# Kentucky – Rd 2 – Emory BW vs UTD KS

# 1NC vs UTD KS

## 1---K

### K Capitalism---1NC

#### Anti-trust is a capitalist psy op to pacify the working class, buy time to mystify unsustainable accumulation, and map competition onto subjectivity – homo economicus devalues life.

Lebow 19 [David Lebow – Lecturer on Social Studies at Harvard University and lawyer, “Trumpism and the Dialectic of Neoliberal Reason,” Perspectives on Politics 18(2):380-398, doi:10.1017/S1537592719000434]

I. Neoliberal Reason

As Michel Foucault and others have argued, neoliberalism entails far more than an economic doctrine favoring deregulated markets.4 It is a novel form of governmentality—a rationality linked to technologies of power that govern conduct, not just through direct state action but through liberty itself.5 Not isolated to the traditionally demarcated sphere of economics, neoliberal society entails a whole economic-juridical order.

The central program of neoliberal governmentality is the absolute generalization of competition as a universal behavioral norm. Whereas in liberal thought, the root principle of capitalism was exchange of equivalents, for neoliberal reason it is competition entailing inequality. The key result of market processes goes from specialization to selection. The competitive market is the exclusive site of rationality. It processes information, indicated by price, and is the only mechanism of producing knowledge, defined as what is profitably utilizable. Because consumers are free to refuse inferior goods or services, the price mechanism of the market system ensures optimal solutions and maximal satisfaction of preferences.

Liberal capitalism, as Karl Polanyi argued, required the construction of “fictitious” commodities like land and labor.6 These abstract, exchangeable factors of production had to be disembedded from concrete non-market social relations, norms, and values. Instead of merely disembedding commodities, neoliberalism intervenes to make competitive mechanisms regulate every moment and point in society. It strives to build an empire of market choice that invades every domain of life, and deposes all other social, political and solidaristic institutions and values.

Neoliberalism does not allege that markets are natural; competition must be constructed. Rather than endorsing laissez-faire overseen by a night watchman, it stipulates a strong state engaged in permanent vigilance, activity, and intervention to maintain artificial competition. It must not plan outcomes, which would upset the market’s innate rationality, and must be insulated from political disturbances. Economic interventionism leads down the road to serfdom; fascism and unlimited state power are its necessary results. A “minimum of economic interventionism” on the “mechanisms of the market” must be accompanied by “maximum legal interventionism” on the “conditions of the market.”7 Fixed, formal rules make up an economic constitution that inhibits planning, repulses political disruptions, and impartially safeguards competition. The state is the executor of the market and growth is the basis of public legitimacy. Governance depoliticizes public power, promotes ostensibly post-ideological technical problem-solving by experts, and relies on “best-practices” that dissolve the distinction between public and private organization.8

Unlimited generalization of competition yields an enterprise society in which calculations of supply/demand and cost/benefit become the model of all social relations. Neoliberal reason renders homo economicus, based on this model of the enterprise, the exhaustive figuration of human subjectivity. The center of economic thought shifts from labor and processes of production, exchange, and consumption to human capital and rational decision-making under conditions of scarcity. Capital is everything that can generate future income; wages are reconceived as income from capital. Labor is no longer comprehended as a commodity exchanged for a wage, but as a combination of human capital (the worker’s education and abilities) and the income stream it generates. This neoliberal subject is an aggregate of human capital who invests in his own income-generating abilities.

Neoliberalism replaces the invariant identity of the moral person as a rights-bearing citizen with a formally empty receptacle filled up through enterprising choices. It brushes aside models of freedom as self-rule achieved through moral autonomy or popular sovereignty.9 In the neoliberal “democracy of consumers,” individual consumers together constitute the sovereign that monopolizes the issuance of legitimate commands.10 Sovereign will is expressed not through political channels, but by choices in the “plebiscite of prices.”11 Whereas producers have particular interests like protectionism, consumers have a consensual and common interest; all favor the impartial functioning of market processes. In the neoliberal free society, consumers exercise their right to choose in complete independence.

II. From Keynesian State Capitalism to Neoliberal Deregulation

Situating the 2008 crisis in a historical account of American political and economic development clarifies its broader significance. The early twentieth-century Progressives were disdainful of what they took to be the chaos and waste of fin de siècle laissez-faire society. They strove to build a new American state that would replace the structural and rights-based formalisms of the nineteenth century with direct democracy and expert administration. It took the Great Depression and New Deal to bring into full bloom the Progressive commitment to pragmatic rationality. Thereafter, the “policy state” was authorized to pursue designated social goals and develop the means to accomplish them.12 The slew of New Deal innovations included state oversight of labor negotiations, invigorated antitrust, Keynesian countercyclical deficits to stimulate demand and increase purchasing power, an expansive public sector sheltered from the business cycle, aggressive banking regulation, and social insurance. Regulation and redistribution ensured the conditions necessary for an economic system based on capital accumulation, private property, and corporate profit to endure.

To many, the differences between the New Deal and Nazi political economies appeared less significant than their common response to monopoly capitalism. Both erased boundaries between state and society by politicizing the private sphere and authorizing public bureaucracies to rationalize crisis-prone economies. Frankfurt School member Friedrich Pollock suggested that this common “state capitalism” had solved the contradiction between the forces and relations of production, and thus overcome the economy’s crisis tendencies. It seemed to him that management had become merely technical and “nothing essential” had been “left to the laws of the market.”13 Worries abounded that the private law sphere of property and contract was necessary for individual freedom. Despite salient differences between Nazi and New Deal state capitalism, many feared that intervention into society was a waystation to domination. Unease about the specter of American despotism motivated development of mechanisms to ensure that interventionism did not devolve into arbitrary rule.14 Expertise was one justification and limitation of the policy state. Authority could be safely delegated to a new corps of public-spirited administrators because their scientific knowledge would not only make them effective, but also counsel restraint. Enduring misgivings led later to new laws of administrative process. The procedural state was legitimated by its defenders as being a substantively value-neutral and instrumentally rational machine serving goals set by society. Regulatory decision-making was shunted into the abstruse procedures of courtrooms and bureaucracies. Defenders of the state emphasized that its processes of allocating authority were neutral, impartial, and open to all. The balanced accommodation of all interest groups seeking to exercise influence would yield an equilibrium corresponding to the public interest.15

The intermeshing of state and society through interest groups, agencies, and professionalized parties marginalized the public. The sovereign public opinion that Progressives had hoped would rationalize government gave way to the rationality supposedly inherent in processes of public law, public-private negotiation, and regulated markets. The state was endowed with a diffuse legitimacy in exchange for a growing economy, broad distribution, and ongoing household capacity to consume.16 The Keynesian welfare settlement pacified the working class, protecting the market economy from more radical political pressures. Newly available, mass-produced commodities encouraged leveled-down notions of citizenship as welfare clientelism and privatistic consumption. As the state expanded and routinized, the initial politicization of private property relations through public intervention developed into depoliticized economic management by lawyers and social scientists organized by administrative and judicial processes.

