# 1AC R2 – Wyoming CM

## 1AC – Districts

**Plan: The United States federal government should prohibit artificial centralization of distributed ledger technology networks as an anti-competitive business practice.**

### Adv – Innovation

#### Blockchain will massively undermine status quo antitrust enforcement

Schrepel 19 [Thibault, Assoc Prof of Law at VU Amsterdam Univ, Faculty Affiliate at Stanford Univ CodeX Center, blockchain expert appointed to the World Economic Forum, “Is Blockchain the Death of Antitrust Law? The Blockchain Antitrust Paradox,” *Georgetown Law Technology Review* 3.2, heinonline, JCR] \*edited for ableist language

Because the future evolution of blockchain is unknown, it is difficult to evaluate the scope of the practices that will develop along with it. This article has identified several unilateral anticompetitive practices. They are most likely to occur on private blockchains. However, most of the usual mechanisms of antitrust law will be ineffective in the face of blockchain. 2 3 8 Even with the "regulatory infiltration" proposed using a "law is code" approach, some of the instruments which are used today, such as emergency measures or commitments, will be ineffective in their current form. 239 In the face of blockchain, current antitrust law may well be eliminated. In fact, three factor corroborate this hypothesis. First, antitrust law will probably become ineffective without regulatory infiltration. For the first time in its history, antitrust law will have to be greatly supplemented by regulations taking the form of a "law is code" approach. Indeed, antitrust law will not have complete answers to three issues: how to detect the anticompetitive practices committed on the blockchain, how to identify the actor responsible for these practices, and finally, how to remedy them for the future. While the author of an anticompetitive blockchain can sometimes be identified, the effectiveness of sanctions and remedies may be ~~crippled~~ [undermined] by blockchain's immutability. Presciently, the home page of the Ethereum Project reads: "Build unstoppable applications."240 Thus, even where antitrust law finds a way to regulate blockchains, it may die because it is no longer a creator of welfare on its own. Think of it as the unfortunate death of jazz: the music still exists and has listeners, but jazz no longer creates debate or leads to any movement that ventures beyond its own framework. Second, public blockchains will limit monopolization even when new governance mechanisms are implemented. In particular, predatory pricing and refusal to deal appear to be exceedingly unrealistic, while tying, margin squeezing, exclusionary dealing, loyalty rebates, and exploitative and discriminatory abuses are unlikely to occur. Furthermore, because the transactions implemented on public blockchains are visible to all, the incentive to engage in anticompetitive practices is reduced since market surveillance and industry monitoring can easily root out illegal activity. However, some perpetrators will be protected by the "opacity effect" created by the characteristics of the technology. This is particularly true for private blockchains where entering it, absent regulation infiltration, is technically impossible. In short, anticompetitive practices are expected to be rare on public blockchains, but these practices could be plentiful on private blockchains that operate below authorities' radar. The same issues arise outside the scope of unilateral practices, namely, for collusive agreements where the identification of colluders and the unsuitability of existing mechanisms to stop and punish such practices is equally problematic.241 The third and final reason to expect the death of antitrust law is tied to its foundations. Without a doubt, regulators will find ways to submit blockchains to the law, whether it is by way of regulatory infiltration-which is recommended-or other ways that place the technology at risk, such as the regulation of end users, transportation layers, information intermediaries, blockchain intermediaries, transaction processors or code, architecture or hardware manufacturers-which is not recommended.m But even if antitrust law remains as a body of positive law,24 3 the regulator may end up protecting the existence of antitrust law even though its initial goals are no longer fulfilled. After all, modern antitrust law is built on the premise that the Sherman Act is concerned with trusts.2 44 Without trusts, are antitrust laws needed? This is the "blockchain antitrust paradox": antitrust laws' potential lack of legitimacy (and efficacity) on the one hand and the need to stop anti-competitive practices on the other. Furthermore, the death of antitrust law might not be solely linked to blockchain technicalities. The fate of antitrust law might also be determined by the inherent conflict between the logic of blockchain technology and the logic of antitrust law. Recall that there is no trustee in the sense of a third-party fiduciary within the framework of blockchain. In other words, the target of antitrust laws is absent.245 Blockchain challenges the raison d'etre of antitrust law. Conversely, antitrust law was created for, and is applied by, centralized regulatory agencies, such as the FTC, the DOJ, and the European Commission. Enforcing antitrust law amounts to imposing vertically designed rules and concepts on a technology built around the desire for decentralization.246 But blockchain is used not only for "philosophical" reasons related to its decentralized nature but also because it is practical, and in fact, blockchain's practicability results from its decentralization.247 In short, this opposition between the vertical nature of antitrust law and the horizontal or decentralized nature of blockchain raises a legitimacy concern. The cultural and sociological factors that led to the development of blockchain technology cannot be ignored by the law. As a consequence, on top of all the challenges related to blockchain technicalities, another concern is the legitimacy of antitrust law with respect to this technology. To address this concern, a way must be found to decentralize antitrust law and antitrust authorities.248 This will require a minima to design and implement new governance models using blockchain.250 Antitrust authorities can no longer rely on pyramidal structures nor continue to operate in a closed circle on the model of nation-state-led government. Antitrust law as we know it must die and be reborn. If not, it soon will be illegitimate.

#### Leads to a confrontational regulatory approach, which gets circumvented and guarantees dominance of centralized ecosystems

Schrepel 21 [Thibault, Assoc Prof of Law at VU Amsterdam Univ, Faculty Affiliate at Stanford Univ CodeX Center, blockchain expert appointed to the World Economic Forum, *Blockchain + Antitrust: The Decentralization Formula*, p.238-9, JCR]

Opting for a confrontational approach will put blockchain ecosystems at risk. Let me generalize my findings and return to the MOAF approach to explain why that is. First, a confrontational approach would not be desirable from the regulators' point of view. Aggressive law enforcement would indeed threaten the fundamental principles of encryption and immutability. While that might deter some illegal behaviors, it would also threaten all sorts of beneficial practices that rely on either of these two principles. Thus, the accuracy level would remain low because it would entail numerous false positives and eventually deprive regulators of blockchain's contribution to the common good. In terms of manageability, a confrontational approach would put blockchains under the regulator's control. Enforcing and monitoring costs would be extremely high. This approach would require costly deanonymization services and expansive practices altering the registers, stopping smart contracts and carrying out forks. Second, this approach would also be detrimental to blockchain communities. In terms of objectivity, regulations of this sort could be relatively predictable for private actors, but objectivity would suffer from the resistance of certain blockchain communities. Technical innovations would rapidly emerge to escape regulation, forcing the regulator to continually adapt its regulations and apply them inconsistently. In terms of flexibility, this confrontational regulation would open the blockchain fortress with a tank. It would be highly coercive. New regulations would forcibly impose enforcement mechanisms on all blockchain communities — or, at the very least, on a (large) part of them — by eliminating some of the technology core characteristics. In other words, implementing regulations of this sort would be like using a sledgehammer to crack a nut. This is not a pretty picture." Blockchain is still a burgeoning technology and adopting a confrontational approach would end up removing some essential features for its survival against other species (i.e., centralized ecosystems). Alternatively, these regulations would be ineffective, as communities would work to escape the rule of law. If confrontational law lags behind the technology, its enforcement will partially be held in check for the reasons I have discussed. If, on the contrary, confrontational law is ahead of technology, the latter will circumvent and escape it by eliminating control mechanisms and changing governance and incentives (not always for the better). This will be limited, as only the most advanced part of the community would succeed; but that fraction would take a chunk of the users with it. The rule of law would not regain its full primacy. In fact, we have seen this already. When the New York State Department of Financial Services imposed a requirement to obtain a "BitLicense" before engaging in Bitcoin activities?' several startups moved to New Jersey. If developers cannot vote with their computers, they vote with their feet by relocating their operations. This affects all users. In a nutshell, one must reject the confrontational approach because it allows neither the law (here, antitrust) nor the technology (here, blockchain) to fully achieve its objective. One must find another way to enter blockchain ecosystems. I offer an alternative option in that regard.

#### US failure to adapt to blockchain tech is causing a massive soft-power shift to the Indo-Pacific – wrecks leadership and crushes growth for decades. Leads to walled gardens that disrupt international trade.

Wintermeyer 21 [Lawrence, co-founder of Global Digital Finance, a non-profit promoting fair and transparent markets, former CEO of Innovate Finance, the UK FinTech members association, “Will The Revolution Be Tokenized: Governments, Blockchain, And The Digital Space Race,” 10/06/21, <https://www.forbes.com/sites/lawrencewintermeyer/2021/10/06/will-the-revolution-be-tokenized-governments-blockchain-and-the-digital-space-race/?sh=337f9b7e5170>, accessed 10/29/21, JCR]

In 2015 The Economist magazine hailed blockchain as “the trust machine”, capable of replacing governance structures, displacing institutions, and bringing a new level of transparency to transactions and information, with implications across public life. In the years since, the technology has produced trillion-dollar decentralized financial markets and a slew of innovation over blockchains especially in financial services, with the rise of bitcoin, stabelcoins, decentralized finance or DeFi, Central Bank Digital Currencies (CBDCs), and other industries such as shipping, logistics and supply chains are starting to scale use cases. OECD research, however, shows little breakthrough in blockchain innovation in government and minimal impact in the public sector - the technology is often described as a solution in search of a problem. While the technology is rapidly maturing, we are starting to see governments take an interest in blockchain and distributed ledger technology (DLT) in areas such as tax, standards and certification, digital identity, and data privacy. For governments, assessing blockchain’s disruptive potential is both a practical challenge and a philosophical one. The raison d’etre of many public institutions is the provision of public goods, and the underwriting of rights and the social contract – functions that blockchain’s pioneers sought to replace with cryptography, networks, and protocols. Whether this technology will be used to displace or complement traditional governance models is an open question, as is its ability to deliver such transformation. This year’s opening discussion at the OECD’s 4th Annual Blockchain Policy Forum addressed several the main opportunities and challenges at the intersection of technology and governance to disentangle blockchain’s promise from reality and explored the extent to which the technology can and should be guided by governments towards better models of social and economic connection. “In global trade, the leaders in blockchain technologies are the Indo-Pacific based governments like China and Singapore. Trade is the lifeblood of this region which is considered the global trading hub. China and Singapore have been early to understand the benefits of the blockchain for supply chain management, not just for the provenance and tracking of goods, but for tax, customs, and digital rights. “Blockchain has dramatically scaled the 14th century Venetian innovation of the double-ledger into a theoretically infinite multidimensional ledger which is public, open, transparent, and immutable, and secures access using cryptography. It’s like another layer of the Internet, with greater resilience against cybercrime, and integrates multiple stakeholders in much better management of the economy,” says Alex Sandy Pentland, MIT professor and director of MIT Connection Science. In a world with geo-political turbulence and trade headwinds, digital leadership in sectors like central bank digital currencies and supply chains using new digital technologies really matter – welcome to the digital space race. The intellectual property, technologies, and standards in blockchain are now being used to gain a global foothold in trade. Importantly, this is helping to drive rapid adoption with low friction use cases and easy to access services. Blockchain is helping counties that are early movers and leaders in this space to position themselves to generate decades of industrial, societal, and economic growth. “Governments need to learn how to adopt and adapt to polycentric governance models to better engage the broad range of actors and stakeholders required to compete in the digital world without having to create new overarching bureaucratic institutions,” says Primavera De Filippi, permanent researcher at the National Center of Scientific Research in Paris (CNRS) and faculty associate at the Berkman Klein Center for Internet & Society at Harvard University. Most of the blockchain DLT technologies are developed in open source with large pools of developers participating by voting through digital protocol governance models which extend in many protocols to other entities becoming governance nodes. This is akin to a large mutual society and is risk adjusted both by the volume of experienced participants and stakeholders and its polycentric nature. “There are two big benefits for governments building out their programs on the blockchain; the first is COLLABORATION – governments can attract a larger and more diverse range of stakeholders to build out and adopt the digital infrastructure for trade, tax, identity, financial services, etc., and use the power of the crowd – this is markedly different to large enterprise software projects which have significant concentration risks including the number of commercial stakeholders that can engage. The second is CERTIFICATION – governments can move away from using “sticks” by offering “carrots” to stakeholders that exhibit measurable compliant behaviors – this could dramatically change the way we look at regulation and compliance. “This is all achievable through smart contracts on the blockchain and can be accomplished now without new contract law if we adopt “functional equivalence” for smart contracts, just as we adopted it moving from paper to electronic contracts. The only big decision that governments need to make upfront is whether to use public or private blockchains, or a mix, and this decision merits significant consideration of the specific use case,” says De Filippi. Adds Pentland, “there is a great transfer of “soft power” taking place with blockchain technologies, and when it comes to trade, it is Indo-Pacific led. It is important as the systems grow that they focus on a level of interoperability with each other through standards, to ultimately deliver the benefits that distributed ledger technologies offer – multi-dimensional participation. If countries seek to go down the “walled garden” route, interoperability will go down the drain and the global trade system will be open to further arbitrage opportunities by those that seek to exploit this situation.” Governments and industry must recognize that blockchain is now mature, here to stay, and ready to use, today. The technology is more than a decade old and the underlying technologies of distributed databases, cryptography, and peer to peer networking have been with us since the dawn of computing. Software developers are delivering blockchain use cases to market quicker than most industries, governments, and regulators can keep up with – that is the power of the polycentric networked crowd. There is more innovation going on outside your four walls than inside, and you need to know how to plug into it. As is often the case, it is the systematic factors coupled with institutional bias that are barriers to governments and managers understanding how and when to mobilize new innovative technologies and methods for society, and in many instances, few are really incentivized to make it happen. The blockchain revolution provides “the platform” to engage large numbers and dimensions of stakeholders in the economy through shared mutual governance – the major incentive is already there, it is baked into the governance model – greater and more efficient economic participation in the economy. Governments would be wise to be serious about prioritizing the digital space race. If the revolution is tokenized, it will be because large public blockchain consensus protocols are tokenizing it, and large swathes of global business and consumers are using it.

#### Rapid crypto expansion without global management frameworks ensures the crypto version of 2008 – leaks into broader finance accelerate the impact.

Financial Times 2/20 (FT Editorial Board, 2-20-2022, Crypto’s rise requires a global response, Financial Times, <https://www.ft.com/content/e5084635-9fdc-40d9-8d9e-d886c336d4a5>) MAM

If there was one principle uniting the diffuse challenges facing G20 finance ministers at this weekend’s meetings, from inflation to climate change, it was that prevention would have made all of them much easier — and cheaper — to deal with. The same applies to one of the most prominent issues of financial regulation: setting global rules for managing cryptocurrencies. Perhaps this was why the finance ministers wisely accepted the conclusions of a report by the Financial Stability Board into the sector. No major changes in regulation were announced. But agreement to accelerate monitoring and to find regulatory gaps that need filling, are welcome first steps in the journey to ensure speculation in crypto remains an individual, rather than a socialised, risk. Policymakers used to assume that crypto, while problematic for a number of reasons — including its potential to defraud ordinary investors and launder criminals’ ill-gotten gains — would not threaten the health of the financial system. This assumption may not be safe for much **longer** as cryptocurrencies and related assets become more mainstream. Problems in markets for cryptocurrency may increasingly “leak” into the broader financial system — imperilling the stability of banks, other lenders and so the wider economy. Cleaning up after such a crisis will be more expensive than preventing it from happening in the first place. A survey published in June 2021 found that hedge funds expected to expand their holdings of so-called cryptoassets substantially. Instruments linked to cryptocurrency, such as derivatives, are likely to proliferate: many traders use options to bet on bitcoin’s value. Fidelity, one of the world’s biggest asset managers, launched a bitcoin exchange traded fund last week. Crypto’s move out of the shadows increases the risk that a sharp drop in price could **shake confidence in major players**, especially those that have funded their exposure through borrowing. The nightmare scenario would be a crypto version of the 2008 financial crisis. On that occasion, uncertainty over which institutions were exposed to a collapse in novel financial securities was enough to cause financial markets to freeze up. For the moment though, there is no comparative “shadow banking” system that backs lending to the real economy with cryptoassets. Few would consider bitcoin a “safe asset”, unlike the mortgage-backed securities that were at the centre of the 2008 crisis. If anything is to fulfil this role it is likely to be stablecoins, which account for a significant majority of all trading in cryptocurrency. These tokens are meant to be fully convertible to ordinary currencies, usually the US dollar. This grants them, with their apparent safety and stability, many of the same properties of bank deposits — which are similarly meant to be convertible to state-backed money on request. A big enough shock to crypto markets may lead to investors seeking to “cash in” their stablecoins, behaving like depositors in a bank run. This would force stablecoin providers to sell their assets in order to get investors their money. If this resulted in a fire sale, other markets could similarly be destabilised. These risks are small for now. Crypto does not yet have the scale to make them more acute. But global finance moves fast. That is why the G20 is right to get on the front foot. In a world awash with money, allowing investors to seek out the speculative gains associated with crypto must remain a second order priority to financial stability.

#### Kills interdependence – conflicts escalate to war.

Dr. Asma Iqbal & Muhammad Rafi Khan 21, Assistant Professor of Political Science, Government Graduate College for Women Samanabad; Lecturer/Research Officer at Minhaj University Lahore, “Power and Interdependence with Internet,” Pakistan Social Sciences Review, Vol. 5, No. 1, pgs. 1142-1153, 3/30/21, https://pssr.org.pk/issues/v5/1/power-and-interdependence-with-internet.pdf

Interdependence

Reflecting a softer image of power and extending its domains to global social structures, interdependence is a multidimensional term, that gained traction with the emergence of the concept of globalization. It refers to a state, or a condition, that compels two or more actors to seek cooperation. For such cooperation, the absence of enmity is not a requirement. There are many examples of interdependence between fierce enemies, like Pakistan and India, China and India, and Russia and the US. The goals of this interdependence are to fulfill domestic and international deficiencies for national interest, and sometimes, international interest. The presence of Russia and the US in the Security Council, where both take decisions together in international interest, and can also veto any move for their own or their ally’s national interest.

The world today has mostly been eradicating the threats of war and becoming increasingly interdependent. Their actions are mostly based on the cost- benefit ratio. For instance, if a state must choose between war and trade and applying the statistical models for a complete understanding of both before deciding, the trade will supersede in choice over the war in most cases. That is why even enemies are doing trade, while the war of words also gains traction. This is because the cost of war is higher, and the benefit of trade is higher. The democratic peace theory and the McDonald Peace theory exist in almost the same domains, where political relationship and economic connectivity, both are eradicating scenarios of a possible war.

As an effective tool of soft power, the interdependence has shattered the isolation of introverted peoples and merged them with vibrant, dynamic, and socially linked societies. It relies on multidimensional mediums to avoid conflicts, increase connectivity, and inculcates multilateralism. Among these, the Internet is the most obvious, effective and resourceful medium that “frees us from geographic fetters and brings us together in topic-based communities that are not tied down to any specific place. Ours is a networked, globalized society connected by new technologies” (Dentzel, 2014).

The internet, coinciding with matters related to power, is a world of unknown depth. It is the most effective tool of connectivity in this modern world. It can also be designated as a doorway between traditional unilaterality and a multilateral world. It boosted interdependence and opened new horizons of connectivity and cooperation. Therefore, the virtual age has cut the distances short and challenged the hardships of the physical world with a counterbalance, depicted in the figure below.

#### This decks digital readiness – we’re getting passed up by countries with mature infrastructure.

Andriole 21 (Steve Andriole, Thomas G. Labrecque Professor of Business Technology in the Villanova School of Business at Villanova University, 12-13-2021, The US-China Technology Arms Race. It’s Not A Two-Country Race Anymore., Forbes, <https://www.forbes.com/sites/steveandriole/2021/12/13/the-us-china-technology-arms-race-its-not-a-two-country-race-anymore/>) MAM

The race for global leadership in artificial intelligence (AI), machine learning (ML), blockchain, cryptocurrency and digital infrastructure – among many other technologies – is well underway. But now, instead of the proverbial two-country races we’re so familiar with, the race has expanded. It’s now **any country’s race**. How could this be when the US and China are spending so much money? The metrics have changed. Today it’s about patents and adoption.

