formal voice of EMDEs at the IMF has increased only trivially, the crisis has opened channels for several of these countries, particularly China, to increase their informal influence. Moreover, we find increasing inconsis¬tency between the rhetoric coming from the institution, its research, and its actual practice. As we will see, the rhetoric-research-practice gap reflects something more than public relations imperatives. The gap reveals increas¬ing contestation and even confusion within the Fund. Of equal if not greater importance, productive incoherence is also evi¬denced in the emergence of a far more heterogeneous financial governance architecture. As noted, the East Asian crisis renewed interest in the creation of alternative institutions of financial governance. The drive toward institutional innovation was given far greater force during the global crisis, while the resources necessary to sustain such experiments only became avail-able to rapidly growing EMDEs following the Asian crisis. New innovations have now emerged at the transregional, regional, subregional, bilateral, and national levels. Today we encounter a range of new and expanded reserve pooling arrangements and development and infrastructure banks. Existing institutions evolved in significant ways during the global crisis and have continued to do so (as we will see in the discussion of the Chiang Mai Initiative Multilateralisation, the Arab Monetary Fund, the Development Bank of Latin America, the China Development Bank, and Brazil's National Eco¬nomic and Social Development Bank). At the same time, new arrangements have arisen to rectify perceived failings in the global financial architecture, particularly the shortage of infrastructure financing. The new arrangements are exemplified in twin BRICS initiatives, the New Development Bank and the Contingent Reserve Arrangement, and also in the Eurasian Fund for Stabilization and Development and in the China-led Asian Infrastructure Investment Bank and the One Belt, One Road Initiative/Silk Road Fund. These and other innovations are emblematic of developments and aspi¬rations across EMDEs. The new willingness and ability to undertake innovation in financial governance may turn out to be one of the most important legacies associated with the global crisis, especially when compared with prior crises. The new arrangements do not coalesce around a singular, grand global architecture that might replace the BWIs. Instead, we are observing productive incoherence in the expansion of disparate and, in some cases, overlap¬ping and interconnected institutions that complement the BWIs. Taken together, they are "thickening" and diversifying the financial landscape in EMDEs and introducing the possibility of a transition to a more complex, decentralized, multitiered, pluripolar global financial and monetary system (Armijo and Roberts 2014; Chin 2010; Grabel 2013a; 2013b; Huotari and Hanemann 2014; Mittelman 2013; Riggirozzi and Tussie 2012). The expan¬sion of these initiatives is widening policy space for development. They also generate opportunities for experience-based learning and the creation of new partnerships and coalitions, and in turn enable EMDE "forum shop-ping." In sum, the initiatives are substantially complicating the terrain on which the BWIs operate. We might also understand these institutions, how¬ever small in scale, in terms of their potential to increase robustness and even what Nassim Taleb (2012) terms "anti-fragility" of the global financial governance architecture. This would involve a collection of institutions that enjoy some degree of autonomy from each other, where crises are less likely to generate contagion across countries, and where each crisis might allow for learning that induces new innovations that are better able to prevent and limit the scope of future crises. What I call the productive redun¬dancy that is a feature of the emerging financial governance landscape is central to the achievement of these goals.

#### US is already at the top and challengers won’t challenge for primacy

**Nusca 18** [Andrew, "U.S. Returns to No. 1 in Global Competitiveness, Report Says" fortune.com/2018/10/16/global-competitiveness-report-usa/]

The United States is the most globally competitive nation in the world for the first time since the 2008-2009 global financial crisis, according to a new report. Singapore, Germany, Switzerland, and Japan rounded out the top five. The latest Global Competitiveness Report, conducted by the World Economic Forum, uses a new methodology that aims to better account for the effects of the so-called Fourth Industrial Revolution. WEF, as it’s known, credits three things for U.S. supremacy among 140 economies: market size, innovation ecosystem (including idea generation, entrepreneurial culture, openness, and agility), and stability. The study measured each nation using 98 indicators. “These developments—the Fourth Industrial Revolution and the consequences of the Great Recession—are redefining the pathways to prosperity and, indeed, the very notion of prosperity, with profound implications for policy-making,” wrote WEF founder and executive chairman Klaus Schwab in the report’s preface. “Concerned leaders are grappling for answers and solutions, aiming to go beyond short-term, reactionary measures.” It’s not all sunshine for the U.S., though. According to WEF, there are indications of a weakening social fabric in the States—the nation scored 63.3 out of 100, down from 65.5—and worsening security thanks to a homicide rate that’s five times the average of other advanced economies. What’s more, the U.S. was just 40th place for checks and balances (score: 76.3 out of 100), 15th for judicial independence (79.1 out of 100), and 16th for corruption (75 out of 100). But the American innovation economy is strong. “Once the preserve of the most advanced economies, innovation has become an imperative for all advanced economies and a priority for a growing number of emerging countries. And yet the vast majority of them are struggling to make innovation a meaningful engine of growth,” the report’s authors write. “The results show that there are only a few innovation powerhouses in the world, including Germany, the United States and Switzerland.”

## Digital Security Adv

### 1NC – AT: Blockchain IOT

#### Blockchain IoT fails

Saima Zafar 21, Associate Professor, Department of Electrical Engineering, National University of Computer and Emerging Sciences, Lahore Pakistan, et al., 5/31/21, “Integration of blockchain and Internet of Things: challenges and solutions,” Annals of Telecommunications, https://doi.org /10.1007/s12243-021-00858-8

(5) Transaction speed performance: Most of the IoT use cases have a requirement to process about 1000 or above data transactions per second on average. Yet, if we consider the bitcoin blockchain, it provides only 7 transactions per second. Clearly, a huge gap exists between the IoT transaction processing mechanism and the bitcoin blockchain. An important future research challenge is to minimize this gap by scaling up the transaction processing performance of decentralized blockchain.

(6) Blockchain protocol redesign: Our research on blockchain and IoT integration challenges has directed us to the stance that blockchain fundamental protocol redesign is needed in terms of network broadcasting mechanism, storage, data accessing mechanism, and security mechanism, while keeping blockchain’s decentralized nature.

(7) Blockchain re-parameterization: Keeping in mind the present scalability bottlenecks of the blockchain, it is important to consider that to what extent the blockchain core parameters re-designing can be worked without effecting and sacrificing security provided by the blockchain.

### 1nc at: ai

#### AI Impact is wrong

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

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