The terms of the social contract preserving the coexistence of capitalism and democracy had been set. In exchange for a pacified citizenry and depoliticized regulatory authority, the policy state promised to deploy instrumental reason to sustain both capital accumulation and widely distributed capacity to consume (supported, always, by the exclusion of African Americans). During the decades of postwar growth, these twin responsibilities seemed attainable and compatible. Capitalism functioned smoothly enough and potentially delegitimating inequality was clipped by inflation, tax-based welfare, and collectively negotiated wages. But in the late 1960s and early 1970s, weakening growth, stagflation, trade deficits, and the collapse of Bretton Woods revealed that state capitalism had not solved the problems of economics. As the Great Depression had enabled construction of the instrumentally rational policy state, economic disturbances in the 1970s opened the breach into which neoliberal reason entered to reconfigure the political economy. Rather than shielding rational policy-making from political pressure and assuring broadly distributed welfare, neoliberalism promised growth driven by depoliticized markets freed from regulation and downwards redistribution. Believing in the optimal rationality of competitive markets, neoliberals sought to reinvigorate capital accumulation through deregulation, lowered taxes, financialization, privatization, and market expansion.

Liberating accumulation from the restrictions and obligations incurred under state capitalism might have imperiled capitalism’s peace treaty with democracy. For deregulation to proceed without impairing the system’s legitimacy, the quid pro quo—depoliticization for consumption—had to continue. Over the ensuing decades, as Wolfgang Streeck explains, the state “bought time” by finding new ways to generate illusions of widely distributed prosperity that prolonged the capacity of the lower and middle classes to consume.17 Each successive attempt exhausted itself, leading to new and escalating disturbances. In the 1970s, inflation safeguarded social peace by compensating workers for inadequate growth until stagflation ended this mode of buying time. A subsequent reliance on public debt enabled the government to pacify conflict with borrowed money. Rising debt and balking creditors delimited this phase, which was brought to a definitive close with the Clinton administration’s social spending cuts and balanced budgets. In a final stage that dawned in the 1980s but grew increasingly paramount over time, debt-based support of purchasing power was privatized. Household spending was financed through mortgages, student loans, and credit cards. This “privatized Keynesianism” buoyed consumption up through 2008, despite cuts to social spending, falling wages, and tightening employment markets.18

Each device for upholding spending maintained the legitimacy of the depoliticized political economy, even as liberalization continued to strip the wage-dependent population of regulatory and redistributive safeguards. The end of the inflation era brought structural unemployment and weakened trade unions. The passing of the public debt regime meant cuts to social rights, privatization of social services, and a trimmed public sector. Growing private debt enabled people to hold on despite lost savings, and rising under- and unemployment. At every step, the neoliberal project was “dressed up” as a consumption project.19 Continuing consumption ensured legitimacy long enough to enact total transformation of the political economy.

The state could not buy time indefinitely. The 1970s had already witnessed the beginning of the transition from a manufacturing, production-oriented economy that exported surpluses to an import-based, finance and services economy focused on consumption. As the United States went from creditor to debtor, a system of “balanced disequilibrium” took hold.20 With impunity granted as the world’s reserve currency, the United States ran mounting budget and trade deficits. To finance them, it absorbed surplus capital from abroad, much of which wended its way to Wall Street. Banks used these profits to extend credit to the working- and middle- classes. Household debt funded consumption of imported goods, returning the surplus capital abroad, and completing the circuit of global trade. This system depended on the unsustainable condition of ever-increasing debt-based consumption. Consumption was notoriously reinforced by secondary markets in what was essentially private money (securitized derivatives and collateralized debt obligation) that was much riskier than assumed. Because increasingly irresponsible lending was integral to continuing the consumption that stabilized the macroeconomic system, it became a sort of vicious collective good that progressively magnified the scale of the inevitable crash.21 When in 2008 the debt finally proved unserviceable and the housing bubble burst, the private money disappeared and the disequilibrated global economic system fell into crisis.

Consumption based on private debt had provided an unstable bridge over the yawning inequality brought about by deregulation, financialization, globalization, and the diminished welfare state. When the 2008 crisis dried up credit, it revealed a divided “dual economy.”22 On one side is the primary sector of elite, highly-educated professionals who are collected in coastal urban centers and tied in to corporate management, technological innovation and oversight of global capital flows. On the other is the secondary sector of low-skilled workers primarily fixed in the heartland, for whom deregulated competition has brought under- or unemployment, job instability, depressed wages, exploding debt, and diminished prospects.

Unable to buy more time, the state’s breach of the postwar social contract has been exposed. The neoliberal system of capital accumulation was entrenched at the expense of broad and sustainable consumption. The results have been the politicization of defrauded citizens and a political economy plunged into legitimation crisis. Time has belied the premature conclusion that contradiction and crisis potential had been overcome by state capitalism. Contradiction was relocated into cross-cutting imperatives for the state to enable capital accumulation and distribute consumption. In hindsight, we find only a window of stabilization of an enduring crisis potential built into capitalist political economy. As Nancy Fraser puts it “on the one hand, legitimate, efficacious public power is a condition of possibility for sustained capital accumulation; on the other hand, capitalism’s drive to endless accumulations tends to destabilize the very public power on which it relies.”23 The political fallout from the 2008 crisis marks the end of the postwar social contract that had established conditions ensuring the continued coexistence of capitalism and democracy.

#### Capitalism drives extinction and structural violence

Allinson et al 21 [Jamie Allinson is Senior Lecturer in Politics and International Relations at Edinburgh University and author of The Age of Counter-revolution. China Miéville is the author of a number of highly acclaimed and prize-winning novels including October: The History of the Russian Revolution. Richard Seymour is the author of numerous works of non-fiction, His writing appears in the New York Times, London Review of Books, Guardian, Prospect, Jacobin. Rosie Warren is an Editor at Verso and the Editor-in-Chief of Salvage. All are writing for the Salvage Collective. “The Tragedy of the Worker: Toward the Proletarocene.” Introduction. July 2021. Verso EBook. ISBN: 9781839762963 //shree]

This is the question that vexed us as we set out to write The Tragedy of the Worker. From the vantage point of the present, the history of capitalist development is, as Marx expected, the history of the development of a global working class, the proletarianisation of the majority of the world’s population. But the very same process of that development has brought us to the precipice of climate disaster. Our position, to recall Trotsky’s rationalisation of War Communism in 1920, is in the highest degree tragic.

It is now clear that we will pass what scientists have long warned will be a tipping point of global warming, accelerating the already catastrophic consequences of capitalist emissions. How do we imagine emancipation on an at best partially habitable planet? Where once communists imagined seizing the means of production, taking the unprecedented capacities of capitalist infrastructures and using them to build a world of plenty, what must we imagine after the apocalypse has befallen us? What does it mean that as capitalism has become truly global, the gravediggers it has created dig not only capitalism’s grave, but also that of much organic life on earth?

Our answers to these questions remain rooted in the politics of revolutionary communism. Our stance is not based on the fantasy of a homeostatic nature that must be defended but on the critique of the capitalist metabolism – the Stoffwechsel- that must be overthrown. Earth scientists are accustomed to speak in terms of ‘cycles’ by which substances circulate in different forms: the water cycle, the rock cycle, the nitrogen cycle, the glacial-interglacial cycle, the carbon cycle, and others. One way of registering the catastrophe of climate change is to see these cycles – most of all, but not solely, the carbon cycle – as disordered, under- or over-accumulating. But this is to ignore the more fundamental circuit of which these now form epicycles, like Ptolemy’s sub-orbits of the heavenly bodies: the circuit of capital accumulation, M-C-M′.