There are lots of technologies that attract attention. The world is obsessed with AI/ML, blockchain, cryptocurrency, IOT, big data analytics, cybersecurity, 3-D printing and drones. It’s excited about virtual reality, augmented reality and mixed reality. Everyone loves talking about driverless cars, ships and planes. While we’re growing increasingly worried about social media and privacy (as we should), we’re still addicted to our ever-more-powerful smartphones. And then there’s The Metaverse.

AI/ML is a huge family of technologies with enormous professional levels. Lest everyone believe the US and China are the only countries investing in AI/ML, there are many countries that have unveiled substantial AI/ML research and development (R&D) strategies including the United Kingdom, Russia, Israel, Japan and France. Singapore, South Korea, Sweden, Taiwan, the UAE and Mexico are also strategically focused on AI/ML. The world is well aware of the application potential of AI/ML. In fact, the global field’s getting crowded.

While blockchain enables cryptocurrency transactions, it’s by no means limited to currency exchanges: blockchain is **transactionally agnostic**. When we look at the adoption of blockchain, more and more local, regional and national governments are adopting blockchain or approving blockchain investments. Blockchain is already widely adopted in China and Asia across multiple vertical industries, such as insurance and agriculture. Australia’s “CSIRO’s Data61 has formed a consortium with law firm Herbert Smith Freehills and IBM to build Australia’s first cross-industry, large-scale, digital platform to enable Australian businesses to collaborate using blockchain-based smart legal contracts.” The European Union (EU) has made blockchain a priority. Other countries are making similar commitments to blockchain, including Dubai, Estonia and Gibraltar, among other government offices

As of now, governments cannot control cryptocurrency – though they can – and will – regulate and tax it. More and more businesses are accepting it; many have no choice since competitors are accepting it. Crypto also provides a safer and cheaper way to transact. Payment system incumbents will eventually champion cryptocurrency. Some countries are “open” to the use of stable-coin cryptocurrencies. The US is “open” (with some yet-to-be-precisely-defined requirements) to the possibilities of cryptocurrency, as are Canada, Australia, the European Union (EU), Finland, Belgium, Switzerland, Malta, Cyprus, Bulgaria, the UK and Germany. Some countries, like China, Russia, Vietnam, Bolivia, Ecuador and Columbia, have essentially banned Bitcoin and cryptocurrency, though several of these countries have a lot of blockchain and cryptocurrency start-up activity. In short, crypto is almost everywhere. The real race here is about acceptance.

In addition to AI/ML, blockchain and cryptocurrency, is a country’s ability to participate in the technology arms race through the readiness of its digital infrastructure. Digital readiness describes the condition of a country’s overall digital infrastructure and its ability to adopt AI/ML, blockchain, cryptocurrency and other emerging digital technologies. Countries that have well-developed digital infrastructures – such as Sweden and Norway – are able to leverage technologies as long as, of course, they’re inclined to do so. In order for countries to leverage technology they must possess basic and always-improving digital infrastructure capabilities (broadband, cloud, big data, cybersecurity, etc.) because adoption and scalability require a modern digital infrastructure. The mature countries here include Estonia, Finland, Norway, Denmark, New Zealand, Israel, Canada, Sweden, South Korea, the Netherlands and Singapore. Surprised by the list? (The comparison of this list with the list of military powers is fascinating, and clearly differentiates the military and technology arms races.)

#### Leadership on digital trade reinvigorates partnerships in the Indo-Pacific.

Bera and Cutler 10/8 (Ami Bera, Congressman for Sacramento/California District 7, and Wendy Cutler, Vice President at the Asia Society Policy Institute (ASPI), 10-8-21, Bring Washington Back to the Table, The Diplomat, <https://thediplomat.com/2021/10/indo-pacific-trade-bring-washington-back-to-the-table/>) MAM

If there is one major tenet that sets apart the foreign policy approaches of U.S. President Joe Biden and former President Donald Trump, it is this: Abandoning American leadership in the international community cedes the power to set international norms, rules, and values to other nations. Rejoining various multilateral organizations and agreements and reinvigorating our global partnerships, in areas like COVID-19 response and climate change, are welcome steps by the Biden administration. However, international engagement should not stop there. Rather, the Biden administration should build on this model and prioritize a forward-looking and impactful economic and trade agenda with the Indo-Pacific region, particularly in working with like-minded regional partners to **set the rules of the road on digital trade.** We were both involved in boosting our economic engagement with the Indo-Pacific region during the Obama administration, one as a senior official at the Office of the U.S. Trade Representative (USTR), the other as a member of Congress working to build support for and provide oversight of the president’s agenda. What we experienced during that time was the United States taking the lead in developing policies to open markets for U.S. exporters, workers, and farmers, while also using the United States’ prestige and leadership to foster more pro-worker, pro-democracy, and pro-consumer policies in the region. Make no mistake — the effort to remove trade barriers and expand economic opportunity in the Indo-Pacific has continued, with countries in the region actively working on agreements among themselves and with nations in other regions. The countries of the region are talking, debating, and negotiating over trade policies to help promote growth, create jobs, and improve livelihoods for their citizens. While taking place far from Washington, these discussions are impacting our economy, given global supply chains and future agreements the U.S. may want to develop. But right now, we’re not at the table. Biden and USTR Ambassador Katherine Tai have made it clear that they want to take a thoughtful approach on U.S. trade policy, particularly to ensure it continues to be pro-worker and pro-environment. We don’t disagree, having seen both the policy and political benefits when forces aligned during the re-negotiation of NAFTA that resulted in USMCA. There were improvements, compromises, and tough decisions made all around, and the agreement is better for it. That’s why we strongly believe the United States must continue that work and look for opportunities elsewhere to expand economic opportunity, lead with our values, and develop policies that benefit the U.S. and like-minded partners. One important way the U.S. can do this is by working on a regional digital trade agreement with our friends in the Indo-Pacific region. Digital trade touches all sectors of our economy, including manufacturing and agriculture, and involves rules around access to the internet, digital inclusiveness, trade facilitation, sharing and storage of data, and others — all critical issues for which rules and norms and policies are still being developed and decided, and which grow in importance every single day. As other countries are far along in this work with each other, we risk losing the opportunity to shape policies that directly affect American citizens and businesses here at home. We’re also losing the opportunity to ensure the policies that ultimately get enshrined are ones that prioritize democratic values, such as a free sharing of ideas and information, individual privacy, and business and consumer protections. We remain optimistic that the Biden administration will succeed in repositioning the United States as a force for good and a force for international cooperation after four tumultuous years under the previous administration. There is no better way to do that than by advancing economic opportunity and freedom of choice in one of the most economically important and dynamic regions in the world – the Indo-Pacific. The Biden administration has a unique window of opportunity to do so. We hope they seize it before the table is set without us.

#### That solves global existential risks – it’s reverse causal.

Joseph S. Nye Jr. 20. Harvard University Distinguished Service Professor, Emeritus. "COVID-19’s Painful Lesson About Strategy and Power". War on the Rocks. 3-26-2020. https://warontherocks.com/2020/03/covid-19s-painful-lesson-about-strategy-and-power/

In 2017, President Donald Trump announced a new National Security Strategy that focused on great-power competition with China and Russia. While the plans also note the role of alliances and cooperation, the implementation has not. Today, COVID-19 shows that the strategy is inadequate. Competition and an “America First” approach is not enough to protect the United States. Close cooperation with both allies and adversaries is also essential for American security.

Under the influence of the information revolution and globalization, world politics is changing dramatically. Even if the United States prevails in the traditional great-power competition, it cannot protect its security acting alone. COVID-19 is not the only example. Global financial stability is vital to U.S. prosperity, but Americans need the cooperation of others to ensure it. And while trade wars have set back economic globalization, there is no stopping the environmental globalization represented by pandemics and climate change. In a world where borders are becoming more porous to everything from drugs to infectious diseases to cyber terrorism, the United States must use its soft power of attraction to develop networks and institutions that address these new threats. For example, this administration proposed halving the U.S. contribution to the World Health Organization’s budget — now we need it more than ever.

A successful national security strategy should start with the fact that “America First” means America has to lead efforts at cooperation. A classic problem with public goods (like clean air, which all can share and from which none can be excluded) is that if the largest consumer does not take the lead, others will free-ride and the public goods will not be produced. As the technology expert Richard Danzig summarizes the problem:

Twenty-first century technologies are global not just in their distribution, but also in their consequences. Pathogens, AI systems, computer viruses, and radiation that others may accidentally release could become as much our problem as theirs. Agreed reporting systems, shared controls, common contingency plans, norms and treaties must be pursued as a means of moderating our numerous mutual risks.

Tariffs and border walls cannot solve these problems. While American leadership is essential because of the country’s global influence, success will require the cooperation of others.

On transnational issues like COVID-19 and climate change, power becomes a positive-sum game. It is not enough to think of American power over others. We must also think in terms of power to accomplish joint goals, which involves power with others. On many transnational issues, empowering others helps us to accomplish our own goals. The United States benefits if China improves its energy efficiency and emits less carbon dioxide, or improves its public health systems. In this world, institutional networks and connectedness are an important source of information and of national power, and the most connected states are the most powerful. Washington has some sixty treaty allies while China has few. Unfortunately, as Mira Rapp-Hooper recently argued, the United States is squandering that power resource.

In the past, the openness of the United States enhanced its capacity to build networks, maintain institutions, and sustain alliances. But will that openness and willingness to engage with the rest of the world prove sustainable in the current populist mood of American domestic politics? Even if the United States possesses more hard military and economic power than any other country, it may fail to convert those resources into effective influence on the global scene. Between the two world wars, America did not and the result was disastrous.

#### Effective regulations key to US competitiveness in blockchain – organizations want reliable and stable regulatory environment to build trust

Werbach 18 [Kevin, Professor of Legal Studies & Business Ethics at the Wharton School, FCC Agency Review Co-Lead, “Trust, but Verify: Why the Blockchain Needs the Law,” *Berkeley Technology Law Journal* 33, heinonline, JCR]

One difference between the regulatory debates in the dot-com and distributed ledger eras is that the United States is no longer the dominant source of activity. The Internet today is highly globalized, but in the 1990s, usage and startup creation were heavily centralized in the United States. In contrast, there are concentrations of distributed ledger activity around the world. London, Berlin, Switzerland, and Singapore are major hubs, with significant centers in mainland China, Canada, South Korea, Japan, Estonia, Argentina, and Hong Kong.209 Vitalik Buterin, leader of the Ethereum project, is a Russian who grew up in Canada, heads a foundation headquartered in Switzerland, and now lives in Singapore. If he had created an early Internet startup, he would have likely headed to Silicon Valley. The global distribution of blockchain development activity encourages jurisdictional competition among regions. U.S. dominance of the early Internet industry produced major benefits, both economic and in terms of global soft power. Hoping to be the Silicon Valley of the crypto economy, countries ranging from tiny Gibraltar to Russia are creating new legal frameworks to attract blockchain startups, coin offerings, and other activity. The early leader is the canton of Zug, Switzerland, which combines a stable government, a central location in Europe, a welcoming environment for cryptocurrency companies, and very favorable tax policies. 210 It is bidding to be the cryptocurrency equivalent of Delaware for U.S. incorporation, although the real Delaware, among other locales, seems determined to compete. The U.S. is still a very important driver of blockchain activity. A significant portion of core Bitcoin development occurs in the United States. New York is one of the primary centers for distributed ledger technology in financial services. Many of the most significant investors in blockchain startups are in the United States, including Digital Currency Group, Blockchain Capital, Andreessen Horowitz, and Union Square Ventures. U.S. technology and services firms such as IBM, Microsoft, and PwC are at the forefront of most large-scale enterprise implementations of distributed ledger applications. The technical talent and technology startup ecosystems in the United States remain unmatched. It bears repeating that major Internet companies did not locate in Sealand or island tax havens; they went to where the developers and customers were. Organizations do not just seek the least regulation; they seek the best regulation, among a slate of other factors. A reliable and stable regulatory environment will be important for building trust in blockchain platforms that seek a large user base. Similarly, even jurisdictions keen to attract entrepreneurial businesses in fields such as cryptocurrency do not simply engage in a race to the bottom. Singapore is a hotbed of blockchain activity, due in part to its permissive regulatory attitude. However, the Monetary Authority of Singapore made clear in an August 2017 announcement that initial coin offerings there would be subject to money laundering and terrorist financing restrictions.' They would also be regulated as securities offerings when they "represent ownership or a security interest over an issuer's assets or property. "212 Some small territories focused on generating revenues may take an "anything goes" attitude, but ICOs based there will eventually be less trusted and therefore less successful in attracting capital. Moreover, the countries where that capital comes from will not be shy about exercising jurisdiction. These are the same reasons why all companies today do not domicile in offshore tax havens. While the BitLicense may have given the United States a poor regulatory reputation in some cryptocurrency circles, more recent initiatives were more thoughtfully drawn. The Uniform Law Commission, which creates model codes that are widely adopted by state legislatures, adopted a model cryptocurrency law in 2017 that limits the scope of regulation.213 The CFTC created a LabCFTC group to study cryptocurrencies and engage with the nascent industry.214 The SEC's investigative report on initial coin offerings and The DAO was widely praised as measured and technically knowledgeable.21 s There is no certainty that the United States, or any jurisdiction, will strike the appropriate balance between flexibility and protection in its regulatory approaches to blockchain-based systems. The debates have just begun. Overall, though, regulators who do nothing will be a greater threat to the development of the market than those who engage in thoughtful and evolving efforts to address public policy considerations.

#### Focusing antitrust law on practices that artificial centralize blockchain creates synergy that assures cooperative relationship between blockchain & antitrust – solves regulatory certainty and innovation

Schrepel 21 [Thibault, Assoc Prof of Law at VU Amsterdam Univ, Faculty Affiliate at Stanford Univ CodeX Center, blockchain expert appointed to the World Economic Forum, *Blockchain + Antitrust: The Decentralization Formula*, p.75-8, JCR]

In fact, antitrust law and blockchain ecosystems seek decentralization at two different levels. Antitrust law prohibits certain categories of conduct, creating tensions with tech communities without focusing much on digital architectures. Blockchain, on the contrary, seeks to decentralize by providing its users with a specific digital architecture. It does not prohibit (anticompetitive) practices where code allows. This creates tensions between them, as I show in Part 2 of this book. Their cooperation will require the identification of ways to deal with these mutual provocations, as I will explain in Part 3. As things stand, both of these communities exhibit what Veblen called "trained incapacity" — the difficulty to think beyond a set of constraints and assumptions. Policymakers tend to believe that the law should be the most important constraint organizing our lives. For that reason, legal rules are often applied without looking for ways to coordinate with other constraints, including digital architectures." In the meantime, blockchain communities tend to view legal enforcement as an adversary, and not as an ally, As John Perry Barlow stated in 1996: "I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather." After all, the law liberates, but it also implies illegality, lawsuits, liability assignment and sanctions. The antitrust and blockchain communities will gain from over-coming these biases. If we want antitrust and blockchain to collaborate on a long-term basis, we need to talk about the problems that their cooperation will encounter along the way. The challenge before us is intricate." On the one hand, it is a matter of getting legal minds to recognize that technology can help achieve objectives that the law cannot achieve on its own. There are three reasons for this. First, blockchain provides a technical approach to the subject. It serves as a framework for decentralizing the economy by default, while antitrust mostly applies ex post by correcting past behaviors." Second, antitrust agencies' detection rate remains low, meaning that illegal behavior often goes unpunished." And enforcement is costly, which makes it impossible to pursue all potentially illegal practices. This is particularly prob-lematic in a world where illegal practices can be implemented through coding that quietly and immediately affects billions of users. Also, the rule of law is (unfortunately) inapplicable in some places. This is the case when the state bypasses legal constraints,'" and when jurisdictions are mutually unfriendly and do not enforce foreign laws." For example, enforcement of U.S. court judgments abroad can prove especially difficult in light of divergent rules on jurisdiction, requirements for special service of process, reciprocity and some foreign countries' public policy concerns," including in Europe." Finally, antitrust law is complex and cannot be fully mastered by all companies — the compliance costs are high and many firms unwittingly infringe the law. Blockchains could therefore supplement antitrust by creating an architecture that leads to fewer anticompetitive practices. On the other hand, blockchain communities would gain from working with (not against) antitrust law enforcers. That is because antitrust would eliminate practices that artificially centralize blockchain ecosystems and that blockchain architecture cannot stop or prevent. I will analyze them in Part 2. Doing so would also provide legal certainty, thus fostering investments and benefiting all the actors involved in commercial activities that rely on blockchain. For these reasons, one should think of antitrust and blockchain as allies —not enemies — as they both seek the same objective, while presenting complementary strengths and defects. Doing so would lead policymakers to promote and implement a new "law + technology" approach that recognizes that the benefits of cooperation outweigh those of one-off confrontations. A game theorist would represent that approach as illustrated in Figure 5.1. That bigger picture should guide every one of our actions in the field, including how we deal with mutual aggressions. After all, no great player has ever won a game of Go without conceding a few territories. In this chapter, I first discussed decentralization in the context of antitrust law. I showed that antitrust law's objective has always been to free markets from economic coercion. In other words, it protects consumers by ensuring the decentralization of market players' decision making. The Sherman Act translates that objective, and so does the TFEU. Despite having a similar objective, I explained that blockchain and antitrust do not automatically benefit from one another — their cooperation must be willingly enacted. Mainly, there are situations in which the law cannot be (fully) enforced. That is true when technology (such as blockchain) prevents legal enforcement and when the rule of law is not actionable (because one country is disregarding it, or because two jurisdictions are unfriendly). In other situations, the law interferes with technology developments; it creates a different type of tension. That absence of mutual assistance between blockchain and the law would be problematic at two levels. First, it would be troublesome because blockchain could achieve decentralization in areas where the law does not apply. And second, by increasing the number of transactions executed, blockchain will simultaneously increase the number of anticompetitive practices that take place. Antitrust will thus be needed to eliminate these practices. This latter point — how blockchain may (be used to) violate antitrust — is the subject of Part 2 of this book. When entering it, let us keep in mind that the "big picture" (the mutually beneficial nature of the cooperation between antitrust and blockchain) must inform how we deal with the "small one" (areas of tension between them). Failure to do so would lead to a lose-lose situation.

#### Antitrust action against artificial centralization is key to collaborative relationship between antitrust agencies and blockchain communities. Necessary for long term economic stability

Schrepel 21 [Thibault, Assoc Prof of Law at VU Amsterdam Univ, Faculty Affiliate at Stanford Univ CodeX Center, blockchain expert appointed to the World Economic Forum, *Blockchain + Antitrust: The Decentralization Formula*, p.247-9, JCR]

1.2.1 Not this... Enforcement is the second pillar of a collaborative approach between law and tech, antitrust and blockchain. I realize that this may seem counterintuitive; enforcement is, by definition, confrontational. In reality, distinct types of enforcement can lead to varying degrees of confrontation: some harm the entire blockchain, while others target the sole perpetrators of illegal practices. One should avoid the former, as it would reduce blockchain's usefulness and thus deprive policymakers and regulators of an important ally. It is in the interests of both communities to encourage the latter. I concluded the first part of this book by underlining that making law and tech work toward the same objective implied bearing with some assaults by each on the other. This means that blockchain communities should not only tolerate antitrust sanctions, but also facilitate them, because they ultimately lead to further decentralization. It also means that antitrust agencies and courts should direct their enforcement activities in a specific way. Overall, they should seek to preserve blockchain. This will be challenging, as agencies generally conduct their enforcement activities one case after the other, without such a long-term objective. That being said, agencies could still achieve the overall goal of enabling blockchain technology to flourish while ensuring case-by-case enforcement. For that, agencies should avoid enforcement activities against practices that directly arise from the intrinsic characteristics of a blockchain. For example, public permissionless blockchains distribute information throughout the marketplace, including the number of transactions implemented by specific users, the fees being paid and so on. This transparency could lead to antitrust concerns, especially when it comes to tacit collusion.'" Nevertheless, because this essential feature makes markets more fluid and mitigates information asymmetry," enforcement activities should not be directed at it. The same goes for the opacity that blockchains create. As we have seen together, the identity of a blockchain's participants and the content of their transactions are protected by encryption. Yet one should not consider this a relevant element in European competition law for presuming the intention to collude (moral component), for systematically making cartelization on block-chain a restriction "by object" rather than "by effect," or for easing the burden of proof on antitrust agencies. Doing so would deter legal uses of blockchain. More generally, it is important to underline that all blockchain participants agree to the same set of rules. That should not be seen as an illegal agreement between them, even though it affects their economic behavior. Agreeing to the same rules is, in fact, necessary for blockchain's survival, as it creates consistency in the blockchain ledger in the absence of central coordination. It solves the Byzantine Generals Problem, according to which a central power is always needed to coordinate actions and maximize outcomes. That applies to forks, which should only rarely be seen as illegal (as I discussed in Chapter 8), because they create checks and balances within each blockchain. Let me reiterate that without consensus regarding the rules and their modification, the whole system would collapse, as the ledger integrity could not be maintained. All practices engaged by the blockchain nucleus to ensure survival, such as their forks and modifications of the core client, should thus be presumptively legal as far as antitrust enforcement is concerned. 1.2.2 ...but that! I recommend that antitrust agencies focus their enforcement activities on practices that affect the "real space", and on practices that defeat blockchain's purpose. As I discussed in Chapters 9 and I1, the first type of practice covers the use of blockchains to support firms' efforts to collude or monopolize markets. These practices have a strong and direct impact on consumers. Detecting this type of behavior will require proactive actions by antitrust agencies. If they engage in such actions, enforcement in the field will increase consumer welfare. The second category concerns practices that centralize blockchain eco-systems artificially. More specifically, agencies should target practices that centralize the infrastructure level of a blockchain. As I have explained, that level has a critical influence on the decentralization of other levels. Prohibiting artificial forms of centralization at that layer will free most of the ecosystem from coercive forms of power. In doing so, it will make blockchain a more potent ally to antitrust law. Furthermore, this type of enforcement will prove increasingly important over time. If blockchain adoption continues to increase, it could very well become a key infrastructure for the world economy. At that point in time, the artificial centralization of blockchain will become antitrust agencies' top enforcement priority. Overall, directing enforcement activities toward these two types of practices would free blockchain, and its economic ramifications, from the most restrictive practices without diminishing its usefulness or creating resentment within blockchain communities. Antitrust would thus become the ally of blockchain ecosystems and would start being perceived as such.

#### Antitrust oversight keeping blockchain open & decentralized is key to innovation

Massarotto 20 [Giovanna, Academic Fellow at the Center for Technology Innovation and Competition (CTIC) at UPenn, “Antitrust in the Blockchain Era,” *Notre Dame Journal on Emerging Technologies*, <https://ndlsjet.com/wp-content/uploads/2020/04/Antitrust-in-the-Blockchain-Era.pdf>, JCR]

Thus, someone might be led to question the future role of antitrust to tackle monopolizing conduct and regulate data. Although the main goal of antitrust law could be achieved through open and decentralized networks, such as public blockchains, antitrust enforcers still need to play a fundamental role as gatekeepers of the economic democracy in markets. As the Supreme Court recognized, the Sherman Act is the “Magna Carta of free enterprise”105 which needs to be enforced to be effective. The railroads and the Internet network created potential open platforms and infrastructures, which required an antitrust intervention to guarantee equal access to all market participants and prevent possible abusive practices.106 In order for open platforms to function, antitrust agencies are irreplaceable neutral bodies to oversee that no one engages in anticompetitive conduct to profit beyond that attainable in open and free markets. Standard Oil, 107 AT&T108 and more recently U.S. and EU Microsoft109 have shown that the temptation for companies that have the most to lose in a totally open market to engage in illegal anticompetitive behavior is often compelling.110 Antitrust agencies are responsible to ensure that there is a level playing field to compete in the evolution of existing technologies or the creation of new ones. Through the support of antitrust law, the largest companies can continue in the development of competitive technologies, creating alternative platforms or advancing the existing ones in open democratic (socially scalable) markets. As a football match needs both rules and referees, markets need rules and neutral bodies to oversee the compliance of those rules. Otherwise it is hard to tell who wins the competition or to even have a competition at all. Initially, markets based on the blockchain technology might not need a complex set of rules—an antitrust supervision and regulation might be sufficient. Greater forms of oversight might be desirable if such markets become increasingly high-traffic areas and a crucial component of our economic system.111 In a perfect world, self-regulation would be ideal.112 But as the financial crisis of 2008 revealed, specific forms of regulation are often necessary when antitrust alone is insufficient to regulate high-traffic industries.113 As one looks back on the Internet regulatory framework, it is true that the “Internet is the least regulated part of the telecommunications world today[,]”114 and it is also true that the fundamental compatibility rule is enforced.115 Although it is the least regulated, the Internet is still public in nature and governed by public rules enforced by public bodies.116 The following section explores some regulatory issues related to blockchain. Antitrust law originated in the United States as the first arm of government regulation117 on the booming oil market to limit the risks linked to the monopoly power of Standard Oil. Data represent the ‘new oil’ and instead of being traded in physical platforms (like the railroad) are being traded in online digital platforms based on the Internet. As a consequence, data have attracted even more and varied businesses, creating new, digital, online platforms. Such platforms based on the Internet network became increasingly high-traffic marketplaces and a crucial part of today’s economy, thereby requiring sophisticated regulations.118 Similar to the Internet through the Web, as above outlined, we might consider having a single universal blockchain that includes a variety of different markets. Blockchain markets built on a single universal blockchain infrastructure might become a fundamental component of our economy and require government intervention to regulate competition and possible legal issues. Markets require trust in order to attract business. The blockchain is not an exception to this fundamental economic principle. As learned from the past, self-regulation has often failed to maintain trust in markets from the Great Depression to the cryptocurrency crash of 2018. 119 Antitrust and effective forms of regulation are necessary to build—trust. 120 The blockchain technology is in its infancy and the creation of a universal public blockchain is merely an idea. At this moment, it might be difficult to elaborate specific forms of regulation for new markets that we cannot even envisage, but the Internet and the Web can certainly be used as a useful model of reference both to anticipate and to regulate a future single blockchain network. Similar to the Internet, government agencies might start theorizing rules to guarantee the compatibility in a public blockchain platform and prevent an uncontrolled centralization and private supervisory powers. Sir Tim Berners-Lee suggested the adoption of a Magna Carta or Bill of Rights for the Web to prevent Internet fragmentation into private networks and get everybody on the open and universal Web platform.121 Should we theorize a Magna Carta for the Blockchain to protect users’ rights related, for example, to their data? Perhaps, similar to the Web, we might start from setting some universal open standards to guaranty inter-operability of data122 and a socially scalable platform. The World Wide Web Consortium (W3C) set the open standards principles for the Web—open and free standards for a World Wide Blockchain might be defined in a similar fashion. The blockchain network, as well as the Internet platform, would certainly raise some specific legal and ethical issues, which cannot yet be envisaged. Thus, let us start from what we already know about the Web and the Internet regulations to anticipate and prevent some negative consequences that might also affect the creation of a single blockchain. Regulators are encouraged to envisage rules to protect ethical principles in blockchains123—for example, rules to prevent access by minors or people that might be interested in using a blockchain to commit crimes. This regulation may also cover the uncontrolled exchange or storage of sensitive information,124 or generally illegal and speculative activities. For example, the FBI expressed their concerns about the criminal exploitation of Bitcoins as the parties of bitcoin transactions are unknown.125 As with any tool, blockchain is not immune to abuses. Similar to the Internet, a public universal blockchain might need rules to guarantee non-discrimination among market players. A regulator may choose to adopt a net-neutrality regulation to prevent a paid prioritized blockchain in a single universal blockchain.126 In Europe and in part of the United States, net-neutrality or open internet regulation127 have allowed corporations of all sizes to act without the interference of the big Internet providers companies, creating a ‘neutral’ environment where every company can benefit from the same Internet speed and indiscriminately grow.128 Learning from the Internet, a paid prioritization blockchain network could generate a dual speed blockchain which would require one to pay for the benefits of a high speed blockchain or use a slower speed one for free.129 This duality might be prevented through the creation of developing technologies. The lightning network, for example, has the potential to make blockchain transactions faster and less expensive. It is based on a payment channel that is simple and fast in a decentralized manner. 130 Parties pay a fee only once and can transact back and forth without paying fees to miners. 131 With each transaction, parties sign a balance sheet confirming the new balance and when their transactions are completed, the parties pay to close the channel.132 The lightning network is a technology less developed than blockchain. However, it demonstrates along with the same blockchain ingenuity, how the creation and development of new technologies can provide more organic solutions which can be more ideal than regulation in certain circumstances. If we look back historically, regulation and guidelines are fundamental components in the prevention of forms of inequality, illegal activities, and the abuse of market power in free and open markets. Presently, there are basically no regulations to guide the growth and ensure an environment of trust among blockchain providers and users. Antitrust surveillance is the first step in preventing monopolies and forms of collusion among network participants in addition to overseeing markets until regulations are in place.133 Regulators and antitrust enforcers have a huge responsibility in the development of blockchain markets that we cannot fully envisage presently, although we know it very possibly might include the creation of a universal public blockchain. By its nature, the competitive market process looks for innovative and unanticipated solutions. As outlined above, antitrust, regulation, and innovation are not separate issues.134 The path of innovation largely depends on the action of both regulators and antitrust agencies, the results of which are unpredictable. The creation of a single universal blockchain where new markets run is feasible if such a blockchain can be kept free and open while subject to the supervision of regulatory bodies. History told us that individual market participants cannot be trusted to operate in the public interest in a total laissez-faire market. Markets rely on the trust of users. Market speculation, uncontrolled centralization and private supervisory powers can all promote a lack of trust rather than trust. In the context of antitrust, the likely shifting from closed-centralized platforms to open-decentralized networks, based on blockchain technology, is as compelling, critical, and revolutionary as the Internet has been over the past decades. Today antitrust agencies are concerned with a few powerful hi-tech companies which control most digital markets through their centralized platforms and databases.135 This economic scenario is likely to change soon, not by means of an antitrust intervention, but rather by decentralized networks based on blockchain technology. Antitrust enforcers then need to preserve both economic democracy and innovation to benefit consumers and the economy overall. Antitrust law should encourage competition to increase consumer welfare by improving, for example, social scalability and stimulate the growth of markets—no matter what the harm to a competitor, if the result of such conduct benefits consumers. Antitrust enforcers must endorse and oversee the process of the decentralization phenomena on behalf of free open markets and economic democracy. They will also be crucial in maintaining the delicate balance between over controlling the actions of large players and keeping them incentivized to lead the creation of new technologies.

### Adv – Digital Security

#### Scenario 1 – AI

#### High risk of AI targeting the financial sector now.

Cantos 19 [Michelle, Strategic Intelligence Analyst, former defense contractor and helped develop human-computer symbiosis programs for clients in the federal government, “Breaking the Bank: Weakness in Financial AI Applications,” 03/13/19, <https://www.fireeye.com/blog/threat-research/2019/03/breaking-the-bank-weakness-in-financial-ai-applications.html>, accessed 10/29/21, JCR]

Currently, threat actors possess limited access to the technology required to conduct disruptive operations against financial artificial intelligence (AI) systems and the risk of this targeting type remains low. However, there is a high risk of threat actors leveraging AI as part of disinformation campaigns to cause financial panic. As AI financial tools become more commonplace, adversarial methods to exploit these tools will also become more available, and operations targeting the financial industry will be increasingly likely in the future. Financial entities increasingly rely on AI-enabled applications to streamline daily operations, assess client risk, and detect insider trading. However, researchers have demonstrated how exploiting vulnerabilities in certain AI models can adversely affect the final performance of a system. Cyber threat actors can potentially leverage these weaknesses for financial disruption or economic gain in the future. Recent advances in adversarial AI research highlights the vulnerabilities in some AI techniques used by the financial sector. Data poisoning attacks, or manipulating a model's training data, can affect the end performance of a system by leading the model to generate inaccurate outputs or assessments. Manipulating the data used to train a model can be particularly powerful if it remains undetected, since "finished" models are often trusted implicitly. It should be noted that adversarial AI research demonstrates how anomalies in a model do not necessarily point users toward a wrong answer, but redirect users away from the more correct output. Additionally some cases of compromise require threat actors to obtain a copy of the model itself, through reverse engineering or compromising the machine learning pipeline of the target. The following are some vulnerabilities that assume this white-box knowledge of the models under attack: Classifiers are used for detection and identification, such as object recognition in driverless cars and malware detection in networks. Researchers have demonstrated how these classifiers can be susceptible to evasion, meaning objects can be misclassified due to inherent weaknesses in the mode (Figure 1). Researchers have highlighted how data poisoning can influence the outputs of AI recommendation systems. By changing reward pathways, adversaries can make a model suggest a suboptimal output such as reckless trades resulting in substantial financial losses. Additionally, groups have demonstrated a data-poisoning attack where attackers did not have control over how the training data was labeled. Natural language processing applications can analyze text and generate a basic understanding of the opinions expressed, also known as sentiment analysis. Recent papers highlight how users can input corrupt text training examples into sentiment analysis models to degrade the model's overall performance and guide it to misunderstand a body of text. Compromises can also occur when the threat actor has limited access and understanding of the model’s inner-workings. Researchers have demonstrated how open access to the prediction functions of a model as well as knowledge transfer can also facilitate compromise. AI can process large amounts of information very quickly, and financial institutions are adopting AI-enabled tools to make accurate risk assessments and streamline daily operations. As a result, threat actors likely view financial service AI tools as an attractive target to facilitate economic gain or financial instability (Figure 2). Branding and reputation are variables that help analysts plan future trade activity and examine potential risks associated with a business. News and online discussions offer a wealth of resources to examine public sentiment. AI techniques, such as natural language processing, can help analysts quickly identify public discussions referencing a business and examine the sentiment of these conversations to inform trades or help assess the risks associated with a firm. Threat actors can potentially insert fraudulent data that could generate erroneous analyses regarding a publicly traded firm. For example, threat actors could distribute false negative information about a company that could have adverse effects on a business' future trade activity or lead to a damaging risk assessment. Manipulating the data used to train a model can be particularly powerful if it remains undetected, since "finished" models are often trusted implicitly. FireEye assess with high confidence that there is a high risk of threat actors spreading false information that triggers AI enabled trading and causes financial panic. Additionally, threat actors can leverage AI techniques to generate manipulated multimedia or "deep fakes" to facilitate such disruption. False information can have considerable market-wide effects. Malicious actors have a history of distributing false information to facilitate financial instability. For example, in April 2013, the Syrian Electronic Army (SEA) compromised the Associated Press (AP) Twitter account and announced that the White House was attacked and President Obama sustained injuries. After the false information was posted, stock prices plummeted. Malicious actors distributed false messaging that triggered bank runs in Bulgaria and Kazakhstan in 2014. In two separate incidents, criminals sent emails, text messages, and social media posts suggesting bank deposits were not secure, causing customers to withdraw their savings en masse. Threat actors can use AI to create manipulated multimedia videos or "deep fakes" to spread false information about a firm or market-moving event. Threat actors can also use AI applications to replicate the voice of a company's leadership to conduct fraudulent trades for financial gain. We have observed one example where a manipulated video likely impacted the outcome of a political campaign. Several financial institutions are employing AI applications to select stocks for investment funds, or in the case of AI-based hedge funds, automatically conduct trades to maximize profits. Financial institutions can also leverage AI applications to help customize a client's trade portfolio. AI applications can analyze a client's previous trade activity and propose future trades analogous to those already found in a client's portfolio. Actors could influence recommendation systems to redirect a hedge fund toward irreversible bad trades, causing the company to lose money (e.g., flooding the market with trades that can confuse the recommendation system and cause the system to start trading in a way that damages the company). Moreover, many of the automated trading tools used by hedge funds operate without human supervision and conduct trade activity that directly affects the market. This lack of oversight could leave future automated applications more vulnerable to exploitation as there is no human in the loop to detect anomalous threat activity. We assess with moderate confidence that manipulating trade recommendation systems poses a moderate risk to AI-based portfolio managers. The diminished human involvement with trade recommendation systems coupled with the irreversibility of trade activity suggest that adverse recommendations could quickly escalate to a large-scale impact. Additionally, operators can influence recommendation systems without access to sophisticated AI technologies; instead, using knowledge of the market and mass trades to degrade the application's performance. We have previously observed malicious actors targeting trading platforms and exchanges, as well as compromising bank networks to conduct manipulated trades. Both state-sponsored and financially motivated actors have incentives to exploit automated trading tools to generate profit, destabilize markets, or weaken foreign currencies. Russian hackers reportedly leveraged Corkow malware to place $500M worth of trades at non-market rates, briefly destabilizing the dollar-ruble exchange rate in February 2015. Future criminal operations can leverage vulnerabilities in automatic training algorithms to disrupt the market with a flood of automated bad trades. Financial institutions and regulators are leveraging AI-enabled anomaly detection tools to ensure that traders are not engaging in illegal activity. These tools can examine trade activity, internal communications, and other employee data to ensure that workers are not capitalizing on advanced knowledge of the market to engage in fraud, theft, insider trading, or embezzlement. Sophisticated threat actors can exploit the weaknesses in classifiers to alter an AI-based detection tool and mischaracterize anomalous illegal activity as normal activity. Manipulating the model helps insider threats conduct criminal activity without fear of discovery. Currently threat actors possess limited access to the kind of technology required to evade these fraud detection systems, and therefore with high confidence we assess that the threat of this activity type remains low. However, as AI financial tools become more commonplace, adversarial methods to exploit these tools will also become more available and insider threats leveraging AI to evade detection will likely increase in the future.

#### Financial panic causes World War III – economic guardrails no longer work

Sundaram & Popov 19 [Jomo, a former economics professor, was United Nations Assistant Secretary-General for Economic Development, and received the Wassily Leontief Prize for Advancing the Frontiers of Economic Thought, Vladimir, Research Director at the Dialogue of Civilizations Research Institute in Berlin, “Economic Crisis Can Trigger World War,” 02/12/19, <http://www.ipsnews.net/2019/02/economic-crisis-can-trigger-world-war/>, JCR]

Economic recovery efforts since the 2008-2009 global financial crisis have mainly depended on unconventional monetary policies. As fears rise of yet another international financial crisis, there are growing concerns about the increased possibility of large-scale military conflict. More worryingly, in the current political landscape, prolonged economic crisis, combined with rising economic inequality, chauvinistic ethno-populism as well as aggressive jingoist rhetoric, including threats, could easily spin out of control and ‘morph’ into military conflict, and worse, world war. The 2008-2009 global financial crisis almost ‘bankrupted’ governments and caused systemic collapse. Policymakers managed to pull the world economy from the brink, but soon switched from counter-cyclical fiscal efforts to unconventional monetary measures, primarily ‘quantitative easing’ and very low, if not negative real interest rates. But while these monetary interventions averted realization of the worst fears at the time by turning the US economy around, they did little to address underlying economic weaknesses, largely due to the ascendance of finance in recent decades at the expense of the real economy. Since then, despite promising to do so, policymakers have not seriously pursued, let alone achieved, such needed reforms. Instead, ostensible structural reformers have taken advantage of the crisis to pursue largely irrelevant efforts to further ‘casualize’ labour markets. This lack of structural reform has meant that the unprecedented liquidity central banks injected into economies has not been well allocated to stimulate resurgence of the real economy. Instead, easy credit raised asset prices to levels even higher than those prevailing before 2008. US house prices are now 8% more than at the peak of the property bubble in 2006, while its price-to-earnings ratio in late 2018 was even higher than in 2008 and in 1929, when the Wall Street Crash precipitated the Great Depression. As monetary tightening checks asset price bubbles, another economic crisis — possibly more severe than the last, as the economy has become less responsive to such blunt monetary interventions — is considered likely. A decade of such unconventional monetary policies, with very low interest rates, has greatly depleted their ability to revive the economy. The implications beyond the economy of such developments and policy responses are already being seen. Prolonged economic distress has worsened public antipathy towards the culturally alien — not only abroad, but also within. Thus, another round of economic stress is deemed likely to foment unrest, conflict, even war as it is blamed on the foreign. International trade shrank by two-thirds within half a decade after the US passed the Smoot-Hawley Tariff Act in 1930, at the start of the Great Depression, ostensibly to protect American workers and farmers from foreign competition!