This circuit accumulates profit and produces death. Neither is accidental. It is for this reason that the debates that capitalist ruling classes permit among themselves on ‘adaptation’ versus ‘mitigation’ take place on false premises. What is to be mitigated is the impact of climate change on accumulation, rendered through the ideology of ‘growth’ as something that benefits everyone. What we are to adapt to are the parameters of accumulation, sacrificing just enough islands, eco-systems, indigenous – and non-indigenous – cultures to maintain its imperatives for a period of time until new thresholds must be crossed, and new life sacrificed to the pagan idol of capital. Already, capitalist petro-modernity builds a certain quantum of acceptable death into its predicates: at the very least, the 8.7 million killed by fossil fuels each year according to Harvard University are considered a price worth paying for the stupendous advantages of fossil capital. And the sky can only keep going up, as deforestation, polar melt, ocean acidification, soil de-fertilisation and more intense wildfires and storms tear the web of life into patches. If the necropolitical calculus of the Covid-19 pandemic appears crass, just wait until its premises are applied to climate catastrophe.

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

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

Silvia Federici provides a longer historical perspective, noting that ‘commoning is the principle by which human beings have organised their existence for thousands of years;’ and that to ‘speak of the principle of the common’ is to speak ‘not only of small-scale experiments [but] of large-scale social formations that in the past were continent-wide.’87 Hence a commons-based society is neither a utopia or reducible to fringe projects, and the commons have persisted despite the many and continuing enclosures, ‘feeding the radical imagination as well as the bodies of many commoners.’87 Federici acknowledges that commons and practices of commoning are diverse, that many are susceptible to cooptation and many are consistent with the persistence of capitalism; indeed some, such as charities providing social services (including foodbanks) during the years of austerity budgets in the United Kingdom (2010-2015), reinforce and stabilise capitalism.87 What matters to Federici is the character and intentionality of the commons as anti-capitalist, as ‘a means to the creation of an egalitarian and cooperative society…no longer built on a competitive principle, but on the principle of collective solidarity [and commitments] to the creation of collective subjects [and] fostering common interests in every aspect of our lives.’87

Federici’s analysis resonates with the political thought and proposals developed by Dardot and Laval in their 2018 work, ‘On Common: Revolution in the 21st century.’11 For Dardot and Laval, the common is likewise understood as a principle of political struggle, a demand for ‘real democracy’ and a major driving force behind the emerging articulation of a political vision and programme that transcends and overcomes the straitjacket logic of neoliberal ideological hegemony and its ‘policy grammar’ which appears to foreclose all alternatives and lock us forever into a capitalist realism in which ‘it is easier to imagine the end of the world than it is to imagine the end of capitalism.’89 Eschewing Bollier’s ‘triarchy’ of a market/state/ commons coexistence, Dardot and Laval argue for a politics of the common based on an engaged citizenry that directly participates and deliberates in all decisions which impact it, and in the process not merely transforms the institutions responsible for the management of services and allocation of resources, but creates new institutions and new ways of being in the world.11

Dardot and Laval describe this form of politics as ‘instituent praxis’: the common, they argue, is ‘not produced but instituted.’11 This acknowledges the conventional understanding of Ostrom, Bollier and others of ‘the commons’ as residing in the rules – the laws – that a community establishes for the collective management and use of shared resources, but extends it much further and in a more radical direction The essence of the commons, they argue, is not in the goods per se such as land or a forest or a seed bank ‘held in common,’ but rather in the process of their establishment as well as the ongoing negotiation that will surround their use and governance. Hence, Dardot and Laval distinguish the commons from the ‘rights’ tradition of property, arguing that ‘the commons are above all else matters of institution and government…the use of the commons is inseparable from the right of deciding and governing. The practice that institutes the commons is the practice that maintains them and keeps them alive and takes full responsibility for their conflictuality through the coproduction of rules.’90 To ‘institute’ in this context should not be misunderstood as ‘to institutionalise [or] render official;’ rather it is ‘to recreate with, or on the basis of, what already exists.’ 90 This messy, conflictual and evolving process is what Dardot and Laval insist will ultimately bring about a revolution, not in the form of a violent uprising or insurrection, but rather through the ‘reinstitution of society’ via the transformation of politics and economy from its current state of ‘representative oligarchy’ to full participatory and deliberative democracy.11 Such a vision is premised on a mass politicisation of society; in effect a return of mass popular political contestation and a turn away from the postpolitical era of the neoliberal consumer.91-92

## 2--- Prohibit PIC

### OFF

#### Next off is the Prohibit PIC---

#### The United States should only allow the continuation of mergers in the defense scope without applying the competitive effect standard under antitrust law when the president determines it is necessary to prevent condition which may pose a direct threat to the national defense or its preparedness programs.

#### It competes---the counterplan is a regulation not prohibition.

James Broaddus 50. February 6; Judge on the Kansas City Court of Appeals, Missouri; Westlaw, “City of Meadville v. Caselman,” 240 Mo. App. 1220. https://casetext.com/case/city-of-meadville-v-caselman-1

"Under power conferred on cities of the fourth class `to regulate and license' dramshops, there is no authority to wholly prohibit or suppress. Where there is mere power in a municipality to regulate in a state, with a general policy of conducting licensed saloons, authority to prohibit is excluded. The difference between regulation and prohibition is clear and well marked. The former contemplates the continuance of the subject-matter in existence or in activity. The latter implies its entire destruction or cessation.'" (Citing text writers and cases.)

#### The counterplan maintains DPA authority---the plan eliminates it.

Michael H. Cecire and Heidi M. Peters 20. Michael H. Cecire, Analyst in Intergovernmental Relations and Economic Development Policy. Heidi M. Peters, Analyst in U.S. Defense Acquisition Policy. “The Defense Production Act of 1950: History, Authorities, and Considerations for Congress” Updated March 2, 2020. https://www.everycrsreport.com/reports/R43767.html

Authorities Under Title VII of the DPA

Title VII of the DPA contains various provisions that clarify how DPA authorities should and can be used, as well as additional presidential authorities. Some significant provisions of Title VII are summarized below.

Special Preference for Small Businesses

Two provisions in the DPA direct the President to accord special preference to small businesses when issuing contracts under DPA authorities. Section 701 reiterates89 and expands upon a requirement in Section 108 of Title I directing the President to "accord a strong preference for small business concerns which are subcontractors or suppliers, and, to the maximum extent practicable, to such small business concerns located in areas of high unemployment or areas that have demonstrated a continuing pattern of economic decline, as identified by the Secretary of Labor."90

Definitions of Key Terms in the DPA

The DPA statute historically has included a section of definitions.91 Though national defense is perhaps the most important term, there are additional definitions provided both in current law and in E.O. 13603.92 Over time, the list of definitions provided in both the law and implementing executive orders has been added to and edited, most recently in 2009, when Congress added a definition for homeland security93 to place it within the context of national defense.94