#### Decentralized blockchain prevents AI monopolization and drives AI innovation.

Karger et al. 21(Erik, Research Assistant and Ph.D. Student, Marvin Jagals, Research Assistant and Ph.D. Student, Frederik Ahlemann, chair for Information Systems and Strategic IT Management; all are at the University of Duisburg-Essen, Germany, 2021, Blockchain for AI Data – State of the Art and Open Research, Forthcoming Forty-Second International Conference on Information Systems, <https://www.researchgate.net/profile/Erik-Karger/publication/355174945_Blockchain_for_AI_Data_-_State_of_the_Art_and_Open_Research/links/61697bc8039ba2684441b860/Blockchain-for-AI-Data-State-of-the-Art-and-Open-Research.pdf>) MAM

Artificial intelligence (AI) and blockchain are currently trending terms that become increasingly present in people's everyday lives. Blockchain has been adopted for various other use cases since its first appearance as the Bitcoin’s underlying technology in 2008 (Nakamoto 2008). Blockchain allows the tamper-proof transfer of data or other assets without the involvement of an intermediate third party. As a new computational infrastructure**, blockchain has the potential to change many business, governance, and societal processes** (World Economic Forum 2018). AI is another technology that becomes increasingly influential for both research and practice. Self-learning algorithms are already part of many people’s everyday routines. AI drives many **aspects of modern society**. These aspects range from web searches to content filtering on social networks, to e-commerce website recommendations. This technology is also increasingly present in consumer products, such as cameras and smartphones (LeCun et al. 2015).

Next to the increased amount of available computing power that improved tremendously over the last years, data are another crucial driver behind the current growth and rise of AI systems. The reliability, security, trustworthiness, and credibility of the data sources or platforms from which data are collected and obtained are very relevant (Salah et al. 2019). If the data quality is poor, the quality of the AI models trained with these data suffers as well. Especially smaller companies may find it difficult to obtain sufficient data for training models. In contrast, large companies, such as Facebook and Google, usually find the acquisition or use of a large amount of data easy to implement. This centralization of data causes concerns about the possible **AI monopolization** by a few big companies (Dinh und Thai 2018). This could also negatively affect balanced competition between AI researchers and companies, eventually leading to a **slow down** in the development of AI (Dinh und Thai 2018). Furthermore, centralized data storage via clouds, data centers, and clusters might be obstructive for the development of highly secure and data protection-relevant AI applications. Particularly, centralized data storage is very vulnerable in terms of data protection and security when involving personal and sensitive data on users, locations, activities, or health records (Salah et al. 2019).

Given by its nature, the blockchain can tackle data quality and storage issues. For certain parties, blockchains natively already deliver **quality assurances** regarding the data stored on them: The employment of hashes to connect blocks prevents interfering with data (Cappiello et al. 2019). **Besides, blockchain's main benefit is decentralized trust.** The blockchain establishes a distributed chained data structure by using technologies such as smart contracts. These features enable blockchains to serve as a technical foundation for cryptocurrencies and as a system for data quality improvement and assurance (Wang et al. 2018; An et al. 2020). The blockchain has significant advantages for end users, as it can provide a secure and trusted shared ledger of data and transactions (Salah et al. 2019). The blockchain’s abilities might, therefore, **increase data creators' and owners’ motivation to share their data**. The users of AI systems can benefit directly from these data, as they **can be used as learning data** for the development of AI systems. This can help companies **generate more reliable AI** system results.

#### This is essential to secure AI from devastating attacks

Platz 20 [Brian, member of Forbes Technology Council, Co-CEO and Co-Chairman of Fluree, PBC, an open-source platform for data ecosystems, “Why We Shouldn't Have AI Without Blockchain,” 07/23/20, <https://www.forbes.com/sites/forbestechcouncil/2020/07/23/why-we-shouldnt-have-ai-without-blockchain/?sh=be795394c4eb>, accessed 10/29/21, JCR]

As AI continues to permeate the online world, it opens up a Pandora's box of unintended consequences. That’s because unleashing AI on the current version of the internet and letting it feed on potentially inauthentic data can lead to devastation. Our increasing reliance on machine learning opens the floodgates for hackers and other bad actors to manipulate data and exploit algorithms in dangerous ways. From entering counterfeit products into the supply chain to changing software source code to meddling with voter registration databases, data tampering is already being used as a powerful weapon. Introducing AI into the equation only amplifies the danger. AI is powerful enough to drive autonomous machines, and hackers are powerful enough to get past any firewall. Damage can be done in just a few seconds, and it could be months before anyone notices that something is off. To confidently support the expansion of AI as we move toward the next phase of the internet, the internet itself must adapt — with blockchain serving as the root of the change. The internet is already untrustworthy. Spurred on by game-changing events like the uncovering of AI-generated fake news and deep fake photos, internet users are being forced to rethink their faith in the internet as solely a force for good. Facebook’s Cambridge Analytica scandal and Equifax’s data breach exposed another one of the internet’s major problems: database vulnerability. Here, too, the public is beginning to turn against the internet. For evidence, look no further than the EU's General Data Protection Regulation (GDPR) or the California Consumer Privacy Act (CCPA) — two pieces of legislation both meant to place extreme limitations on the collection and storage of personal data. The underlying problem is that database security never caught up to the raw computer power that allows companies to collect and store more consumer data than ever thought possible. Instead of rethinking databases from the ground up to adjust to this new reality, the growing trend has been to introduce point fixes, further exacerbating the mess of APIs that have bogged down "modern" internet architecture. Yet it is the ability to gather and store data that drives the modern economy. Data is what enables companies to bring about the next generation of services custom-tailored to our preferences and needs. Web 3.0 ups the ante — and it needs a defense mechanism. It is possible to salvage the best of the internet while starting to solve some of its most pressing concerns. That’s because the internet is quickly moving into a new phase known as the Semantic Web, or Web 3.0. Web 3.0 aims to empower machines that are connected to the internet to communicate directly with each other — this is known as machine-to-machine (M2M) communication. Additionally, Web 3.0 will rely on AI to learn more about a user’s preferences from their past interactions, providing a richer and more personalized user experience. Search engines, for example, will be able to provide more accurate and intelligent results based on an individual’s habits and previous activities. On first blush, this may sound like an entrenchment of the problem: If we’re already concerned about our data, why move to a Web 3.0 model that depends on personal data even more? The answer is simple: It’s true that Web 3.0 will be data-driven, but it will no longer rely on centralized and insecure databases. Additionally, Web 3.0 has an essential tool in its toolkit that fundamentally changes the security profile of user data: blockchain. Blockchain can mitigate AI’s risks as a key part of Web 3.0. Blockchain provides the necessary technology to make sure that AI architects can understand and trace the path of machine learning, allowing them to be confident in the integrity of the data that powers AI. That’s because blockchain provides a tamper-proof public record, ensuring each individual piece of data’s end-to-end traceability. Using this digital audit trail, AI decisions and results become easily explainable. That explainability will become increasingly important as machine learning becomes more pervasive in online operations. With more deployments, there will be more adversarial attacks. Strong data integrity along with a provable history that can track the chain of updates over time will be absolutely critical to fighting against foul play. Perhaps one of the best things about blockchain protection is that a tamper-proof record not only helps identify suspicious cases of “data poisoning” in the past, but it also helps prevent them from happening in the future. On the blockchain, AI has access to data that is not only tamper-resistant and secure by design, but comes with a mathematical record that proves it has not been tampered with. This enables more open, decentralized, even permissionless environments, democratizing AI for all. The next generation of the AI-powered internet requires the next generation of defense mechanisms, and blockchain is the perfect match.

#### Scenario 2 – Internet of Things

#### Blockchain will revolutionize IoT security, but artificial centralization wrecks the benefits

Schrepel 21 [Thibault, Assoc Prof of Law at VU Amsterdam Univ, Faculty Affiliate at Stanford Univ CodeX Center, blockchain expert appointed to the World Economic Forum, *Blockchain + Antitrust: The Decentralization Formula*, p.269-70, JCR]

1.2.1 Blockchain and the Internet of Things. Technologies tend to accelerate each other," and for that reason, it is useful to analyze how they interact. Blockchain has direct implications for quantum computing, 3D printing, biotech and nanotechnologies, among others." In the subsequent developments, I will limit myself to discussing the loT and Al, as blockchains may serve as an infrastructure for these two technologies, there-fore shaping their use and developments. To put it simply, the loT is all about connecting the analog world to the digital one. Physical products are equipped with sensors or connectors that can send information or be controlled by online applications. There are over 20 billion loT devices in circulation today and this number will likely triple by 2025." Each of these devices generates information that is then turned into data, thus accelerating the already exponential production of data. In fact, the world is expected to produce six times as much data in 2025 as in 2019." Blockchains could boost loT. First, blockchains could be used as the infra-structure layer on top of which loT ecosystems are built. Second, blockchains, combined with algorithms, could help monitoring devices and spot anomalies. Should, for example, a product malfunction, blockchain ledgers could help identifying why—without permitting the constructor to tamper it. Third, smart contracts could allow loT devices to interact with each other on specified terms and ensure that they stick to them. Most of all, blockchain technology provides loT systems with security. By eliminating a single point of failure, blockchains ensure continuity even when a server is down. Not so surprisingly, 86 percent of blockchain adopters are combining the technology with loT solutions and this number will likely grow in the fidure.35 If blockchain technology does indeed become the infrastructure upon which most loT systems are built, it will be necessary to ensure that the technology's internal layers are free from economic coercion. If not, artificial forms of centralization will impact loT markets — for example, notably through anticompetitive practices that affect the validation of transactions or that raise prices. We can find a direct relationship between these external applications and blockchain's fourth and fifth layers.

#### Attacks on critical infrastructure on the rise. IoT attack would ripple across sectors.

Horwitz 21 [Lauren, senior content director at IoT Today, winner of the Silver Award from the American Society of Business Publican Editors, “IIoT Software Vulnerabilities Fuel Critical Infrastructure Attacks—Again,” 08/16/21, <https://www.iotworldtoday.com/2021/08/16/iiot-software-vulnerabilities-fuel-critical-infrastructure-attacks-again/>, accessed 10/21/21, JCR]

In August 2021, Forescout Research Labs and JFrog Security Research identified 14 vulnerabilities affecting the NicheStack TCP/IP stack, which the organizations dubbed INFRA:HALT. TCP/IP stacks enable vendors to implement basic network communications for IP-connected systems, including IT, operational technology (OT) and Industrial Internet of Things (IoT) devices. Indeed, NicheStack is present in myriad OT devices that are commonly used in several critical infrastructure sectors, such as manufacturing plants, water treatment, power generation and more. The new vulnerabilities enable remote code execution, denial of service, information leak, TCP spoofing, or DNS cache poisoning. Critical Infrastructure Attacks Reveal ICS Weak Spots The vulnerabilities discovered illuminate the risk to critical infrastructure systems should they be compromised by malicious actors. These systems are aging and vulnerable, said experts. “It is … an unfortunate example of the huge vulnerability of an aging infrastructure that has been connected, directly or indirectly, to the Internet,” said Curtis Simpson, CISO at Armis in a recent article on increasing attacks on critical infrastructure. Forrester Research’s Brian Kim said that critical infrastructure organizations need to focus on identifying vulnerable OT devices within their estate, then focus on building a zero-trust strategy, using least privilege and network segmentation to prevent malicious actors from gaining access to critical systems. “One of the best ways we can reduce the impact of a breach is a zero-trust strategy by limiting the communications of these ICS [industrial control systems],” Kime said.. “We can create an allow list that only allows communications with control systems that run a process–allowing least privilege for network connections … is a best practice. And ideally, we should have a barrier between IT and OT and segment each facility to have its own network. JFrog and Forescout research teams will present a webinar on August 19 to provide additional information about how these vulnerabilities were identified and how they can be mitigated. Critical Infrastructure Attacks on the Rise. Last year, there were some 65,000 ransomware attacks, according to the Recorded Future, a Boston-based cybersecurity firm. Cyberattacks on critical infrastructure present certain benefits from the attackers’ perspective, even if the objective of attackers is not a payout. First, malicious attackers can gain access to these vulnerable devices with ease, as OT devices may be older and lack the security protocols of newer technologies. Second, once critical operations are affected, it can grind operations to a halt. Affected organizations have great incentive to pay ransomware demands just r resume operations. “The nature of these vulnerabilities could lead to heightened risk and expose national critical infrastructure at a time when the industry is seeing an increase in OT attacks against global utilities, oil and gas pipeline operators as well as healthcare and the supply chain,” wrote Forescout Research Labs in an announcement regarding the vulnerabilities. Third, access to OT devices can always provide entrée to other systems within organizations. “Once accessed, the stack becomes a vulnerable entry point to spread infectious malware across IT networks,” the researchers continued. Kime noted that attacks like the recent one on Colonial Pipeline revealed that critical infrastructure systems are interconnected, creating the opportunity for ripple effects within these systems, then across the chain to IT systems as well. “An event like Colonial Pipeline has revealed that these are more systems of systems rather than independent, isolated sectors that operate within their own little world,” Kime said. Ultimately, Kime noted, critical infrastructure operators need to shift their perspective to enable more thoroughgoing protection of the critical infrastructure they manage. “There should be a strong focus among critical infrastructure on not just security but resilience,” he said.

#### Operational technology attacks are a unique terminal risk – economic and societal collapse.

Murphy 19 (Hannah Murphy, Tech Correspondent at Financial Times, 10-13-2019, Companies urged to bolster infrastructure cyber defences, Financial Times, <https://www.ft.com/content/797e1e5e-ca53-11e9-af46-b09e8bfe60c0>) MAM

Hackers have traditionally focused their attention on computer software, resulting in a mushrooming of cyber security companies that promise protections for office-based clients. But there is another, less well-known hacking threat: cyber attacks on big corporate operations, such as **manufacturing facilities or power plants, as well as other vital infrastructure.** Such attacks are becoming more commonplace, fuelling concerns that companies should ramp up their efforts to guard against them. This is no small challenge. For companies with operational technology — the computerised systems used to control industrial operations — the risks of a breach are plentiful; disruptions to machinery processes could dent revenues or cause an accident. For those involved in “critical infrastructure” — the **dams, energy, oil and gas facilities** required for society to function smoothly — the risks are more dramatic and may attract nation state hackers, not just those seeking financial gain. “Our economy will disappear, society will collapse — and these things are possible,” says Sujeet Shenoi, professor of computer science at the University of Tulsa, who has been involved in multiple government-led critical infrastructure projects. “**There’s never been a war** in human history **where** the **critical infrastructure hasn’t been damaged**.” He notes that some 80 per cent of critical infrastructure in the US is privately run. “These companies are not prepared for [a cyber attack]. You need extremely well trained people,” he says, noting the many former government experts are moving into the sector. Historically, critical infrastructure and operational technology were kept separate from the computer networks typically used in corporate headquarters. However, those worlds are now converging as outdated analogue systems have become increasingly digitised. “Systems that have been developed over 30 or 40 years are having the internet introduced to them,” says Casey Ellis, founder and chief technology officer at Bugcrowd, a cyber security group. But **retrofitting systems** that were never intended to be on the internet **creates new opportunities for hackers**, he says. “The attack surface is expanding rapidly.” As with normal IT systems, ransomware and malware can be used to infect operational technology and critical infrastructure. The most high-profile worm was the 2010 Stuxnet malware, which targeted Iran’s nuclear facilities. Operations at the food company Mondelez and drugmaker Merck were disrupted by the ransomware dubbed NotPetya in 2017. Ukraine has suffered a spate of attacks on its power grid system recently, and earlier this year, Norwegian aluminium maker Norsk Hydro had to freeze operations earlier after it fell victim to ransomware. While the marketplace for cyber security companies offering support to such groups is smaller than the traditional IT security space, experts caution that companies should take action. Moves might include assessing company **systems to ensure staff know what devices are connected to the network,** testing and monitoring those systems, and devising a plan for worst-case scenarios. Above all, companies should isolate the most critical systems to ensure they can keep them operating no matter what, says Pedro Abreu, chief product and strategy officer at online security company Forescout, who dubs the process “containing the blast area”. “If a WannaCry [attack] happens, I want to [be able to] shut down that facility or country” while the rest of the network remains running, he says. Various sectors are equipped differently, experts say. Where deep-pocketed energy, and oil and gas groups have been able to pour investment into bolstering their protections, others, such as the water sector, are thought to be lagging. To their advantage, Michael Fabian, principal consultant at Synopsys, notes that operational technology systems are “very restrictive”, meaning that “some expertise is needed to hack [them]”. By comparison, “**people providing consumer services have a massive attack surface**,” he says, citing the likes of Citibank, Target or Amazon. Nevertheless, operational technology systems have their own nuances. First, testing them for vulnerabilities can be difficult because the systems are too sensitive or essential to pause. “There are things that are ultra critical that we can’t put at risk by testing them, but we are doing just that — putting them at risk — by not testing them,” says Charles Henderson, global head of IBM’s hacking unit X-Force Red. This means cyber security companies may have to test for vulnerabilities against a less reliable reproduction of an actual system. And if a problem is uncovered, it is harder to fix. “The life cycles of those systems in the field is extraordinarily long,” says Eric Cornelius, chief product officer at BlackBerry Cylance, a cyber security group. Moreover, even if cyber security companies offer solutions, it can be many years before a system can be updated. For example, many companies would opt to rebuild an offshore gas plant once it has finally stopped running, rather than upgrade at great cost, Mr Cornelius says.

#### Goes nuclear

Vladimir Orlov 20, Founder & Director of the PIR Center, President of the Trialogue Club International, Head of the Center for Global Trends and International Organizations at the Diplomatic Academy, Ministry of Foreign Affairs of the Russian Federation, Co-Founder and Academic Supervisor of the International Dual Degree MA Program in Nonproliferation and Global Security Studies, MGIMO University, Professor at MGIMO University, author (or coauthor) of more than a dozen books and monographs and more than three hundred research papers, articles, and essays, publishes his views in Russian and foreign periodicals, “‘No Holds Barred’ and the New Vulnerability: Are We in for a Re-Run of the Cuban Missile Crisis in Cyberspace?,” SSRN Scholarly Paper, ID 3538078, Social Science Research Network, 02/14/2020, papers.ssrn.com, doi:10.2139/ssrn.3538078

Not hundred per cent of the dialogue has been frozen, fortunately. Certain informal, mostly offthe-record, meetings of US and Russian experts on cyber agenda continue taking place, both through Track 2 and Track 1.5. One of the most intellectually stimulating meetings, with frank exchanges, took place in Vienna in December 2018. The report produced after the meeting stressed “the significant risk […] that cyber-attacks could conceivably lead to a military escalation that may further trigger a nuclear weapons exchange, a fact that became more explicit with the adoption of the current Nuclear Posture Review. This issue gets complicated given that third parties may have the capabilities to invoke a cyber conflict between Russia and the United States. Whether a country or a non-state actor, they could put the two countries on the verge of an armed conflict by attacking critical infrastructure of either of them and making it look as if the aggressor were the other one”[22]. However, one should have no illusion: such informal meetings may be fully fruitful only when their reports and policy recommendations are utilized by the governments. And for that, a warmer climate in bilateral relations is a must. So far, we see exactly the opposite: mercury falling to freezing levels.

Risk of cyber clashes growing into a chaotic global cyber war has been emphasized by the UN Secretary-General Antonio Guterres in his Agenda for Disarmament: “Malicious acts in cyberspace are contributing to diminishing trust among States… States should implement the recommendations elaborated under the auspices of the General Assembly, which aim at building international confidence and greater responsibility in the use of cyberspace.[23]” However, as the members of the US-Russian Track 1.5 working group on strategic stability recently concluded, “without a constructive dialogue on cyber issues between the United States and Russia, the world would most likely fail to agree on any norms of responsible behavior of states in cyber space”[24].

Do we really have to survive a cyber equivalent of the Cuban Missile Crisis to realize the importance of achieving some kind of agreement on cyber issues, and on the broader agenda of international information security?[25] Or is that kind of talk plain old alarmism?

I don’t want to sound a fatalist, but I am even less keen on sounding like an ostrich that’s buried its head in the sand. We cannot ignore the obvious: whether the world’s most powerful actors like it or not, the world is sliding to another major crisis like the one in 1962. The cyber war is already raging. There are no rules of engagement in that war. The uncertainty is high. The spiral of tension is getting out of control. The cyber arms race is gaining momentum. And there are no guarantees that the next crisis will be controllable, or that it will result in a catharsis as far as international information security regulation is concerned. There’s no telling what will happen once the cyber genie is out of the bottle.

#### Cooperation between blockchain and antitrust enables innovation via legal comfort zones – prevents fears of regulatory capture.

Schrepel 22 (Thibault, Assoc Prof of Law at VU Amsterdam Univ, Faculty Affiliate at Stanford Univ CodeX Center, blockchain expert appointed to the World Economic Forum, 1-17-2022, Unlocking the Potential Between Blockchain and Antitrust, <https://www.theregreview.org/2022/01/17/schrepel-potential-between-blockchain-antitrust/>) MAM

Law and technology overlap in many ways, but scholars and regulators tend to focus on incompatibilities between the two. I propose that they also explore synergies between law and tech, and address frictions in a way that preserves them. This exploration should begin with blockchain and antitrust. In recent months, a body of blockchain antitrust cases has emerged. Looking at the cases in isolation could give the impression that the interaction between blockchain technologies and antitrust laws is only a point of friction. In Gallagher v. Bitcointalk.org, a Bitcoin enthusiast filed a claim against the Bitcoin Foundation and the forum owners for excluding him from the website. He argued that the defendants conspired against him to prevent new competition in the space, therefore violating Section 1 of the Sherman Act. In another case, United American Corporation v. Bitmain, the plaintiff argued that various firms—including those of prominent Bitcoin investor Roger Ver—schemed to hijack the Bitcoin Cash network, here again in violation of Section 1 of the Sherman Act. More recently, in In re Tether and Bitfinex Crypto Asset Litigation, plaintiffs argue that Tether and Bitfinex have coordinated to manipulate the price of Bitcoin. They seek $1.4 trillion in compensation. All these cases are directed against the blockchain ecosystem—for good or bad reasons. They provide only a partial view of the relationship between blockchain and antitrust. As I argue in a new book, Blockchain + Antitrust, regulators should approach blockchain and antitrust **from a cooperative angle**. Both blockchain and antitrust seek to decentralize economic opportunities despite frictions that can arise. In fact, not only do blockchain and antitrust have the same focus, but they also complement one another and create synergies in a “1 + 1 = 3” fashion. In the field of antitrust, if big tech companies abuse their dominant positions in the advertising market against specific blockchain, blockchain participants could enforce the rules against monopolization and claim for damages. They could also enforce anti-cartel rules, should on-chain or off-chain agents coordinate their behavior against the interest of decentralized communities. Code alone cannot provide a complete solution, and the law can overcome many of its shortcomings. Policymakers and regulators could use blockchain to supplement antitrust rules where such rules prove ineffective or unenforceable. Empirical works show that agencies detect few infringements to antitrust laws or cannot enforce the laws when jurisdictions are mutually unfriendly. Blockchain removes intermediaries with the power of command and control, which de facto eliminates abuses of that power. Furthermore, blockchain aligns value creation with value capture. For example, through NFTs, creators can capture the economic value of what they create. This alignment works in favor of antitrust enforcers. And agencies could also use blockchain to improve their merger control processes and, eventually, decentralize antitrust enforcement. Law alone cannot provide a complete solution, and code can help achieve the objectives set by the legal rules and standards. Despite being two complementary parts of the same equation, the cooperation between blockchain and antitrust requires action. If not, frictions between the two will transform into retaliation strategies that reduce the common good. Cooperation requires a proactive approach followed by legal and tech communities. On the side of public institutions, cooperation requires three actions. First, regulators should direct enforcement activities toward the practices that artificially recentralize blockchains. Including punishment for illegal behaviors implemented outside the chain to protect blockchain participants. Second, when imposing remedies, courts and regulators should preserve blockchain decentralization. The same goes for the design of new regulations. If regulators force blockchain centralization for the convenience of applying the law, they will reduce its differentiation from centralization systems to the point where blockchain’s chances of survival will become too thin. Finally, regulators should create legal comfort zones for blockchain innovation. They should also be concerned about regulatory capture and create a task force to prevent and document it. On the side of blockchain communities, cooperation requires enabling easier legal enforcement by implementing new technical features where necessary. These features could be voting mechanisms to decide on impacting immutability, generalize modifiers, enums, and chameleon hash, or bypass immutability by pruning blockchains. Such features could also take the form of templates and legal factories. There is a difficult balance between enforcement capacity and decentralization, but not an impossible one. The stakes are high. Antitrust is at the very center of most discussions about big tech companies. It will soon be equally prevalent in blockchain ecosystems. We need to foster cooperation between law and technology, and eventually extend the “law + technology” movement beyond antitrust.

#### States fail – biases, lack of clarity to businesses, state enforcement interference.

Jacob P. Grosso 21. J.D. Candidate. “The Preemption Of Collective State Antitrust Enforcement In Telecommunications” University of Richmond School of Law. 02-11-21. https://lawreview.richmond.edu/files/2021/04/5-Grosso-552.pdf

Preemption would result in cognizable benefits to the regulatory and business spheres. These benefits would include **clear guidance**, **increased enforcement efficiencies**, and the ability to pursue nonenforcement agendas and broader policy goals.236 Businesses would receive clear guidance on the legality of their business choices. State antitrust enforcers would redeploy costs to state-specific issues. Federal enforcers would be able to effectively pursue broader policy goals. Consolidated enforcement and regulatory schemes would provide clarity to businesses through more uniform regulations and decreased litigation concerns. This consolidation, in turn, would reduce costs for the government and the competitors while encouraging competition and unnecessary compliance costs.237 Clear regulations serving a common goal, without the inherent biases of individual state interests, can provide clarity to businesses and preserve the balancing of consumer welfare with the aggregate social welfare. Individual states make decisions based on their individual needs, as seen in the T-Mobile-Sprint merger.238 When federal law conflicts with state law, federal law controls.239 Despite this standard, multistate task forces continue to come forward as the interpreters of federal law.240 This approach poses problems because of the inherent state biases that underlie the enforcement actions. **Preemption could decrease the effects of individual state biases on the guidance given to competitors**. Antitrust analysis considers geographic differences in determining the concentration of a market, meaning a one-size-fits-all approach does not work for aggregating individual state markets.241 This restructuring would reduce the effects of an individual state’s interests on collective action.242 While any individual state may be best served by one plan, the economy as a whole might suffer for that decision.243 “Divergent approaches to the exercise of enforcement discretion are not just possible, they are likely.”244 States likely face pressure from several groups that can influence their enforcement decisions, as well as the selfish motivation to protect their consumers regardless of the cost to national welfare.245 **Uniform, clear guidance at the federal level**, **without state interference, will reduce opportunities for the individual motivations of states to negatively impact a clear enforcement scheme**. Adding states as parties to a telecommunications antitrust lawsuit complicates the suit by increasing the number of parties that must agree to a settlement.246 The effects of the preemption and resulting enforcement system will create efficiencies for federal and state enforcers, as well as for businesses. For telecommunications antitrust enforcement actions, this will limit costs to the federal agencies, prevent the duplication of effort (in reviewing transactions), and eliminate the costs of coordination that NAAG multistate enforcement teams face.247 Extending even beyond telecommunications, this results in a net positive for the antitrust sections of state attorneys general offices to redeploy resources to monitor and combat anticompetitive behavior in the state-specific areas that these sections were designed to handle.248

# 2AC

## Innovation

#### It also improves overall resource efficiency and investigation accuracy

Almudena Arcelus 21, Principal at Analysis Group, Mihran Yenikomshian, Vice President at Analysis Group, and Noemi Nocera, Associate at Analysis Group, “Mitigating Antitrust Concerns When Competitors Share Data Using Blockchain Technology”, Harvard Journal of Law and Digital Technology, Harv. J.L. & Tech. Dig. (2021), Spring 2021, Lexis

C. Transparency for regulators

Implementing transparency in the network design can improve regulators' ability to investigate claims of antitrust violations. First, blockchain networks could be designed to provide antitrust investigators with a clear audit trail of the life cycle of an asset as it moves through a firm's supply chain, providing critical information to investigators as they assess when and how a firm's products transformed from raw materials to a finished good. Second, networks can be designed to provide investigators with more accurate, reliable, and comprehensive transaction data across an entire firm, rather than the piecemeal and inconsistent data that regulators often receive. Last, we could imagine the development of a blockchain, potentially accessible only by select parties or regulators, that contains industry-wide transaction data, which could provide an unmatched tool for investigators. Furthermore, the standardized data format in a blockchain may lead to faster resolution of potential antitrust investigations.

Whether or not these particular strategies would be effective in a real-world setting will depend on the industry or business context, the design of the blockchain network at issue, and the effectiveness of governance and regulatory oversight.

V. CONCLUSION

Because of its potential to change the way many governments' and firms' services currently operate, blockchain technology has attracted extensive press coverage. Although antitrust concerns exist in relation to blockchain adoption and data sharing between competitors (including access to information, collusion, abuse of dominance, and enforcement), blockchain serves mainly as a data management tool. How it affects competition will depend on network design and regulatory oversight, among other things. When examining antitrust concerns, industry observers as well as regulators should assess blockchain technology according to its specific implementation and its role in the wider framework within which it is used.

## OFF

### 2AC T – Ongoing Conflict

#### We meet – blockchain is exempted in the status quo because of firm dominance .

Dr. Thibault Schrepel 21, PhD in Antitrust Law from Université Paris-Saclay, LLM in International Law and Legal Studies from the Brooklyn Law School, Associate Professor of Law at VU Amsterdam University, Faculty Affiliate and Creator and Director of the Computational Antitrust Project at the Stanford University CodeX Center, Blockchain + Antitrust: The Decentralization Formula, p. 107-108

4 CHAPTER SUMMARY AND BEYOND

I have explained that legal fictions achieve specific objectives by granting rights to subjects and entities. Their creation is a strenuous exercise, and for this reason courts and legislatures are reluctant to design new ones. Antitrust law, for instance, has been based on the same legal fiction as was theorized the 1930s. Ronald Coase’s early work defines the “firm” as a zone in which vertical control is exercised to reduce transaction costs.

Over the last several decades, the theory of the firm as developed by Coase has become a crucial part of antitrust analysis. It is used to define entities to which antitrust laws apply and to characterize and assess anticompetitive practices. The creation of an “inside” and “outside” the firm thus guides both collusion and monopolization cases.

But one cannot transpose the theory of the firm to blockchain layer 1, as it does not feature the same vertical control. The absence of vertical control averts antitrust law, meaning that most of the behavior within that layer cannot be sanctioned. This is problematic for blockchain communities, as applying antitrust could benefit them by eliminating illegal practices. It is thus necessary to create a new legal fiction around that layer - Chapter 7 makes a proposal along those lines.

#### Restrictions on artificial centralization are prohibitions on anti-competitive business practices

Louven & Saive 18 [Sebastian & David, Research Associates at the Carl von Ossietzky Univ Oldenberg, Research Fellows at the Interdisciplinary Centre for Law of the Information Society, “Antitrust by Design – The Prohibition of Anti-Competitive Coordination and the Consensus Mechanism of the Blockchain,” *ZRI Working Paper*, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3259142>, accessed 10/05/21, JCR]

Basically, the competition authorities have legal powers to prohibit anti-competitive measures. Since the enforcement of any prohibition orders could be partially inadmissible for the reasons mentioned above, the question of effective antitrust enforcement also arises here. After all, prophylactic prevention of blockchain-based anti-competitive coordination by the competition authorities amounts to ex ante regulation, which is basically unfamiliar to European antitrust law. Although the antitrust law merger control contains a perspective to take prior to the measure in question on the basis of its prognostic assessment of the merger. However, this also refers to the effects to be expected after the merger and is limited after the clearance decision to a repressive control of possible remedial measures. Instead, entrepreneurial actions are not subject to approval. The above-mentioned block exemption regulations could provide legal certainty against the intervention of the competition authorities. Secondly, by means of public communications, the authorities could commit themselves in the exercise of their margin of judgement and discretion powers and show companies the possibilities under which conditions their behaviour in connection with blockchain technologies would be unobjectionable under antitrust law. Below the instrument of the exemption there is the possibility of a determination in accordance with Art. 5 para. 2 Regulation 1/2003 relating to individual cases that, subject to new findings, there is no reason for action by the authorities. Section 32c sentence 1 German law against restraints of competition (GWB) contains a corresponding declaratory provision for German antitrust law. The ban on concerted practices under antitrust law can be applied without further ado to blockchain situations. Traditional attribution concepts can be used for anticompetitive information exchange. As far as a current blockchain technology enables an extensive contact among the participating companies by means of its consensus mechanism, this is associated with a high risk, which can be countered by a compliance-sensitive design of the respective blockchain technology. This can also eliminate possible risks in the enforcement of official or judicial prohibition orders that could otherwise affect the entire operation of a blockchain. Just as the consensus mechanism can encourage a feeling, it could prevent it if it is properly designed.

#### Counter-interpretation:

#### Counter-interpretation—subsequent legislative exemptions modify the ‘scope’ of the core antitrust laws.

ABA 15 – (American Bar Association, Handbook on the Scope of Antitrust Law, ABA Section of Antitrust Law, Chicago: ABA Publishing, 2015, p. 9-12) ISBN: 978-1-63425-054-2

Next, the language of the federal antitrust laws imposes several scope limits. Each of the major antitrust statutes applies only to "trade or commerce,"39 and that phrase has been held to exclude gratuitous or charitable conduct and other conduct not involving the exchange of goods or services for consideration.40 The Sherman Act likewise applies only to "persons," and while that term is construed broadly under the Sherman Act, it has some exceptions, notably for the federal government and its instrumentalities.41 Stricter limits appear in the Clayton, Robinson-Patman, and Federal Trade Commission Acts (FTC Act), and these limits are quite complex. The Robinson-Patman Act and two of the Clayton Act's substantive provisions, the limit on tying and exclusive dealing arrangements in section 3 and the limit on interlockin§ directorates in section 8, apply only to persons "engaged in comrnerce.',4 The Federal Trade Commission Act is subject to a few special peculiar Scope limits of its own

Finally, in several distinct ways the language of other federal statutes can limit the scope of the federal antitrust laws. First, approximately three dozen statutes explicitly limit antitrust as it would otherwise apply in particular contexts. Statutory exemptions tend to concern either ( 1) industries that are already regulated by some agency, like insurers excepted by the McCarran-Ferguson Act, by virtue of their being regulated by state insurance commissioners,44 or ocean shipping firms regulated by the Federal Maritime Com.mission,45 or (2) specific kinds of conduct that Congress has chosen from time to time to favor with special freedom to collaborate, like technological research and development, 46 the graduate medical resident program,47 or production joint ventures among competing newspapers.48

### 2AC – EU CP

NO SHOT OF CREDIBILITY- SOFT POWER DOWN IN ECON AND TECH- splinters the EU credibility

Pop ’21 [Valentina; October 4; Europe Express editor, formerly a Russian extracted journalist and writer for the Economist; Financial Times, “Europe’s energy crisis threatens to reignite disputes within the bloc,” <https://www.ft.com/content/5805c3d0-f102-48fc-9cfb-d3b721b85c34>]

Nothing says October like autumn foliage, pumpkin spice latte and — to EU aficionados — decamping in Luxembourg for the ministerial councils this month. With the energy price crisis having contributed to worsening inflation data, we’ll explore how the issue is likely to dominate the eurogroup today — and several other ministers’ meetings taking place at the Kirchberg Conference Centre. Also on the eurogroup agenda, though a mere side note, is the single currency’s mushrooming supervisory architecture. We’re unpacking what the thousands of newly employed financial sleuths are supposed to be doing and when the yet-to-be-established structures are expected to come online. And with local elections in Italy ending tonight, we look at Matteo Salvini’s dwindling fortunes — with the caveat that the political survival skills of “Il Capitano” should not be underestimated. EU disputes, reignited Europe’s escalating energy price crisis will be the focus of attention today when eurozone finance ministers discuss how surging electricity and gas prices could strain government coffers and scupper the EU’s nascent economic recovery, writes Mehreen Khan in Brussels. This afternoon’s meeting of the eurogroup in Luxembourg will be dominated by record prices for natural gas, the causes and consequences of which are dividing member states. The EU’s southern and eastern countries have called on Brussels to help alleviate the pressure on their struggling households, demanding the European Commission come up new emergency funds and provide explicit support for national spending measures to protect consumers. In an interview with the Financial Times, Spain’s deputy prime minister Nadia Calviño urges the commission to provide a common response after Madrid has been forced into drastic action to curb price rises for consumers. France and Italy have launched similar emergency measures this month. Brussels has said it will make clear the tools member states have at their disposal — in line with EU energy and competition rules. But the commission is unlikely to offer radical measures such as diverting the profits from the bloc’s Emissions Trading Scheme to cushion the blow for households. A commission’s “flexibilities” paper is likely to be published next week. Brussels’ initial response may prove to be modest, but officials and diplomats are acutely aware of how the energy debate could poison talks on crucial policy areas that will need to be resolved in the upcoming months. The energy crisis has touched on some of the EU’s most sensitive internal debates, from the bloc’s approach to carbon taxes, dependence on Russian gas, upcoming rules for sustainable finance, and the pending revision of EU spending rules. European leaders are due to grapple with the potential fallout at a summit in Brussels later this month. Northern member states are balking at the idea that higher fuel costs should lead the EU to slow down the road to decarbonisation. The fact that poorer, more fossil fuel reliant countries are in line to suffer the brunt of the impact also risks deepening divides on the transition to net zero and a looming revamp of EU fiscal rules. “This has the potential to sow distrust between countries as we enter a gruelling winter,” said one EU official.