Industrial Base Assessments

To appropriately use numerous authorities of the DPA, especially Title III authorities, the President may require a detailed understanding of current domestic industrial capabilities and therefore need to obtain extensive information from private industries. Under Section 705 of the DPA, the President may "by regulation, subpoena, or otherwise obtain such information from ... any person as may be necessary or appropriate, in his discretion, to the enforcement or the administration of this Act [the DPA]."95 This authority is delegated to the Secretary of Commerce in E.O. 13603.96 Though this authority has many potential implications and uses, it is most commonly associated with what the DOC's Bureau of Industry and Security calls "industrial base assessments."97 These assessments are often conducted in coordination with other federal agencies and the private sector to "monitor trends, benchmark industry performance, and raise awareness of diminishing manufacturing capabilities."98 The statute requires the President to issue regulations to insure that the authority is used only after "the scope and purpose of the investigation, inspection, or inquiry to be made have been defined by competent authority, and it is assured that no adequate and authoritative data are available from any Federal or other responsible agency."99 This regulation has been issued by DOC.100

Voluntary Agreements

Normally, voluntary agreements or plans of action between competing private industry interests could be subject to legal sanction under anti-trust statutes or contract law. Title VII of the DPA authorizes the President to "consult with representatives of industry, business, financing, agriculture, labor, and other interests in order to provide for the making by such persons, with the approval of the President, of voluntary agreements and plans of action to help provide for the national defense."101 The President must determine that a "condition exists which may pose a direct threat to the national defense or its preparedness programs"102 prior to engaging in the consultation process. Following the consultation process, the President or presidential delegate may approve and implement the agreement or plan of action.103 Parties entering into such voluntary agreements are afforded a special legal defense if their actions within that agreement would otherwise violate antitrust or contract laws.104 Historically, the National Infrastructure Advisory Council noted that the voluntary agreement authority has been used to "enable companies to cooperate in weapons manufacture, solving production problems and standardizing designs, specifications and processes," among other examples.105 It could also be used, for example, to develop a plan of action with private industry for the repair and reconstruction of major critical infrastructure systems following a domestic disaster.

The authority to establish a voluntary agreement has been delegated to the head of any federal department or agency otherwise delegated authority under any other part of E.O. 13603.106 Thus, the authority could be potentially used by a large group of federal departments and agencies. Use of these voluntary agreements is tracked by the Secretary of Homeland Security,107 who is tasked under E.O. 13603 with issuing regulations that are required by law on the "standards and procedures by which voluntary agreements and plans of action may be developed and carried out."108 The Federal Emergency Management Agency (FEMA), which at the time was an independent agency and tasked with these responsibilities under the DPA, issued regulations in 1981 to fulfill this requirement.109 FEMA is now a part of DHS, and those regulations remain in effect.

The Maritime Administration (MARAD) of the U.S. Department of Transportation manages the only currently established voluntary agreements in the federal government, the Voluntary Intermodal Sealift Agreement (commonly referred to as "VISA") and the Voluntary Tanker Agreement. These programs are maintained in partnership with the U.S. Transportation Command of DOD, and have been established to ensure that the maritime industry can respond to the rapid mobilization, deployment, and transportation requirements of DOD. Voluntary participants from the maritime industry are solicited to join the agreements annually.110

Nucleus Executive Reserve

Title VII of the DPA authorizes the President to establish a volunteer body of industry executives, the "Nucleus Executive Reserve," or more frequently called the National Defense Executive Reserve (NDER).111 The NDER would be a pool of individuals with recognized expertise from various segments of the private sector and from government (except full-time federal employees). These individuals would be brought together for training in executive positions within the federal government in the event of an emergency that requires their employment. The historic concept of the NDER has been used as a means of improving the war mobilization and productivity of industries.112

The head of any governmental department or agency may establish a unit of the NDER and train its members.113 No NDER unit is currently active, though the statute and E.O. 13603 still provide for this possibility. Units may be activated only when the Secretary of Homeland Security declares in writing that "an emergency affecting the national defense exists and that the activation of the unit is necessary to carry out the emergency program functions of the agency."114

Authorization of Appropriations, as amended by P.L. 113-72

Appropriations for the purpose of the DPA are authorized by Section 711 of Title VII.115 Prior to the P.L. 113-172, "such sums as necessary" were authorized to be appropriated. This has been replaced by a specific authorization for an appropriation of $133 million per fiscal year and each fiscal year thereafter, starting in FY2015, to carry out the provisions and purposes of the Defense Production Act.116

Table 1 shows that the annual average appropriation to the DPA Fund between FY2010 and FY2019 was $109.1 million,117 with a high of $223.5 million in FY2013 and a low of $34.3 million in FY2011. Monies in the DPA Fund are available until expended, so annual appropriations may carry over from year to year if not expended. Recently, the only regular annual appropriation for the purposes of the DPA has been made in the DOD appropriations bill, though appropriations could be made in other bills directly to the DPA Fund (or transferred from other appropriations).

Committee on Foreign Investment in the United States118

The Committee on Foreign Investment in the United States (CFIUS) is an interagency committee that serves the President in overseeing the national security implications of foreign investment in the economy. It reviews foreign investment transactions to determine if (1) they threaten to impair U.S. national security; (2) the foreign investor is controlled by a foreign government; or (3) the transaction could affect homeland security or would result in control of any critical infrastructure that could impair the national security. The President has the authority to block proposed or pending foreign investment transactions that threaten to impair the national security.

CFIUS initially was created and operated through a series of Executive Orders.119 In 1988, Congress passed the "Exon-Florio" amendment to the DPA, granting the President authority to review certain corporate mergers, acquisitions, and takeovers, and to investigate the potential impact on national security of such actions.120 This amendment codified the CFIUS review process due in large part to concerns over acquisitions of U.S. defense-related firms by Japanese investors. In 2007, amid growing concerns over the proposed foreign purchase of commercial operations of six U.S. ports, Congress passed the Foreign Investment and National Security Act of 2007 (P.L. 110-49) to create CFIUS in statute.

On August 13, 2018, President Trump signed into law new rules governing national security reviews of foreign investment, known as the Foreign Investment Risk Review Modernization Act (FIRRMA, Title XVII, P.L. 115-235).121 FIRRMA amends several aspects of the CFIUS review process under Section 721 of the DPA.122 Notably, it expands the scope of transactions that fall under CFIUS' jurisdiction. It maintains core components of the current CFIUS process for evaluating proposed or pending investments in U.S. firms, but increases the allowable time for reviews and investigations. Upon receiving written notification of a proposed acquisition, merger, or takeover of a U.S. firm by a foreign investor, the CFIUS process can proceed potentially through three steps: (1) a 45-day national security review; (2) a 45-day maximum national security investigation (with an option for a 15-day extension for "extraordinary circumstances"); and (3) a 15-day maximum Presidential determination. The President can exercise his authority to suspend or prohibit a foreign investment, subject to a CFIUS review, if he finds that (1) "credible evidence" exists that the foreign investor might take action that threatens to impair the national security; and (2) no other laws provide adequate and appropriate authority for the President to protect national security. FIRRMA shifts the filing requirement for foreign investors from voluntary to mandatory in certain cases, and provides a two-track method for reviewing certain investment transactions. Other changes mandated by FIRRMA would provide more resources for CFIUS, add new reporting requirements, and reform export controls.