#### Empirics prove EU influence fails.

Lehne 17 [Stefan Lehne (MA, International Relations, Fletcher School on Law and Diplomacy at Tufts University, visiting scholar at Carnegie Europe in Brussels, served the General Secretariat of the Council of the European Union as director for the Balkans, Eastern Europe, and Central Asia), 12-5-2017, "Is There Hope for EU Foreign Policy?," Carnegie Europe, https://carnegieeurope.eu/2017/12/05/is-there-hope-for-eu-foreign-policy-pub-74909]

The record of the EU’s concrete diplomatic and security initiatives in neighboring regions is uneven. The dialogue between Kosovo and Serbia, EU involvement in the negotiations on the Iranian nuclear program, the fight against piracy around the Horn of Africa, and the efforts to shore up governance in Mali and neighboring states have contributed to enhancing stability in the neighborhood. The EU-Turkey deal on refugees—while much criticized at the time by humanitarian NGOs—also showed the ability to manage a complex and urgent challenge.5 Unfortunately, the list of disappointments is quite long and illustrates the various structural weaknesses of the EU’s current foreign policy arrangements. Concerning Russia, the EU managed to maintain unity in its sanctions policy—a considerable achievement given the diverse attitude of member states toward Moscow. But the price of this unity was diplomatic paralysis. Just two EU member states, Germany and France, participated in the Normandy format negotiations on the Ukrainian conflict, but they were unable to overcome the stalemate. The EU institutions were practically locked out of this area, as illustrated by the fact that Federica Mogherini visited Moscow for the first time one-and-a-half years after she assumed office. Regarding Syria, the greatest tragedy of recent years with vast consequences for Europe, the EU from the beginning failed to match the objectives of its policy with appropriate instruments. It demanded at an early stage that Syrian President Bashar al-Assad be ousted from power, but the regime proved more resilient than anticipated and EU sanctions have been frustrated by Assad’s regional allies. Th

us, the EU’s role was reduced to providing humanitarian assistance, while the diplomatic process was taken over by Iran, Russia, and Turkey. Libya is a further stain on the EU’s record. While EU actors, particularly France and the UK, were pushing for the intervention that would bring down Libyan leader Muammar Qaddafi, the EU proved ineffective in tackling the postrevolutionary chaos. Instead, stopping the migrants who crossed from Libya to Italy soon became the primary objective. Italy is taking the lead on the ground and working closely with various Libyan security actors. But French President Emmanuel Macron’s sudden initiative to broker an agreement between the internationally recognized government and the strongman in the east, General Khalifa Haftar, was heavily criticized by Rome and revealed the lack of coordination among the main EU players.6 Shifting Global Scales The picture is not much more encouraging on the global level. The EU certainly continues to be one of the most important players in multilateral diplomacy, with its contribution to the Paris Agreement on climate change amounting to the biggest success in recent years. But as the other powers and regions are gaining strength, the EU’s coherence is diminishing due to internal divisions and its overall position is eroding. The UK’s decision to leave the bloc dealt a further severe blow to the EU’s global image. After decades of increasing international weight through successive enlargements, the EU will now lose 16 percent of its economy and one of its strongest foreign policy players.7 The EU’s weight in international economic and financial negotiations will remain considerable, but its clout is being reduced by the fact that its presence in the groups of the seven largest and twenty largest economies (the G7 and G20) and in international financial institutions remains divided between EU institutions and the bigger member states. As the discussions about trade agreements with the United States (the Transatlantic Trade and Investment Partnership) and with Canada (the Comprehensive Economic and Trade Agreement) have shown, trade policy, long one of the union’s greatest strengths, has become controversial as the losers from globalization have begun to mobilize against it. The EU has also failed to develop a coherent response to the rise of China. Competing interests of member states have allowed Beijing to play various parts of the EU off each other, as illustrated by the annual 16+1 summits of Central and Eastern European countries plus China. The EU has long been accustomed to operating as a junior partner to the United States in efforts to preserve the international order, but Donald Trump’s election has put an end to this tandem.8 Too weak to assume the leadership role abandoned by Washington and in many respects still dependent on partnership with the United States, EU actors are just struggling to limit the damage and hoping for the self-correcting capacities of the U.S. political system.

### 2AC – DOJ CP

#### FTC leadership on blockchain establishes a model for other countries to apply to AI and machine learning.

Bojana Bellamy 19, President of Hunton Andrews Kurth LLP’s Center for Information Policy Leadership; Terry Calvani with the Freshfields Law Firm, Former Commissioner and acting Chairman at the Federal Trade Commission; Eduardo Perez Motta, Senior Partner at the SIA Law and Economics Firm and Former President of the Mexican Competition Authority, COFECE, and, also, a Former Chair of the International Competition Network, Rod Sims, Chairman of the Australian Competition and Consumer Commission; Andy Wyckoff, Director of the OECD’s Directorate for Science, Technology, and Innovation, “The FTC’s Role in a Changing World,” FTC, 3/26/2019, https://www.ftc.gov/news-events/events-calendar/ftc-hearing-11-competition-consumer-protection-21st-century

And I think it is important that we, in Europe, do not believe that our way is the only way and I think we must be also humble to take on some of the US best examples. But then the US also, we've got expectations, the US federal privacy debate is going to sort of stir up and come up with perhaps some new ways of dealing with some of these issues. So I think building on that respect for differences, but also what brings us together is really a good way forward. I talked about some of the joint policy initiatives. I really think this would be a great way to bring us together. Think about facial recognition or blockchain or machine learning or Internet of Things, drones, all of that would be amazing.

For example, a case study to bring us to work on something which is proactive, which isn't kind of reactive, confrontational, adversarial, but actually we're creating something better for the world ahead. Of course, cooperation and enforcement is important and I think, as some in Europe, do not believe any of the complaints end up in the right hands. I think that's where the FTC can also help and ensure that the EU-led complaints that are sent to the US actually get heard properly and get enforced potentially or there is a feedback loop back. I think that would be helpful as well.

And then the final point I would like to add, which is something around -- more around, as Eduardo has said, about the leadership role of FTC. I really think actually FTC has got something to teach other regulators just because of its breadth and sort of experience in being a tough enforcer. Those of you who were in privacy for many years used to remember -- people used to say -- Europeans used to say, if only we had the FTC enforcement in the European law that would be the best combination.

So we always looked up to FTC as to how they enforce the law, how they manage, and I think that's something that FTC can really take on a great role, particularly with European regulators, who now have got similar enforcement powers. But, frankly, and I apologize, I know it's going to be online, they don't have the know-how, how to actually use these powers in the best way.

We've seen some Draconian enforcement in the EU without proper due diligence, without proper process, without proper transparency and proper lessons learned why that fine has been applied in this way and why it hasn't been applied that way. And I think this is something, Rod, I think you slightly talked about that. That is where I think FTC can help also, frankly, technically bring the other regulators a little bit up to higher level simply because of its standing and experience in enforcement.

MR. TRITELL: Thank you. I think we have a wonderful example how your questions can really stimulate the panel. (Laughter.)

MR. TRITELL: So feel free, please, to find those cards and send them up here and enhance the show.

So we're talking about conversions and joint projects of an exciting nature. One. way to potentially move those forward is through the vehicles of international organizations. Our hearings have touched many times on the OECD, ICN, ICPEN, we have UNCTAD, regional organizations like APAC, various privacy groups. There's a big menu of these venues, but resources are finite.

Let me ask where in surveying that spectrum do you think the. FTC should allocate, its resources and what should they seek to accomplish in some of these important international fora? Rod?

MR. SIMS: Well, I wouldn't mind just -- I'll answer that question, but it's just backing up to what --

MR. TRITELL: Or come back to any other point, please.

MR. SIMS: Well, what Bojana just said, the -- we notice this quite a lot in our consumer work because we are a consumer and a competition regulator, and because most of our staff do both competition and consumer work, we don't separate them out. I think we're fairly unique in that. But it just strengthens that process, that know-how in competition, which you've got to have to be in the game.

When you translate that into consumer work, it's just so immensely powerful. I think, on average, we would take larger companies to court for breaches of consumer law than we do for competition law. We've recently taken Ford, Hines, Apple to court for breaches of our consumer law. We've got large fines.

Perhaps the biggest development in Australia is we've just convinced the government, under the heading of advocacy, to align the penalties for breaches of competition law and consumer law. So now the penalties will be the same. Previously, the. penalties were much lower for consumer law, which is a terrible thing.

The harm you can do through misleading consumers is visibly as bad as it can be from cartels. There is just no doubt about that. I can give you numerous examples. So I just want to back up that point, that the strength of being the regulator that does a number of things is important. I guess it leads into my point that I think ICPEN is the organization that perhaps needs that extra bit of work, whether it's capacity building with new jurisdictions, whether it's more coordinated action amongst the members, whether it's common approaches and practices, but really just raising up the profile of consumer work.

I have to say I continually get irritated when I'm at international meetings, you get the sense that competition work is held to be in some way superior to consumer work. That is complete, rubbish. They are. equally important. If you want your market economy to work for the benefit of consumers, you need effective competition law and you need effective consumer law. They can both equally do great harm.

And so I just think we've got to raise it up.

MR. TRITELL: I think you have a sub silentio round of applause in the room there, Rod. (Laughter.)

MR. TRITELL: Not to mention from Bojana who mentioned privacy --

MS. BELLAMY: And privacy as well. So we --

MR. TRITELL: -- which we think of as part of our consumer protection.

MR. SIMS: I can't talk about privacy, but --

MS. BELLAMY: The three-headed Medusa. It's the three heads, right?

MR. SIMS: But I would happily push it to privacy, absolutely. Well, the same point applies and it was Bojana's point that got me in there. The same point applies.

MR. TRITELL: Would anybody else like to come in on where, we should focus our efforts in the international organizations.

Eduardo, you talked about maybe we. ought to be going to the next step. So if you'd like to elaborate on that.

MR. MOTTA: Well, yes. I could, in a very general way, elaborate a little bit more on that. Let me first -- let me start with the main features of the ICN. The main features of the ICN, in my view, is that it's a soft law organization, it's a consensus organization. It's a consensus organization. That goes very much in line with what happens in the WTO. It could be risky, but that's the reality.

It's a beautiful system, organization, it's a beautiful network. It uses, very efficiently, the communication technologies and so on. And the main products that are created by the ICN are this best international practices standards, practical guides and toolkits, and they organize workshops for members. I mean, that's in a very general and a schematic way.

Well, the first question is that has been, in my view, the ICN has been one of the most efficient networks I have ever seen, international networks that I have ever seen. When I compare how the ICN was created and what was the situation in the context of the WTO discussion on trade and competition, which was one of the elements that provoked the creation of the ICN, and if you see that, that was 2001 more or less -- I think it was 2001 with 15 members in the ICN.

Today, they have more than 114 members. In 2001, the WTO was working generally well. We were in the middle -- in the start of a new round, the Doha Round. At that time, the ICN was created and the ICN has been much more effective, frankly, than organizations like the WTO.

But my point here is that the international context in which we are living is highly complicated. I mean, there are a lot of nationalistic pressures, national champions, pressure from different countries, developed and developing countries at the same time. That has become, I would say, a more systemic, risky problem for markets. And that doesn't mean -- I mean, the most important elements is how to show that markets in a competition scenery is one of the most important instruments you have in order to create not only efficiency in your economy, but also equality of opportunities for economic players, for economic agents, but also at the same time a quality of opportunities for consumers.

So in that situation is where I think it is needed to give an additional impulse to an international organization like -- or an international network like the. ICN. And maybe -- I mean, I'm basically suggesting to reflect on the possibility to create a new organization, a new international organization of -- this could be consumer and competition agencies. And that should be a more -- in my view, should be a more formal organization in order to generate an international pressure for the evaluation and valuation of the importance of markets in that context, in the context of competition.

So to think about the possibility of having a formal and permanent secretariat, that makes a difference because today what you have is the members are the secretariat itself. So it's difficult to differentiate what a jurisdiction is saying or what the organization is saying because the word is the same. So in my view, you need someone that is more independent than the agencies in order to advocate for competition in different jurisdictions.

It has to be a product, in my view, from an international agreement with some cooperation mechanism, but also some monetary mechanism. That's the most -- I mean, this is a difficult task. I'm not saying that it is not. It's a real challenge. But, frankly, what we. are living internationally is a challenge, itself today.

Sorry for taking --

MR. TRITELL: No, no, a lot of food for our continued thought. Andy, from the OECD perspective, what role can you see from the OECD and how can the FTC effectively engage within the OECD, for example, in the consumer committee or in the privacy activities of the organization?

MR. WYCKOFf: I'll touch on that in just one second. Eduardo provokes me because my part of the OECD has done a lot on telecom dereg, particularly in Mexico. Here's maybe an example we can begin to think about because we. did something in 2012. It helped inform the decisions in the regulatory reform that went on in creating an independent regulator even then. We followed up in 2017 and looked at implementation. What really went on? And that's now become a lessons learned that the rest of the region now is beginning to look at. So I think there's a model for what he's saying.

The FTC -- I speak under the Chair here of my Consumer Policy Committee, Hugh Stevenson, already plays a huge leadership role at the OECD. There's two areas if I had to put on my Christmas list from FTC, where I would like to see them push. One is on this evidence base that many people have talked about. We love statistics at the OECD and comparative --

MS. BELLAMY: Data.

MR. WYCKOFF: Data. Comparative indicators, and can we begin to look at things as we get, for example, like data breach laws from around the world. Can we begin to compare these and get some -- it may not be apples to apples, but at least fruit to fruit to look at.

The other is really leadership work that happened in 2010 again led by the FTC on our consumer policy toolkit. I think they began to open the thinking on both behavioral economics and the informational economics, which I think is important. And following up on that -- and we've begun to do some work on consumer attitudes towards trust. It goes to what people are saying. It may not be such big differences as people think, but also doing some more experimental work, such as on personalized pricing, which we're beginning to see proliferate in many different areas. These are areas where I think there's a lot of international interest and where the FTC could play a leading role.

MR. TRITELL: Well, leading right into our next topic, which is the FTC’s leadership role, I think that there was a point in time when the FTC had so much longer and deeper experience in some of these areas that it was a default and natural leader. Now, we live in a very multipolar world in all of these disciplines, and it prompts me to wonder what does it mean to be a leader in this environment. Is it important for the FTC to be perceived as and to be a thought and policy leader? If so, how can the FTC exercise effective leadership internationally, including on emerging issues and with agencies that operate in very different environments?

So let me just run down the table for anybody who would like to offer thoughts on this study with Bojana.

MS. BELLAMY: Yeah, sure. So I’ve got a very long wish list, which I will submit in writing probably to my friends at FTC. But, Andy, to continue where you kind of stopped, I would really love the FTC -- I think there is some leadership vacuum first, let me say, in the privacy regulatory community at the moment, and I think FTC would be very well placed to fill that vacuum, together with some other across the world are kind of wanting to seek that new leadership role.

So one area where I would like to see some work would be in the area of fairness, fair processing, fairness and unfairness, you know. In the majority of data privacy laws we have requirements with fair processing, yet nobody knows what it means. Yet here, FTC statute and work is based on unfair trade practices. There is unfairness methodology that FTC can teach us a lot in this world of AI and machine learning as to what creates harms to consumers, what and how do we measure that and how we, as organizations, think what is fair and what is not fair.

I think this will be a great opportunity not just for bilateral, multilateral regulatory corporation, but together with the organizations who are implementing this in the practice as well. FTC anonymization test, again for those of you in the privacy geek community is still standing the test of time where frankly everybody else says there’s no such things as anonymous data because everything about me doesn’t matter. If you know who I am, but you know everything about me, that’s good enough to identify me. Well, I think FTC has done some really great thinking in the past and we need to revive that leadership and kind of, again, convergence with some others.

Risk-based approach to regulation and enforcement and investigation is something that I think FTC again is best placed to teach the rest of the world. We live in a world where data is everywhere. Every company, to your point, is today a data company, Rod. I mean, I keep hearing this from manufacturing companies to financial companies who say we are data and tech companies today. So in that world, we really need different ways of approaching that.

And then a final point, I would like to say that this whole topic of incentivizing what good looks like and rewarding good behaviors, I think there is something about that that we need to exploit more. I’ve been head of privacy for a huge multinational company for 12 years, and trust me, when we got good praises from a regulator, that gave me a bigger budget, that gave me more standing internally, that got me to speak to the CEO and the board much quicker than any penalty and any fine did.

I think realizing what motivates companies and motivates people to behave well and be good corporate citizens in this new interconnected world, I think there is work to be done there. And I do remember FTC consent decrees that I have read as I was a practitioner, every single consent decree said to me, here is how they reward companies who actually do something while in privacy. That’s what DOJ said. Data -- I think somebody mentioned before, that’s what the SEC does, that’s what US sentencing guidelines do.

#### There’s a narrow window to establish international norms for safe development---the FTC’s key.

Jessica Newman 21, Research Fellow at the UC Berkeley Center for Long-Term Cybersecurity, AI Policy Specialist with the Future of Life Institute, Research Advisor with The Future Society, 2016-17 International and Global Affairs Student Fellow at Harvard’s Belfer Center, MPP from Harvard University, BA from the University of California, Berkeley, “Cooperation on Artificial Intelligence”, Georgetown Journal on International Affairs, 7/13/2021, https://gjia.georgetown.edu/2021/07/13/now-is-the-time-for-transatlantic-cooperation-on-artificial-intelligence/

The European Union and the United States have not always agreed on the regulation of digital technologies, but closer cooperation is needed to prevent the proliferation of harmful artificial intelligence and to help shape global AI norms that support democratic values, equity, and human rights. The recent launch of the EU-US Trade and Technology Council, together with the new EU AI regulatory proposal, provide a critical window of opportunity for deeper engagement.

Many assume that the European Union is the world’s technology watchdog, while in contrast the United States is an unruly digital Wild West. Media, policymakers, and the general public have been quick to fit the long-awaited EU regulatory proposal on artificial intelligence (the Artificial Intelligence Act, or AIA) into this bifurcated framing. Journalists have suggested that the AIA may “widen the regulatory gulf” between the EU and the US when it comes to reining in the riskiest AI applications. Researchers have called it “a direct challenge to Silicon Valley’s common view that law should leave emerging technology alone.”

However, this framing of a “gulf” between the EU and US on AI regulations is both overstated and counterproductive. The under-regulated AI industry is hurting Americans and Europeans alike, and AI’s risks, like algorithmic amplification of polarization and extremism, cut across borders. Not only do the allies’ perspectives align on various issues, but they are actively courting further cooperation on common challenges.

In mid-June, US President Joe Biden and European Commission President Ursula von der Leyen launched an EU-US Trade and Technology Council (TTC) at the US-EU Summit in Brussels. The TTC comprises ten working groups, with issues including standards cooperation for emerging technologies, data governance and technology platforms, and the threat posed to human rights by technology’s misuse. It remains to be seen, however, how much either ally will invest in this Council or how effective the TTC will be at advancing cooperation on critical AI issues going forward.

The release of the AIA, and the more recent launch of the TTC, present critical and time-sensitive opportunities for engagement. Failing to take advantage of this opportunity for transatlantic cooperation on AI would be a mistake with wide-ranging consequences for both AI and the state of democracy.

Divergent Approaches?

The EU’s proposed AI regulation differs from previous US federal government attempts by establishing oversight mechanisms to mitigate the risks of AI systems. The AIA views some applications of AI, such as AI-based social scoring, as presenting unacceptable risks that must be banned outright because they pose a clear threat to people’s safety and rights. It considers other applications, like using AI to evaluate eligibility for public services or a job, high risk because of their impact on people’s livelihoods and the potential for bias. High risk AI systems are subject to significant obligations before they can be placed on the market.

In contrast, a 2020 memo from the White House Office of Management and Budget on Guidance for Regulation of AI highlights a distrust of regulation that defined the Trump Administration’s approach to AI policy. The memo states, “Federal agencies must avoid regulatory or non-regulatory actions that needlessly hamper AI innovation and growth.” The memo also suggests that AI’s risks should be considered alongside potential benefits.

However, there has been a shift in the US AI policy environment under the Biden Administration, with louder calls for accountability and regulation. Although Biden has yet to make AI a priority, there is greater recognition of the risks the technology can pose and signals that the administration will take AI policy seriously. Vice President Harris has previously endorsed a bill to establish federal AI policy and has criticized the ways that AI can perpetuate bias. An Executive Order signed on Biden’s first day in office established an Equitable Data Working Group and the appointment of Dr. Alondra Nelson to lead the Office of Science and Technology Policy promises a commitment to pursue equitable AI.

The US does already have some protections in place against high-risk AI systems. Real-time biometric surveillance by law enforcement, prohibited in the AIA with some exceptions, has already been banned by numerous cities in the US. A statement of intent issued by the Federal Trade Commission the same week as the AIA release explains that AI products are not outside the scope of its consumer protection laws. Companies will need to adhere to FTC guidelines to ensure AI systems are transparent, explainable, fair, and empirically sound.

In fact, some have asserted that the FTC’s notice has more teeth than the AIA in the near-term. For example, the FTC has committed to holding companies accountable for preventing the proliferation of racially-biased or unreliable algorithms. Meanwhile, it may take years for individual EU member states to adopt the AIA, lessening the immediate impact on Big Tech compared to what some had expected. Under the AIA, most AI technology will not be subject to any regulation and while producers of high-risk AI systems face regulatory requirements it appears that assessments will not be made available to the public. In short, the EU approach may be less of a “burden” than some feared, while the US policy landscape may be less permissive than it may first appear.

More important than the US’s and EU’s willingness to establish regulatory frameworks is the significant overlap in what their frameworks intend to accomplish. The US and EU aim for not only the development of AI, but the development of trustworthy AI. Both have adopted the OECD AI Principles, which provide common benchmarks on issues including sustainable development, human rights, democratic values and diversity, and accountability, among others. The US’s and EU’s support of the Principles has helped to establish a shared language for global AI norms and governance.

Cooperation as a Strategic Goal

Greater transatlantic cooperation on AI is a stated goal of both the US and the EU. A European Commission program for a transatlantic agenda from December 2020 first proposed the EU-US Trade and Technology Council. The Council was an opportunity for allies to work together on critical technologies and to encourage the establishment of digital governance that promotes shared values of human dignity, individual rights, and democratic principles. The agenda described this as “a once-in-a-generation opportunity.”

The US has also highlighted the importance of international cooperation on AI, most recently by accepting the EU’s invitation to launch the TTC. The US has launched the National AI Initiative which intends to support further opportunities for cooperation with strategic allies on research and development, assessment, and resources for trustworthy AI systems. “International Cooperation” is also one of the six strategic pillars outlined on the newly re-launched AI.gov website detailing US AI priorities.

Transatlantic cooperation is widely supported by US industry stakeholders, in part to promote regulatory compatibility. For example, the TTC was endorsed in a blog post by Karan Bhatia, Google’s Vice President of Government Affairs & Public Policy, and in a statement of support from the Information Technology Industry Council. The final report from the National Security Commission on Artificial Intelligence (NSCAI), a multistakeholder group including numerous AI industry leaders, also has a chapter on creating a favorable international technology order. The NSCAI advises the US to establish an International Science and Technology Strategy and argues that “like-minded countries must work together to advance an international rules-based order, protect free and open societies, and unleash economic innovation.”

Given the allies’ many common goals, the AIA should not be seen as a challenge to the US. Instead, the proposal is an important first step and an opportunity to prevent AI uses that violate human safety and fundamental rights. The US and EU can now work together to further clarify and prevent high-risk AI uses, and establish shared AI standards. While the recently-launched TTC provides a valuable platform for this work and will support regulatory policy cooperation and convergence, a handful of working groups only partially focused on AI may struggle to meet these objectives. Additional pathways that deserve consideration include increasing capacity for information sharing and pooling resources for larger scale research on critical topics.

Why Now?

As governments scrambled to control the spread of COVID-19, many turned to AI technologies for help – to better understand the virus, track outbreaks, and help provide care. In some cases, this has justified the implementation of pervasive surveillance systems, which are now being used for troubling ends. As just one example, a facial recognition camera network in Moscow, originally implemented to help enforce quarantine restrictions, was later used to detain dozens of protestors voicing opposition to President Vladimir Putin. AI-enabled surveillance systems have proliferated across the globe, and the scale and scope of “digital authoritarianism” has increased for years, amplified by the use of AI to automate censorship and surveillance systems.

While the United States has worked to develop standards and principles for the use of AI around the world and sought to protect human rights and fundamental freedoms, these actions have failed to stop the misuse of AI. Concrete cooperation with the European Union, which has been lacking, could create a stronger alliance to counter the rising wave of digital authoritarianism. The launch of the TTC shows that President Joe Biden understands this dynamic. He recently said the “transatlantic alliance is back,” and explicitly highlighted the need to shape the rules that will govern the advance of AI, among other consequential technologies.

Importantly, greater transatlantic cooperation on AI is not just in the self-interest of the US and the EU; it can benefit democracies and human rights around the world. The alliance will be even stronger if it looks outward and facilitates international, inclusive dialogues, including with countries from the Global South. Fostering an equitable and responsible digital future requires incorporating critical, yet underrepresented, voices into AI governance discussions and decision-making.

Forgoing greater cooperation on AI between the US and EU would be a shortsighted mistake. There is a narrow window of opportunity to prevent the proliferation of harmful AI and to help shape global AI norms. The time for transatlantic cooperation on AI is now.

#### Self-regulation allows trust and innovation on the blockchain while still punishing anticompetitive practices

Light 21 (Joe Light, Bloomberg business reporter, 11-19-2021, The Crypto Industry’s Solution for Regulation: We’ll Handle It, Bloomberg, <https://www.bloomberg.com/news/articles/2021-11-19/crypto-industry-s-solution-to-regulation-is-self-regulation>) MAM

The cryptocurrency industry suddenly found itself in the crosshairs of a host of U.S. state and federal regulators this fall, facing millions of dollars of fines, threats of lawsuits, and warnings of new rules to come. Crypto executives say the abrupt—and sometimes overlapping—spate of enforcement threatens to chill innovation, especially in areas where it’s not clear which laws apply. Their solution? Let the industry help regulate itself. Major exchanges including Coinbase and Gemini and prominent investors like Andreessen Horowitz have floated the idea of a crypto self-regulatory organization (SRO), arguing it could be better suited to oversee the new and complex industry on some issues than traditional agencies, which have struggled to apply decades-old rules to the new market. Supporters say an SRO could be more agile in deciding on rules around new products, using its members’ expertise and resources. “The job of a regulator is not easy when you’re confronting something new,” says Greg Xethalis, chief compliance officer at crypto investment firm Multicoin Capital. “The question is, how do you get to an environment where the regulatory infrastructure can be more nimble?” Self-regulation has a long history on Wall Street. SROs, which are funded and governed by their own members, set rules, perform inspections, and mete out penalties to members, with authority delegated by Congress and regulators such as the Securities and Exchange Commission. A few years after Congress formed the SEC as part of President Franklin D. Roosevelt’s New Deal, the agency delegated some oversight of brokers and brokerage firms to the newly formed National Association of Securities Dealers, an SRO. Eighty years and a few reorganizations later, the NASD is now the Financial Industry Regulatory Authority, or Finra, with 3,600 employees helping to license, police, and levy penalties on hundreds of thousands of brokers, under the SEC’s supervision. A similar SRO polices commodities brokers, and the major stock exchanges are themselves self-regulatory organizations. For crypto, an SRO could be responsible to go after at least some infractions—referring serious fraud to agencies like the SEC. For example, the SRO could adjudicate whether a newly issued token should be classified as a security, a commodity, or something else, which proponents say would go a long way toward helping firms issue new ones without fearing an enforcement action years later. It could also handle such mundane tasks as setting product disclosure rules or standards governing how to manage customer data. Its behavior would be overseen by the SEC and other agencies, which would have the final say if they disagree with an SRO’s decisions.

### 2AC – Fintech DA

Your link is our link turn – **Status quo blockchain disrupts the effectiveness of coercive economics – corrected innovation is key.**

**Harrell and Rosenberg 19** – Peter E. Harrell is an adjunct senior fellow at the Center for a New American Security; former Deputy Assistant Secretary for Counter Threat Finance and Sanctions at the U.S. State Department. Elizabeth Rosenberg is a senior fellow and director and director of the Energy, Economics, and Security Program at the Center for a New American Security.

Peter E. Harrell and Elizabeth Rosenberg, “Economic Dominance, Financial Technology, and the Future of U.S. Economic Coercion,” *Center for a New American Security*, 2019, pp. 25-26, http://files.cnas.org.s3.amazonaws.com/documents/CNAS-Report-Economic\_Dominance-final.pdf.

**Developments in fin**ancial **tech**nology also **have the** potential to **affect the availability and strength of coercive economic measures** over the longer term. The movement to develop **blockchain-based, decentralized payments platforms and** new digital **currencies** or tokenized assets that feature anonymity **can undermine** the strength of **coercive economic measures**. However, **fin**ancial **tech**nology **developments**, such as the development of artificial intelligence/machine learning (AI/ML) compliance technologies, also **present potential means to better detect and stop evaders and avoiders of U.S. economic coercion** throughout global chains of financial interconnectivity.

**Fin**ancial **tech**nologies are not themselves the drivers of potential future changes to the sources of coercive economic leverage. However, they may **enable foreign governments to** develop better tools to **insulate transactions from U.S. jurisdiction**. And, regardless of the actions of foreign governments as they spread commercially, they may help evaders duck U.S. coercive economic power in limited but meaningful ways. **Conversely, new AI/ML or other technologies may help U.S. policymakers implementing economic coercion** to better do their job.

Financial technology can be a facilitator of rapid transformation in the financial services sector. Importantly, financial technology developments will not happen just in the United States; a number of other countries, from China to Singapore to Switzerland, are promoting themselves as financial technology leaders. There is no guarantee that financial technology innovators and investors will be centered in the United States in the future—which represents a vulnerability to U.S. economic prominence.

Maintaining U.S. Leverage

**The extent to which the U**nited **S**tates **will maintain coercive economic leverage** in a world where financial technology disrupts aspects of the traditional financial architecture **will depend** to a significant degree **on the extent to which U.S. firms**, and large global firms, continue to **play a dominant role in the development of the technology**. To put it bluntly, a blockchain-based clearing mechanism that enables trade between foreign countries without financial transactions touching the dollar would likely undermine U.S. leverage if the technology were developed and operated by a foreign company that had no need to adhere to U.S. law. **The U**nited **S**tates **would maintain** at least some **leverage if the technology were developed** or operated **by a U.S. company** obliged to adhere to U.S. sanctions, technology-export restrictions, and other relevant laws, or a foreign company with significant U.S. exposure.

#### Innovation spurs – stakeholder collaboration causes follow-on.

Lustenberger 21 (Michael Lustenberger and Saša Malešević, School of Management and Law, Institute for Organizational Viability, Zurich University of Applied Sciences, Florian Spychiger, Institute of Informatics, Blockchain and Distributed Technologies, 8-16-21, Ecosystem Readiness: Blockchain Adoption is Driven Externally, Frontiers, <https://www.frontiersin.org/articles/10.3389/fbloc.2021.720454/full>) MAM

Blockchain-based projects are characterized by **close collaboration** between different stakeholders. This cooperation spans a complex range of industries, organizations and interests, making them worthwhile to study from an ecosystem perspective (Barnes and Xiao, 2019). In the ecosystem research, the emphasis is on understanding the interaction between interdependent, but legally autonomous actors creating and commercializing innovations that benefit the end-user. Often, these innovations fail if coordination within the ecosystem is insufficient (Jacobides et al., 2018). As blockchain ecosystems are built up as decentralized systems, in which rights and decision making are not concentrated in a single institution, the development and adoption of this technology provides for organizations several unique challenges such as competing blockchain standards, decentralized governance models, intellectual property concerns, confidentiality risks and regulatory uncertainty (Lacity, 2018). The relative scarcity of blockchain expertise, and the challenge of forming multidisciplinary teams composed of jurists, computer scientists, and blockchain experts, hampered multiple use cases from being deployed and diffused (Beck and Müller-Bloch, 2017). Bringing an example of regulations in the financial industry, Holotiuk et al. (2018) emphasized the need for collaboration between banks and policy makers aiming to establish a common framework for blockchain based solutions. The establishment of blockchain consortia was a reaction to the strong urgency of cooperation between involved stakeholders (Holotiuk et al., 2018). How exactly organizations work together and find solutions within these new form of collaboration are not yet fully understood (Ziolkowski et al., 2020). However, empirical results indicate that preexisting collaboration among stakeholders positively affects the adoption of blockchain (Queiroz and Fosso Wamba, 2019). Therefore, we conclude that pre-existing collaboration approaches among stakeholders will favor blockchain adoption for an organization.

#### Competition law solidifies the blockchain and allows it to reach its economic potential – regulation is inevitable and should include antitrust.

Delrahim 22 (Makan Delrahim, former Assistant Attorney General of the Antitrust Division at the Justice Department, 1-20-2022, Regulation Will Be Good for Crypto, WSJ, <https://www.wsj.com/articles/regulation-will-be-good-for-crypto-blockchain-currency-economy-stablecoins-sec-fdic-11642714529>) MAM

All three branches of the federal government are finally grappling with crypto. Proper legal and regulatory treatment of blockchain technology is overdue. The executive branch—through the president’s Working Group on Financial Markets, along with the Federal Deposit Insurance Corp. and the Office of the Comptroller of the Currency—is calling for increased federal supervision of stablecoins, digital tokens with values tied to existing currencies. Congress has held hearings. A federal court will decide whether public sales of tokens by Ripple should be considered securities transactions, requiring registration with the Securities and Exchange Commission. The White House is expected to issue an executive order directing federal agencies to recommend possible regulations of the crypto industry. The Biden administration should include government competition lawyers and economists in any conversations about crypto regulation. The Justice Department’s antitrust division sponsors a program with the Massachusetts Institute of Technology’s Sloan School of Management to help staff understand how businesses use the blockchain and what effect those technologies have on competition in the marketplace. Moreover, through a Trump-era memorandum of understanding, the antitrust division and SEC staff and leaders meet regularly to share ideas and expertise on emerging issues of common interest. Crypto should be one. Blockchain applications have the potential to transform the entire economy. Like railroads, electricity, telecommunications and the internet, crypto likely will topple existing monopoly structures—and attract would-be monopolists. But crypto is different in one key respect: It has the ability to create and maintain decentralized marketplaces. Blockchain can topple incumbents because it is an open technology of decentralized trust. It makes it possible to cut out the middleman. New players are already using blockchain networks to topple incumbents. Filecoin offers decentralized cloud storage competing with Amazon Web Services. Helium offers decentralized wireless infrastructure. Compound allows consumers to lend and borrow crypto using a decentralized protocol. Maker allows consumers to use credit within minutes using collateralized debt. Catalog, Digimarc, Veszt and Mediachain allow musicians to harness the efficiencies of blockchain for royalty and intellectual-property management. These start-ups could end up being as disruptive to current music distribution status quo as Apple’s iTunes and Spotify have been to the old record label business model. The investment world also faces disruption by so-called decentralized autonomous organizations, which allow large groups to organize for a pricey purchase. One recently appeared to bid on a copy of the U.S. Constitution. The competitive disruption is no longer theoretical, but the blockchain’s success isn’t guaranteed. Policy makers need to appreciate the effect their decisions will have on competition. Competition lawyers and economists can help ensure that any regulatory framework allows for market conditions unhampered by powerful incumbents intent on preserving their dominance. Blockchain creates important efficiencies, such as reduced networking costs. Competition economists understand the importance of harnessing such efficiencies rather than inhibiting them. In today’s digital marketplaces, where a few companies have immense market power as a result of the network effects of their centralized business models, each company can raise the cost of doing business on the entire network as the network becomes larger and more ubiquitous. Blockchain enables all the benefits of network effects without the centralized market power. There’s a lot of potential here. To achieve it, engineers and policy makers need to get on the same page. The goal should be to help the blockchain grow, develop and meet its potential. Antitrust enforcers must be vigilant about ensuring that incumbent businesses susceptible to disruption don’t stop or co-opt the innovators.

#### No Iran nuke acquisition----multiple checks

Mark Fitzpatrick 20. Associate Fellow at the International Institute for Strategic Studies. 1-17-2020. "Is Iran building the bomb?" The Article. https://www.thearticle.com/is-iran-building-the-bomb.

No, Iran has not restarted its nuclear weapons programme. Commentators such as the New York Times columnist Thomas Friedman blithely assume so, based on Iran’s decision on 5 January to retreat from the enrichment limits in the 2015 nuclear deal, known as the Joint Comprehensive Plan of Action (JCPOA). Others wrongly conclude that Tehran has abandoned the deal. Yet Iran is still keeping a foot in the accord, abiding by the crucial inspection requirements, while insisting it will resume full compliance if the US resumes its JCPOA obligations to loosen sanctions. What Iran has done is advance the timeline toward a nuclear weapons capability in line with its nuclear hedging strategy. How much so is a matter of conjecture among experts. Some say that if Iran decided to make an all-out dash for a bomb, and experienced no hiccups along the way — what its adversaries call a worst-case scenario — Iran could produce a bomb’s worth of highly enriched uranium (HEU) in as little as 4-5 months. But such assessments of the so-called break-out period are based on uncertain data and questionable assumptions. The Israeli Defense Force (IDF), which presumably has a clearer window into Iran’s program, assesses that Iran will be able to produce enough HEU by the end of the year and to assemble a weapon in less than two years. Alarming as this might sound, it is not significantly different than when the JCPOA went into effect in 2016. And it is a much better situation than when negotiations began in 2013, at which point the break-out period was judged to be only a couple of months. The IDF also assesses that Iran is currently not interested in developing an atomic bomb as quickly as possible. A key goal of Iran’s negotiating partners was to extend the break-out period to at least a year. The deal succeeded in doing so by eliminating 98 per cent of Iran’s stockpile of low-enriched uranium, all of its stockpile of 20 per cent enriched uranium, which is just below the threshold of being weapons-usable, and two-thirds of the centrifuges that do the enriching. Before those cuts, Iran’s stockpile was enough for up to ten weapons, if further enriched. Afterwards, it had less than a quarter of the feed stock for one bomb Now that Iran has removed restrictions, the stockpile of low-enriched uranium is growing, centrifuges are being reinstalled and more efficient centrifuges are being developed at a faster pace. We will know by how much each of these steps has advanced when the International Atomic Energy Agency (IAEA) releases its next quarterly report in the latter half of February. The enriched uranium feedstock will still be less than a bomb’s worth, but the pace of acceleration will be concerning. One question is whether Iran will resume 20 per cent enrichment, a level it first reached ten years ago, in an escalating stand-off with western states which were imposing ever-more biting sanctions. Today, Iran can again use the 20 per cent step as a bargaining chip in efforts to forestall the re-imposition of UN sanctions. Do not be spooked by the alarmist assessments that will surely follow when the next IAEA report comes out. Remember that worst-case assumptions assume that Iran would be able to get everything right the first time it attempts the tricky task of producing weapons-grade uranium without it exploding prematurely, and that assembling a warhead small enough to fit in the nosecone of Iran’s missiles would go like clockwork. Remember, too, that Iran would be [foolish] ~~suicidal~~ to try to rush to produce HEU at sites that are intrusively monitored.

#### Unilateral sanctions have a less than 13% chance of success

David Cortright 18, (Director of Policy Studies, Kroc Institute for International Peace Studies, University of Notre Dame) "Why sanctions on Iran and Russia probably won't work," Business Insider, <https://www.businessinsider.com/us-sanctions-on-iran-and-russia-probably-wont-work-2018-8>

Allies supporting and reinforcing sanctions are usually pivotal to making them stick. Unilateral sanctions such as the proposed measures against Russia and Iran are seldom successful. Although the European Union has placed sanctions on Russia because of its actions in Ukraine, the latest legislative measures proposed in Congress would be unilateral. In an increasingly globalized world, unilateral sanctions face huge obstacles — even when imposed by the largest economy. A landmark study published in the 1990s by the Peterson Institute for International Economics found th

at unilateral US sanctions achieved their foreign policy goals only 13% of the time. The rare instances when unilateral sanctions work involve countries that have extensive trade relations with the US, clearly not the case with Russia or Iran. Russia is low on the list of US trading partners, and Iran has had virtually no economic or commercial relations with the US Neither country is dependent on US trade or likely to submit to American economic pressure. In addition, when a country faces sanctions, it can often seek commercial ties elsewhere. This was the case with Cuba. When the US imposed sanctions on its former trading partner after Fidel Castro came to power, Havana turned to Moscow for help and became a part of the communist bloc.