Termination of the Act

Title VII of the DPA also includes a "sunset" clause for the majority of the DPA authorities. All DPA authorities in Titles I, III, and VII have a termination date, with the exception of four sections.123 As explained in Section 717 of the DPA, the sections that are exempt from termination are

* 50 U.S.C. §4514, Section 104 of the DPA that prohibits both the imposition of wage or price controls without prior congressional authorization and the mandatory compliance of any private person to assist in the production of chemical or biological warfare capabilities;
* 50 U.S.C. §4557, Section 707 of the DPA that grants persons limited immunity from liability for complying with DPA-authorized regulations;
* 50 U.S.C. §4558, Section 708 of the DPA that provides for the establishment of voluntary agreements; and
* 50 U.S.C. §4565, Section 721 of the DPA, the so-called Exon-Florio Amendment, that gives the President and CFIUS review authority over certain corporate acquisition activities.

P.L. 115-232 extended the termination date of Section 717 from September 30, 2019, to September 30, 2025. In addition, Section 717(c) provides that any termination of sections of the DPA "shall not affect the disbursement of funds under, or the carrying out of, any contract, guarantee, commitment or other obligation entered into pursuant to this Act" prior to its termination. This means, for instance, that prioritized contracts or Section 303 projects created with DPA authorities prior to September 30, 2025, would still be executed until completion even if the DPA is not reauthorized. Similarly, the statute specifies that the authority to investigate, subpoena, and otherwise collect information necessary to administer the provisions of the act, as provided by Section 705 of the DPA, will not expire until two years after the termination of the DPA.124 For a chronology of all laws reauthorizing the DPA since inception, see Table A-4.

Defense Production Act Committee

The Defense Production Act Committee (DPAC) is an interagency body originally established by the 2009 reauthorization of the DPA.125 Originally, the DPAC was created to advise the President on the effective use of the full scope of authorities of the DPA. Now, the law requires DPAC to be centrally focused on the priorities and allocations authorities of Title I of the DPA.

The statute assigns membership in the DPAC to the head of each federal agency delegated DPA authorities, as well as the Chairperson of the Council of Economic Advisors. A full list of the members of the DPAC is included in E.O. 13603.126 As stipulated in law, the Chairperson of the DPAC is to be the "head of the agency to which the President has delegated primary responsibility for government-wide coordination of the authorities in this Act."127 As currently established in E.O. 13603 delegations, the Secretary of Homeland Security is the chair-designate, but the language of the law could allow the President to appoint another Secretary with revision to the E.O.128 The Chairperson of the DPAC is also required to appoint one full-time employee of the federal government to coordinate all the activities of the DPAC. Congress has exempted the DPAC from the requirements of the Federal Advisory Committee Act.129

The DPAC has annual reporting requirements relating to the Title I priority and allocation authority, and is also required to include updated copies of Title I-related rules in its report. The annual report also contains, among other items, a "description of the contingency planning ... for events that might require the use of the priorities and allocations authorities" and "recommendations for legislative actions, as appropriate, to support the effective use" of the Title I authorities.130 The DPAC report is provided to the Senate Committee on Banking, Housing, and Urban Affairs and the House Committee on Financial Services.

Impact of Offsets Report

Offsets are industrial compensation practices that foreign governments or companies require of U.S. firms as a condition of purchase in either government-to-government or commercial sales of defense articles and/or defense services as defined by the Arms Export Control Act (22 U.S.C. §2751, et seq.) and the International Traffic in Arms Regulations (22 C.F.R. §§120-130). In the defense trade, such industrial compensation can include mandatory co-production, licensed production, subcontractor production, technology transfer, and foreign investment.

The Secretary of Commerce is required by law to prepare and to transmit to the appropriate congressional committees an annual report on the impact of offsets on defense preparedness, industrial competitiveness, employment, and trade. Specifically, the report discusses "offsets" in the government or commercial sales of defense materials.131

Considerations for Congress

Enhance Oversight

Expand Reporting or Notification Requirements

Congress may consider whether to add more extensive notification and reporting requirements on the use of all or specific authorities in the DPA. These reporting or notification requirements could be added to the existing law, or could be included in conference or committee reports accompanying germane legislation, such as appropriations bills or the National Defense Authorization Act. Additional reporting or notification requirements could involve formal notification of Congress prior to or after the use of certain authorities under specific circumstances. For example, Congress may consider whether to require the President to notify Congress (or the oversight committees) when the priorities and allocations authority is used on a contract valued above a threshold dollar amount.132 Congress might also consider expanding the existing reporting requirements of the DPAC, to include semi-annual updates on the recent use of authorities or explanations about controversial determinations made by the President. Existing requirements could also be expanded from notifying/reporting to the committees of jurisdiction to the Congress as a whole, or to include other interested committees, such as the House and Senate Armed Services Committees.

Enforce and Revise Rulemaking Requirements

Congress may consider reviewing the agencies' compliance with existing rulemaking requirements. A rulemaking requirement exists for the voluntary agreement authority in Title VII that has been completed by DHS, but it has not been updated since 1981 and may be in need of an update given changes to the authority and government reorganizations since that date.133 One of the agencies responsible for issuing a rulemaking on the use of Title I authorities has yet to do so. Congress may also consider potentially expanding regulatory requirements for other authorities included in the DPA. For example, Congress may consider whether the President should promulgate rules establishing standards and procedures for the use of all or certain Title III authorities. In addition to formalizing the executive branch's policies and procedures for using DPA authorities, these regulations could also serve an important function by offering an opportunity for private citizens and industry to comment on and understand the impact of DPA authorities on their personal interests.

Broaden Committee Oversight Jurisdiction

Since its enactment, the House Committee on Financial Services, the Senate Committee on Banking, Housing, and Urban Affairs, and their predecessors have exercised legislative oversight of the Defense Production Act. The statutory authorities granted in the various titles have been vested in the President, who has delegated some of these authorities to various agency officials through E.O. 13603. As an example of the scope of delegations, the membership of the Defense Production Act Committee (DPAC), created in 2009 and amended in 2014, includes the Secretaries of Agriculture, Commerce, Defense, Energy, Labor, Health and Human Services, Homeland Security, the Interior, Transportation, the Treasury, and State; the Attorney General; the Administrators of the National Aeronautics and Space Administration and of General Services, the Chair of the Council of Economic Advisers; and the Directors of the Central Intelligence Agency and National Intelligence.

In order to complement existing oversight, given the number of agencies that currently use or could potentially use the array of DPA authorities to support national defense missions, Congress may consider reestablishing a select committee with a purpose similar to the former Joint Committee on Defense Production.134 As an alternative to the creation of a new committee, Congress may consider formally broadening DPA oversight responsibilities to include all relevant standing committees when developing its committee oversight plan.

Should DPA oversight be broadened, Congress might consider ways to enhance inter-committee communication and coordination of its related activities. This coordination could include periodic meetings to prepare for oversight hearings or ensuring that DPA-related communications from agencies are shared appropriately. Finally, because the DPA was enacted at a time when the organization and rules of both chambers were markedly different to current practice, Congress may consider the joint referral of proposed DPA-related legislation to the appropriate oversight committees.

Amending the Defense Production Act of 1950

While the act in its current form may remain in force until September 30, 2025, the legislature could amend the DPA at any time to extend, expand, restrict, or otherwise clarify the powers it grants to the President. For example, Congress could eliminate certain authorities altogether. Likewise, Congress could expand the DPA to include new authorities to address novel threats to the national defense. For example, Congress may consider creating new authorities to address specific concerns relating to production and security of emerging technologies necessary for the national defense.