### 2AC – Nomination

#### GOP blocks.

DeBonis and Siegel 2/17 (Mike DeBonis covers Congress, with a focus on the House, for The Washington Post, Rachel Siegel is an economics reporter covering the Federal Reserve, 2-17-2022, GOP Fed blockade has Democrats worried about other nominations, including Supreme Court, Washington Post, <https://www.washingtonpost.com/politics/2022/02/17/republicans-fed-supreme-court/>

* GOP boycott

Senate Democrats are bracing for a potentially lengthy showdown over President Biden’s Federal Reserve nominees after Republicans boycotted a key committee vote Tuesday — and they are preparing for the possibility that the GOP might use the same bare-knuckle tactics against other high-profile nominees, including Biden’s forthcoming Supreme Court pick. Republican members of the Senate Banking Committee, led by Sen. Patrick J. Toomey (Pa.), did not attend Tuesday’s planned meeting in protest of Democrats’ intention to advance Sarah Bloom Raskin, Biden’s nominee for vice chair for supervision at the Fed, citing concerns about her work for a financial technology start-up, denying Democrats a majority quorum. Raskin was among six Biden nominees who were set to be advanced to a floor vote who are now sitting in limbo because of the boycott. Banking Committee Chairman Sherrod Brown (D-Ohio) made clear Wednesday that Democrats have no plans to separate Raskin’s confirmation from the others, which include a new four-year term for Fed Chair Jerome H. Powell. Republicans boycott and delay vote on Biden Fed nominees “If Toomey gets his way on this, it’s the way they will stop nominee after nominee after nominee: ‘Sorry, they didn’t answer right, so we’re not going to show up and provide a quorum,' ” Brown told reporters Wednesday. “You can’t govern that way.” The GOP boycott comes as Biden prepares to make the single most consequential and high-profile nomination of his presidency so far: a successor for Supreme Court Justice Stephen G. Breyer, who announced last month that he would retire once his replacement is confirmed. Asked if he was concerned that the GOP boycott tactic could expand to that nomination, Brown said, “I think this could set a precedent that could lead to that.” Brown and other Democrats said this week that it was unclear what they could do to get around the boycott tactic given the evenly divided Senate and the set of rules that govern committee procedures. The Senate has operated for more than a year with a 50-50 split between the parties. Democrats hold majority control with Vice President Harris’s tiebreaking vote, plus a delicately negotiated power-sharing agreement that gives Senate Majority Leader Charles E. Schumer (D-N.Y.) and Democratic committee chairmen agenda-setting power and guarantees the ability of a united Democratic caucus to advance legislation to the floor and confirm nominees.

#### LT - Winners win – Biden can leverage his wins to build capital

Barrow 1-17-21 (Bill. Joe Biden’s long political evolution leads to his biggest test; The president-elect will inherit stewardship of a nation wrenched by pandemic and seismic cultural fissures. <https://www.denverpost.com/2021/01/17/joe-biden-political-evolution/>)

While Biden aides argue his shifts don’t involve changes in principle or fundamental values, some other observers say the point is moot. The question, said Maurice Mitchell, who leads the progressive Working Families Party, is simply whether Biden will continue to evolve and leverage his political capital into both post-Trump stability and big policy wins.

“We can’t control people’s convictions but we can shift the politics of the possible,” Mitchell said, noting that Johnson signed seminal civil rights laws less than a decade after quashing such measures as Senate majority leader.

Barber, the minister, pointed to other historical figures whom Biden sometimes mentioned while campaigning: Roosevelt and Abraham Lincoln. Both, Barber noted, were savvy, even ruthless politicians who reached for their biggest achievements only after winning the nation’s highest office — and they did so against vicious opposition and during times of existential national threats.

#### \*\*PC’s fake, prefer our ev and the DA has no weight or prefer theirs and we get the link turn

---added [retain control of the Senate] in brackets for readability

Paul Waldman 12/3, opinion writer for the Plum Line blog, “Joe Biden has to move fast,” 12/3/20, The Washington Post, https://www.washingtonpost.com/opinions/2020/12/02/joe-biden-has-move-fast/

For every day of his presidency, Joe Biden will be restrained and bedeviled by Republican power. Republicans will probably retain control of the Senate, and even if they don’t [retain control of the Senate], they will do everything they can to sabotage Biden’s agenda. They will obstruct and delay, whether it’s on legislation, appointments or anything else, to make sure Biden has as little as possible to show for his time in office.

Unfortunately, Biden is naturally inclined to respond in just the way Republicans are counting on. He’s a compromiser, a dealmaker — a man who wants to believe that there are bipartisan solutions to be found.

That’s not to say that Biden is naive about what he faces, just that he will always be vulnerable to some of the same mistakes that President Barack Obama made early in his tenure, mistakes that come from thinking Republicans just might be operating in good faith and with the proper persuasion they can be dealt with.

But a realization of the full implications of our current polarization may just prove liberating for the new administration.

There are at least some encouraging signs that Biden understands the situation; here’s a report from Politico on how his transition is thinking about personnel:

Concerned about Republicans slow-walking confirmation hearings for Cabinet appointees and hollowed-out federal agencies, Biden and his aides are eager to place mid- to lower-level officials across the federal government, particularly in national security roles, to ensure his administration can begin to enact his agenda immediately, according to three people familiar with the situation.

Slow-walking will absolutely be the Republican strategy, on both appointments and legislation. They won’t come out and say they’re going to stonewall every appointee and refuse to allow any legislation to pass; instead they’ll say that they just want to make sure Biden doesn’t stock his administration with radical leftists and propose far-out socialist laws. Send us the nominees and the bills, and we’ll consider them. It’ll just take some time.

Weeks will then stretch into months, and the Biden agenda will languish. They’ve done it before — Obama himself describes how they endlessly dragged out negotiations on the Affordable Care Act by claiming they might support it — and they’ll do it again. That’s the Republican plan.

The first step to getting around it is to understand that the public won’t blame gridlock on the ones who are causing it. They’ll just see a bunch of bickering in Washington with nothing getting done, and Biden will be the one who takes the blame.

Once you realize that the public is neither aware of nor particularly concerned about process questions, you can stop worrying about whether Republicans will squawk at this appointment or that executive order — because they’ll squawk no matter what you do. If it’s a good idea and you think the results will be good, then just do it. As quickly and comprehensively as possible.

As David Roberts of Vox observes: In 2009, Obama and his aides made the mistake of thinking that their major initiatives had to be rolled out one at a time in sequence, because he had a finite store of “political capital” that had to be spent carefully. But political capital is not something that exists apart from any particular issue; it isn’t a special sauce that has to be poured on a policy in order to make it palatable.

And with the parties as polarized and unified as they are, political capital has become all but meaningless. There may have been a time when a popular president possessed so much capital that a senator from the opposition party would feel compelled to support him on part of that president’s agenda, but that time is long gone. There is no account Biden can draw on to turn Republican “no” votes into “yes.”

So setting up a series of high-profile policy battles may be the opposite of what Biden should do. The unfortunate fact is that he may not have the opportunity to do much in the way of big legislation on health care or climate change or anything else, and if he has only executive power to work with, it makes it all the more urgent to move quickly.

Which means getting staff in place immediately and then unleashing them. The Revolving Door Project argues that Biden should give as much authority as possible to the agencies to let them dismantle their particular corners of the Trump legacy on their own, because the task “simply will not happen if approached sequentially or micromanaged” by a White House staff with limited bandwidth.

That means moving on every policy area all at once. There’s nothing to be gained by putting off any part of Biden’s agenda. Whatever he can do given the limits of his power, he should do as soon as possible, in a flood of policymaking.

#### Warming won’t be catastrophic.

Dr. Benjamin Zycher 21, Senior Fellow at the American Enterprise Institute, Doctorate in Economics from UCLA, Master in Public Policy from the University of California, Berkeley, and Bachelor of Arts in Political Science from UCLA, Former Senior Economist at the RAND Corporation, Former Adjunct Professor of Economics at the University of California, Los Angeles (UCLA) and at the California State University Channel Islands, and Former Senior Economist at the Jet Propulsion Laboratory, California Institute of Technology, “The Case for Climate Change Realism”, 6/21/2021, https://www.aei.org/articles/the-case-for-climate-change-realism/

Unable to demonstrate that observed climate trends are due to anthropogenic climate change — or even that these events are particularly unusual or concerning — climate catastrophists will often turn to dire predictions about prospective climate phenomena. The problem with such predictions is that they are almost always generated by climate models driven by highly complex sets of assumptions about which there is significant dispute. Worse, these models are notorious for failing to accurately predict already documented changes in climate. As climatologist Patrick Michaels of the Competitive Enterprise Institute notes:

During all periods from 10 years (2006-2015) to 65 (1951-2015) years in length, the observed temperature trend lies in the lower half of the collection of climate model simulations, and for several periods it lies very close (or even below) the 2.5th percentile of all the model runs. Over shorter periods, such as the last two decades, a plethora of mechanisms have been put forth to explain the observed/modeled divergence, but none do so completely and many of the explanations are inconsistent with each other.

Similarly, climatologist John Christy of the University of Alabama in Huntsville observes that almost all of the 102 climate models incorporated into the Coupled Model Intercomparison Project (CMIP) — a tracking effort conducted by the Lawrence Livermore National Laboratory — overstate past and current temperature trends by a factor of two to three, and at times even more. It seems axiomatic to say we should not rely on climate models that a

re unable to predict the past or the present to make predictions about the distant future.

The overall temperature trend is not the only parameter the models predict poorly. As an example, every CMIP climate model predicts that increases in atmospheric concentrations of greenhouse gas should create an enhanced heating effect in the mid-troposphere over the tropics — that is, at an altitude over the tropics of about 30,000-40,000 feet. The underlying climatology is simple: Most of the tropics is ocean, and as increases in greenhouse-gas concentrations warm the Earth slightly, there should be an increase in the evaporation of ocean water in this region. When the water vapor rises into the mid-troposphere, it condenses, releasing heat. And yet the satellites cannot find this heating effect — a reality suggesting that our understanding of climate and atmospheric phenomena is not as robust as many seem to assume.

The poor predictive record of mainstream climate models is exacerbated by the tendency of the IPCC and U.S. government agencies to assume highly unrealistic future increases in greenhouse-gas concentrations. The IPCC’s 2014 Fifth Assessment Report, for example, uses four alternative “representative concentration pathways” to outline scenarios of increased greenhouse-gas concentrations yielding anthropogenic warming. These scenarios are known as RCP2.6, RCP4.5, RCP6, and RCP8.5. Since 1950, the average annual increase in greenhouse-gas concentrations has been about 1.6 parts per million. The average annual increase from 1985 to 2019 was about 1.9 parts per million, and from 2000 to 2019, it was about 2.2 parts per million. The largest increase that occurred was about 3.4 parts per million in 2016. But the assumed average annual increases in greenhouse-gas concentrations through 2100 under the four RCPs are 1.1, 3.0, 5.5, and an astounding 11.9 parts per million, respectively.

The studies generating the most alarmist predictions are the IPCC’s Special Report on Global Warming of 1.5°C and the U.S. government’s Fourth National Climate Assessment, both of which were published in 2018. Both assume RCP8.5 as the scenario most relevant for policy planning. The average annual greenhouse-gas increase under RCP8.5 is over five times the annual average for 2000-2019 and almost four times the single biggest increase on record. Climatologist Judith Curry, formerly of the Georgia Institute of Technology, describes such a scenario as “borderline impossible.”

RCP6 is certainly more realistic. It predicts a temperature increase of 3 degrees Celsius by 2100 in the average of the CMIP models. But on average, those CMIP models overstate the documented temperature record by a factor of at least two. Ultimately, models with a poor record of successfully accounting for past data and highly unrealistic future greenhouse-gas concentrations should not be considered a reasonable basis for future policy formulation.

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## CP

### Recutting

**There is no crisis over who would enforce blockchain- they need to read a piece of evidence that the FTC will fight the DOJ over the enforcement to have a net benefit. Their UQ evidence on the innovation ADV says that it falls squarely into DOJ enforcement territory and there isn’t conflict. Prefer blockchain specific evidence because they can be right that FTC and DOJ quarrel but its not about our aff.**

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

Large financial institutions will not allow these transformations to occur without a fight, however. To ensure that fight is fair, antitrust authorities and regulators must consider how best to shape antitrust enforcement and competition policy for blockchain technologies. Much of the competition-related scholarship on blockchain has focused on the technology's potential impact on [\*538] antitrust risks and enforcement, and the bulk of that literature has sounded **dire warnings** about blockchain's anticompetitive potential and the possibility that it will enable cartel members to escape prosecution. 161 These concerns are **premature**.

Blockchain's primary effect in the antitrust arena may be to **facilitate collusion**. 162 As a general matter, distributed ledgers make sharing information among participants easier. When that sharing includes competitively sensitive data, such as pricing information, firms may be able to use blockchains to form and maintain price-fixing cartels. Some have suggested that blockchains, combined with the Internet of Things and artificial intelligence, could serve to monitor adherence to a cartel agreement (for example by measuring and reporting production volumes) and automatically punish defectors through smart contracts. 163 Even without explicit collusive agreements, blockchain's enhanced information-sharing capabilities might facilitate tacit collusion among participants. 164

[\*539] Another antitrust harm that might arise from blockchain use is anticompetitive access denial to permissioned ledgers. In the case of DTCC's blockchain-based, derivatives-processing network, for example, participating big banks potentially could disadvantage derivatives-dealing rivals by excluding them from the ledger. 165

Price-fixing cartels and denial of access to competitively necessary facilities fall **squarely within the ambit of standard antitrust theory and enforcement practice**. The Antitrust Division of the U.S. **D**epartment **o**f **J**ustice is **equipped** to root out price-fixing conspiracies in a range of technological settings. In 2015, the Division prosecuted participants in a cartel that relied on algorithms to fix prices for posters sold on the Amazon Marketplace. 166 While the technology this cartel employed was different than that used in the proverbial smoke-filled rooms of the nineteenth and twentieth centuries, the Division and the Federal Bureau of Investigation were capable of uncovering the scheme and prosecuting the participants. 167 The Division's prosecutorial tools should **prove as effective in the blockchain setting as in any other context**. This is **especially** true of the Leniency Program, under which the Division grants prosecutorial immunity to cartel members who are first-in-the-door to report cartel activity and cooperate in the subsequent investigation. 168 This program is the Division's **most effective criminal enforcement tool** and it should operate **equally well in prosecuting blockchain cartels** as it does in more traditional industries. 169

[\*540] Denial of access to nodes on a clearinghouse blockchain would also represent an **old story in a new technological setting**. Indeed, accusations against big banks of anticompetitive access denial to clearing services pre-date the transition to blockchain. Plaintiffs in In re Credit Default Swaps Antitrust Litigation settled, for $ 2 billion, their claims that big banks used their positions on clearinghouse risk committees to refuse access to dealer rivals in a fashion that harmed competition. 170 These types of "essential facilities" or refusal-to-deal cases can be difficult for plaintiffs to win, but the **theory of harm is familiar, regardless of the technological context**. 171

The same enhanced information-sharing and immutable record-keeping that might appeal to price-fixing cartels also could make blockchain-related antitrust enforcement **more** effective. A leniency applicant may give enforcers access to a permissioned blockchain, allowing them to observe the entire history and ongoing operation of a price-fixing cartel, an advantage difficult to duplicate without the blockchain. 172 Blockchains' ability to accurately preserve and offer easy access to data could reduce the burden of data collection and analysis in both merger and civil non-merger investigations. 173 [\*541] Regulatory nodes on blockchains might allow agencies to **detect anticompetitive conduct in real time**.

### 1AR – FTC

#### Internationally harmonious antitrust regulation is key to establishing certainty and public trust in blockchain.

Siong 19 (Arisa Siong is currently a Public and Regulatory Affairs Director in the External Relations team for Asia, 2019, “The Blockchain Antidote to Monopolization”, Chapter 3 of *Blockchain Economics: Implications of Distributed Ledgers Markets, communications networks, and algorithmic reality*) MAM

Lack of regulatory clarity

One of the potential barriers is the **lack of regulatory clarity over blockchains** and cryptocurrencies in particular. Attempts in early 2018 to coordinate regulatory approaches at the G20 level have failed to reach consensus. Regulation, if any, has been quite ad hoc and regimes vary **regionally as well as internationally.**

Such a lack of consistency creates uncertainty and inhibits wider use of blockchain. For instance, even banks who use Ripple’s blockchain technology for cross border payment settlement would not touch its native token XRP as “there was no way they could use an instrument that regulators may never approve” [Leising and Robinson, 2018]. Further, wide fluctuations in the value of cryptocurrencies prevents them from being a useful medium of exchange.

For blockchain to be pervasive, it must permeate the analogue world. There have been some movement on this front though developments remain experimental. Dubai has ambitious plans to secure all government documents on blockchain by 2020. Meridio has tokenized a three-story building in Brooklyn, enabling trade and investment of this property via blockchain. There is a project to put the genome code of the wildlife in the Amazonian rainforest on a blockchain and track use of this information to return value to the indigenous and traditional communities of the Amazon. More generally, this will require tokenization of analogue assets to be supported by statute (discussed above), not unlike role of the United Nations Commission on International Trade Law’s model laws that allowed electronic contracts to be legally binding. In addition, sensors and smart meters that digitalize new information and signals will widen the scope for blockchain applications. Here, regulation may be required to ensure economical access to this infrastructure.

Public trust and acceptance

Another potential reason for sluggish blockchain development is the paradoxical concept of decentralized trust. Centralized trust is easy to comprehend and accept because it has been the default. In markets where authorities do not command that sort of respect, decentralized trust may be attractive. Decentralized trust offered by blockchain is built on protocol designed incentives, implemented in code. That sets the bar for trust high as these protocols are not easily understood. As it is hard to trust something you do not understand, the core blockchain community has remained small.

This also means that non-code proficient users of blockchain (most of us) must delegate trust, via interpretation of code, to trusted parties or functions — for instance in the auditability of open source code or an establishment to provide oversight of the development of the code. This however represents a move back toward centralization and hangs a question mark over the value of decentralization. It has not helped that cryptocurrencies have developed a reputation as medium for illegal activities. Bitcoin, the poster child for blockchain being the currency of choice for an underground drug bazaar (Silk Road) does not bode well for instilling trust. For all its promise of trust, blockchain’s potential downfall is the lack of trust.

Regulation can help address concerns associated with blockchain technology and foster development. As trust is increasingly delegated to protocols and code, there will be an increasing public safety dimension to the work of software engineers and developers carry out. Regulatory oversight to ensure that digital architectures and systems of tomorrow are developed with public safety in mind will help **instill public trust** in code.

The Centre for International Governance Innovation suggests some form of **self-regulation** via a Code of Ethics akin to that in the civil engineering profession [CIGI, 2018b].

Self-regulation would shift the burden of regulation to **more parties** rather than rely solely on the government, allowing regulation to be nimble and relevant. On the other hand, self-policing schemes tend to suffer from moral hazard issues and may lack effectiveness. It is important therefore, for **market forces and societal norms** to impose **constraints on** the **conduct** of firms.

The present concern over economic and political power amassed by digital giants provides an important lesson in ensuring competitiveness of markets. Competition policy and law therefore need to be alert to the potential competition issues in blockchain markets.