#### Key to pandemic response.

J. Mark Gidley et al. 20. J. Mark Gidley chairs the White & Case Global Antitrust/Competition practice. Martin M. Toto and Sean Sigillito. “A Novel Antitrust Defense for COVID-19 Agreements: Section 708 of the Defense Production Act” <https://www.whitecase.com/sites/default/files/2020-04/novel-antitrust-defense-covid-19-agreements-section-708-defense-production-act.pdf>

There is a dire need for the assistance of private industry in developing vaccines and treatments for the SARS-CoV-2 virus, and for the manufacture and distribution of medical and other supplies to aid in the United States’ response to the COVID-19 health emergency. The Government’s recent actions indicate a desire to allow private sector companies to work together to do so quickly.

While many of the needs arising from the ongoing emergency focus specifically on medical supplies, the President’s delegation of Section 708 authority to the DHS as well as HHS potentially opens the door to voluntary agreements within broader sectors of the US economy. Under the right circumstances, and if the business combination could garner the governmental sponsor needed for the voluntary agreement, invoking the Defense Production Act’s antitrust relief provision through the enactment of voluntary agreements could allow for a more robust response to the COVID-19 pandemic.

#### Extinction.

Dennis Pamlin & Stuart Armstrong 15. \*Executive Project Manager Global Risks, Global Challenges Foundation. \*\*James Martin Research Fellow, Future of Humanity Institute, Oxford Martin School, University of Oxford. February 2015, “Global Challenges: 12 Risks that threaten human civilization: The case for a new risk category,” Global Challenges Foundation, p.30-93. https://api.globalchallenges.org/static/wp-content/uploads/12-Risks-with-infinite-impact.pdf

A pandemic (from Greek πᾶν, pan, “all”, and δῆμος demos, “people”) is an epidemic of infectious disease that has spread through human populations across a large region; for instance several continents, or even worldwide. Here only worldwide events are included. A widespread endemic disease that is stable in terms of how many people become sick from it is not a pandemic. 260 84 Global Challenges – Twelve risks that threaten human civilisation – The case for a new category of risks 3.1 Current risks 3.1.4.1 Expected impact disaggregation 3.1.4.2 Probability Influenza subtypes266 Infectious diseases have been one of the greatest causes of mortality in history. Unlike many other global challenges pandemics have happened recently, as we can see where reasonably good data exist. Plotting historic epidemic fatalities on a log scale reveals that these tend to follow a power law with a small exponent: many plagues have been found to follow a power law with exponent 0.26.261 These kinds of power laws are heavy-tailed262 to a significant degree.263 In consequence most of the fatalities are accounted for by the top few events.264 If this law holds for future pandemics as well,265 then the majority of people who will die from epidemics will likely die from the single largest pandemic. Most epidemic fatalities follow a power law, with some extreme events – such as the Black Death and Spanish Flu – being even more deadly.267 There are other grounds for suspecting that such a highimpact epidemic will have a greater probability than usually assumed. All the features of an extremely devastating disease already exist in nature: essentially incurable (Ebola268), nearly always fatal (rabies269), extremely infectious (common cold270), and long incubation periods (HIV271). If a pathogen were to emerge that somehow combined these features (and influenza has demonstrated antigenic shift, the ability to combine features from different viruses272), its death toll would be extreme. Many relevant features of the world have changed considerably, making past comparisons problematic. The modern world has better sanitation and medical research, as well as national and supra-national institutions dedicated to combating diseases. Private insurers are also interested in modelling pandemic risks.273 Set against this is the fact that modern transport and dense human population allow infections to spread much more rapidly274, and there is the potential for urban slums to serve as breeding grounds for disease.275 Unlike events such as nuclear wars, pandemics would not damage the world’s infrastructure, and initial survivors would likely be resistant to the infection. And there would probably be survivors, if only in isolated locations. Hence the risk of a civilisation collapse would come from the ripple effect of the fatalities and the policy responses. These would include political and agricultural disruption as well as economic dislocation and damage to the world’s trade network (including the food trade). Extinction risk is only possible if the aftermath of the epidemic fragments and diminishes human society to the extent that recovery becomes impossible277 before humanity succumbs to other risks (such as climate change or further pandemics). Five important factors in estimating the probabilities and impacts of the challenge: 1. What the true probability distribution for pandemics is, especially at the tail. 2. The capacity of modern international health systems to deal with an extreme pandemic. 3. How fast medical research can proceed in an emergency. 4. How mobility of goods and people, as well as population density, will affect pandemic transmission. 5. Whether humans can develop novel and effective anti-pandemic solutions.

## 3 - CP

### Regulations CP---1NC

#### \*\*\*The United States federal government should substantially increase prohibitions on mergers in the defense sector by applying a competitive effects standard through non-antitrust regulations.

#### The counterplan PICs out of anti-trust legislation and the FTC and DOJ as enforcers---other agencies’ regulations solve.

Lawrence Fullerton et al. 08. Joel M Mitnick, William V Reiss, George C Karamanos and Owen H Smith. Sidley Austin LLP. Vertical Agreements The regulation of distribution practices in 34 jurisdictions worldwide. “United States.” https://www.sidley.com/-/media/files/publications/2008/03/getting-the-deal-through--vertical-agreements-2008/files/view-united-states-chapter/fileattachment/united-states-21.pdf

5 What entity or agency is responsible for enforcing prohibitions on anticompetitive vertical restraints? Do governments or ministers have a role?

The Federal Trade Commission (FTC) and the Antitrust Division of the Department of Justice (DoJ) are the two federal agencies responsible for the enforcement of federal antitrust laws. The FTC and the DoJ have jurisdiction to investigate many of the same types of conduct, and therefore have adopted a clearance procedure pursuant to which matters are handled by whichever agency has the most expertise in a particular area.

Additionally, other agencies, such as the Securities and Exchange Commission and Federal Communications Commission, maintain oversight authority over regulated industries pursuant to various federal statutes, and therefore may review vertical restraints for anti-competitive effects.

## 4 --- FTC DA

#### FTC’s increasing enforcement in privacy now---it’s focused on algorithmic bias.

James V. Fazio 21. Special counsel in the Intellectual Property Practice Group at Sheppard, Mullin, Richter & Hampton LLP, with Liisa M. Thomas, 3/11. “What Is FTC’s Course Under Biden?” https://www.natlawreview.com/article/what-ftc-s-course-under-biden

The new acting FTC chair, Rebecca Kelly Slaughter, recently signaled that the FTC may increase enforcement and penalties in the privacy and data security realm. Slaughter pointed to several areas of focus for the FTC this year, which companies will want to keep in mind: Notifying Consumers About FTC Allegations: Slaughter referred favorably to two recent cases: (1) the Everalbum biometric settlement from earlier this year (which we wrote about at the time); and (2) the Flo Health settlement over alleged deceptive data sharing practices (which we also wrote about at the time). In drawing on these two cases, Slaughter indicated that in future cases the FTC intends to include as part of any settlement a requirement to notify customers of any FTC allegations. This, she said, would allow consumers to “vote with their feet” and help them decide whether to recommend their services to others. FTC Intent to Plead All Relevant Violations: According to Slaughter, another lesson the FTC is taking from the Flo case is to include in the cases it brings all potentially applicable violations of all relevant privacy-related laws. In the Flo case, Slaughter said the FTC should have pleaded a violation of the Health Breach Notification Rule, which requires that vendors of personal health records notify consumers of data breaches. Focus on Ed Tech and COPPA: Given the explosive growth of education technology during COVID-19, the FTC is conducting an industry sweep of the industry. Related to this, the FTC is reviewing its Children’s Online Privacy Protection Act Rule. This goes beyond the refresh the agency did of their FAQs earlier in the pandemic (which we wrote about at the time). For now, Slaughter reminds companies that parental consent is needed before collecting information online from children under the age of 13. Examination of Health Apps: The FTC will take a closer look at health apps, including telehealth and contact tracing apps, as more and more consumers are relying on such apps to manage their health during the pandemic. Overlap Between Competition and Privacy: Slaughter also indicated that it is worth looking at situations where there may be not only privacy concerns, but antitrust as well. Because the FTC has a dual mission (consumer protection and competition) she notes that it has a “structural advantage” over other regulators in that it can look at these issues, especially since -she states- “many of the largest players in digital markets are as powerful as they are because of the breadth of their access to and control over consumer data.” Racial Equality and AI/Biometrics/Geotracking: Slaughter noted that COVID-19 is exacerbating racial inequities. She pointed to the unequal access to technology, as well as algorithmic discrimination (the idea that discrimination offline becomes embedded into algorithmic system logic). The FTC intends to focus on algorithmic discrimination, as well as on the discrimination potentially embedded into facial recognition technologies. (This mirrors concerns that gave rise to the recent Portland facial recognition law, which we recently wrote about). Finally, Slaughter commented on the use of location data to identify characteristics of Black Lives Matter protesters, and said she is concerned about the misuse of location data to track Americans engaged in constitutionally protected speech. Putting it Into Practice: Companies that operate health apps, that are in the education technology space, or that use algorithms or facial recognition tools will want to keep in mind that these are areas of focus for the FTC. And for everyone, keep in mind that the FTC has indicated it will beef up privacy law penalties and will ask for more notification to injured consumers.

#### Antitrust enforcement saps up FTC resources and personnel, which are finite.

Tara L. Reinhart, et al. 21. \*\*Head of Skadden, Arps, Slate, Meagher & Flom LLP’s Antitrust/Competition Group. \*\*Steven C. Sunshine, Co-head of Skadden, Arps, Slat, Meagher & Flom LLP’s Antitrust/Competition Group. \*\*David P. Whales, antitrust lawyer with over 25 years of experience in both private and public sectors. \*\*Julia Y. York, partner at Skadden, Arps, Slat, Meagher & Flom LLP. \*\*Bre Jordan, associate at Skadden, Arps, Slat, Meagher & Flom LLP focusing on antitrust law. “Lina Khan’s Appointment as FTC Chair Reflects Biden Administration’s Aggressive Stance on Antitrust Enforcement.” 6/18/21. https://www.skadden.com/insights/publications/2021/06/lina-khans-appointment-as-ftc-chair

Second, like all antitrust enforcers, Ms. Khan and the FTC will face resource constraints. Bringing antitrust litigation is an expensive and laborious process, often requiring millions of dollars for expert fees and a large army of FTC staff attorneys and taking many months or even years to accomplish. Typically, the FTC can only litigate a handful of antitrust matters at a time. It seems likely that Congress will provide more funding to the FTC in the current environment, but even with these extra resources, the FTC will still have to pick its cases carefully and cannot challenge every deal or every instance of alleged unlawful conduct.

#### That trades off with the necessary resources for privacy enforcement.

John O. McGinnis\* and Linda Sun\*\* 20. \*George C. Dix Professor, Northwestern University, and Associate-Designate, Wilmer Pickering Hale & Dorr LLP. “Unifying Antitrust Enforcement for the Digital Age.” Northwestern Public Law Research Paper No. 20-20. https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3669087

The FTC needs more resources to adequately address the nation’s growing privacy concerns. Currently, the FTC oversees both consumer protection—encompassing privacy—and antitrust,249 making the FTC the chief federal agency on privacy policy and enforcement250 and the nation’s de-facto privacy agency.251 The agency has long-standing experience in enforcing privacy statutes252 and also has special privacy assets, such as an internet lab capable of high-quality tech forensics to track invasions of privacy.253 The FTC, however, has failed to keep pace with the massive growth of privacy concerns—a phenomenon also driven by modern technology. Very few Americans feel conﬁdent in the privacy of their information in the digital age.254 According to a 2019 study, over 80% of Americans feel that they have little to no control over the data collected on them by companies and the government.255 To adequately address privacy concerns, the FTC needs more resources.256 The agency has been explicit that it needs more manpower to police tech companies. In requesting increased funding from Congress, FTC Director Joseph Simons said the money would allow the agency to hire additional staff and bring more privacy cases.257 A former director of the FTC’s Bureau of Consumer Protection, which houses the privacy unit, has called the FTC “woefully understaffed.”258 As of the spring of 2019, the FTC had only forty employees dedicated to privacy and data security, compared to 500 and 110 employees at comparable agencies in the UK. and Ireland, respectively.259 Without more lawyers, investigators, and technologists, the FTC will be forced to conduct privacy investigations less thoroughly, and in some cases, forgo them altogether.260 Currently, the FT C’s resources are spread thin across multiple missions, to the detriment of its privacy efforts. Removing the agency’s antitrust responsibilities would reallocate resources from the antitrust department to its privacy unit and other areas of consumer protection. Further, it would free up the scarce time of the commissioners to oversee this essential effort.261

#### Unchecked algorithmic bias risks massive inequality and extinction.

Mike Thomas 20. Quoting AI experts including MIT Physics Professors, Senior Features Writer for BuiltIn. THE FUTURE OF ARTIFICIAL INTELLIGENCE: 7 ways AI can change the world for better ... or worse, Updated: April 20, 2020, <https://builtin.com/artificial-intelligence/artificial-intelligence-future>

Klabjan also puts little stock in extreme scenarios — the type involving, say, murderous cyborgs that turn the earth into a smoldering hellscape. He’s much more concerned with machines — war robots, for instance — being fed faulty “incentives” by nefarious humans. As MIT physics professors and leading AI researcher Max Tegmark put it in a 2018 TED Talk, “The real threat from AI isn’t malice, like in silly Hollywood movies, but competence — AI accomplishing goals that just aren’t aligned with ours.” That’s Laird’s take, too. “I definitely don’t see the scenario where something wakes up and decides it wants to take over the world,” he says. “I think that’s science fiction and not the way it’s going to play out.” What Laird worries most about isn’t evil AI, per se, but “evil humans using AI as a sort of false force multiplier” for things like bank robbery and credit card fraud, among many other crimes. And so, while he’s often frustrated with the pace of progress, AI’s slow burn may actually be a blessing. “Time to understand what we’re creating and how we’re going to incorporate it into society,” Laird says, “might be exactly what we need.” But no one knows for sure. “There are several major breakthroughs that have to occur, and those could come very quickly,” Russell said during his Westminster talk. Referencing the rapid transformational effect of nuclear fission (atom splitting) by British physicist Ernest Rutherford in 1917, he added, “It’s very, very hard to predict when these conceptual breakthroughs are going to happen.” But whenever they do, if they do, he emphasized the importance of preparation. That means starting or continuing discussions about the ethical use of A.G.I. and whether it should be regulated. That means working to eliminate data bias, which has a corrupting effect on algorithms and is currently a fat fly in the AI ointment. That means working to invent and augment security measures capable of keeping the technology in check. And it means having the humility to realize that just because we can doesn’t mean we should. “Our situation with technology is complicated, but the big picture is rather simple,” Tegmark said during his TED Talk. “Most AGI researchers expect AGI within decades, and if we just bumble into this unprepared, it will probably be the biggest mistake in human history. It could enable brutal global dictatorship with unprecedented inequality, surveillance, suffering and maybe even human extinction. But if we steer carefully, we could end up in a fantastic future where everybody’s better off—the poor are richer, the rich are richer, everybody’s healthy and free to live out their dreams.”

## 5 – Rocketdyne PiC

### 1NC

#### The United States Federal Government should substantially increase prohibitions on anticompetitive business practices by expanding the scope of the core antitrust laws by applying a competitive effects standard to all mergers in the defense sector, except for the Lockheed/Aerojet Merger.

#### This merger = key to DIB and US economy

Harry J. Kazianis, 21. Senior Director at the Center for the National Interest, founded by President Richard Nixon. “National Security Experts, Not Lawyers, Should Decide Fate of Defense Mergers & Acquisitions.” September 1, 2021. https://nationalinterest.org/feature/national-security-experts-not-lawyers-should-decide-fate-defense-mergers-acquisitions-192868

**What Happens Now?**

Such is the case with the proposed Lockheed Martin acquisition of Aerojet Rocketdyne, a merger that would not alter the competitive landscape in any appreciable way. In fact, it enhances and restores a competitive playing field in the crucial rocket propulsion sector that has tilted dramatically towards well-financed vertically integrated primes such as NG-OATK, SpaceX, and Blue Origin. LM and AJRD have virtually no overlap in terms of market position or the types of systems and services they offer, and the number of rocket propulsion providers would not change.

If the transaction is approved, Aerojet Rocketdyne would benefit from greater stability and would be able to pour more resources into technology, research and innovation. Post-acquisition, Aerojet Rocketdyne’s products will still be available on the open market the same as if the company remained an independent merchant rocket manufacturer. Strong oversight mechanisms available to the Defense Department and the FTC such as consent decrees and 3rd party monitoring have been used to great effect in the Defense industry for decades. That’s good for the taxpayer and the entire defense industrial base. It is also in complete alignment with the goals of the President’s recent executive order on competition in the economy.

#### Econ decline causes global wars

Qian Liu, 18. China-based economist. “From economic crisis to World War III.” Project Syndicate. 11/8/2018. <https://www.project-syndicate.org/commentary/economic-crisis-military-conflict-or-structural-reform-by-qian-liu-2018-11>

The next economic crisis is closer than you think. But what you should really worry about is what comes after: in the **current social, political, and technological landscape**, a **prolonged economic crisis**, combined with rising income inequality, could well **escalate into a major global military conflict**. The 2008-09 global financial crisis almost bankrupted governments and caused systemic collapse. Policymakers managed to pull the global economy back from the brink, using massive monetary stimulus, including **q**uantitative **e**asing and near-zero (or even negative) interest rates. But monetary stimulus is like an adrenaline shot to jump-start an arrested heart; it can revive the patient, but it does nothing to cure the disease. Treating a sick economy requires structural reforms, which can cover everything from financial and labour markets to tax systems, fertility patterns, and education policies. Policymakers have utterly failed to pursue such reforms, despite promising to do so. Instead, they have remained preoccupied with politics. From Italy to Germany, forming and sustaining governments now seems to take more time than actual governing. Greece, for example, has relied on money from international creditors to keep its head (barely) above water, rather than genuinely reforming its pension system or improving its business environment. The lack of structural reform has meant that the unprecedented excess liquidity that central banks injected into their economies was not allocated to its most efficient uses. Instead, it raised global asset prices to levels even higher than those prevailing before 2008. In the United States, housing prices are now 8% higher than they were at the peak of the property bubble in 2006, according to the property website Zillow. The price-to-earnings (CAPE) ratio, which measures whether stock-market prices are within a reasonable range, is now higher than it was both in 2008 and at the start of the Great Depression in 1929. As monetary tightening reveals the vulnerabilities in the real economy, the collapse of asset-price bubbles will trigger another economic crisis – one that could be even more severe than the last, because we have built up a tolerance to our strongest macroeconomic medications. A decade of regular adrenaline shots, in the form of ultra-low interest rates and unconventional monetary policies, has severely depleted their power to stabilise and stimulate the economy. If history is any guide, the consequences of this mistake could extend far beyond the economy. According to Harvard’s Benjamin Friedman, **prolonged periods of economic distress** have been characterised also by public **antipathy toward minority groups or foreign countries** – attitudes that can help to **fuel unrest**, **terrorism**, or even **war**. For example, during the Great Depression, US President Herbert Hoover signed the 1930 **Smoot-Hawley** Tariff Act, intended to protect American workers and farmers from foreign competition. In the subsequent five years, global trade shrank by two-thirds. Within a decade, **World War II** had begun. To be sure, WWII, like World War I, was caused by a multitude of factors; there is no standard path to war. But there is reason to believe that high levels of inequality can play a significant role in stoking conflict. According to research by the economist Thomas **Piketty**, a spike in income inequality is often followed by a **great crisis**. Income inequality then declines for a while, before rising again, until a new peak – and a new disaster. Though causality has yet to be proven, given the limited number of data points, this correlation should not be taken lightly, especially with wealth and income inequality at historically high levels. This is all the more worrying in view of the numerous other factors stoking social unrest and diplomatic tension, including technological disruption, a record-breaking migration crisis, anxiety over globalisation, political polarisation, and rising nationalism. All are symptoms of failed policies that could turn out to be trigger points for a future crisis. Voters have good reason to be frustrated, but the emotionally appealing **populists** to whom they are increasingly giving their support are offering ill-advised solutions that will **only make matters worse**. For example, despite the world’s unprecedented interconnectedness, **multilateralism is increasingly being eschewed**, as countries – most notably, Donald J. Trump’s US – pursue unilateral, isolationist policies. Meanwhile, **proxy wars** are **raging in Syria and Yemen**. Against this background, we must take seriously the possibility that the **next economic crisis could lead to a large-scale military confrontation**. By the logic of the political scientist Samuel Huntington, considering such a scenario could help us avoid it because it would force us to take action. In this case, the key will be for policymakers to pursue the structural reforms that they have long promised while replacing finger-pointing and antagonism with a sensible and respectful global dialogue. The alternative may well be global conflagration.

## Adv 1

### **1NC - Economy**

#### Mergers and acquisitions in aerospace/defense key to the economy

Paul Prentice, 19. Paul Prentice is a professor of economics and business at Colorado Technical University and a former economist in the Reagan administration. He wrote this for InsideSources.com. “Mergers and Acquisitions Benefit the Economy and Americans.” November 26, 2019. https://insidesources.com/mergers-and-acquisitions-benefit-the-economy-and-americans/

Mergers and acquisitions (M&A) are frequently the subject of business news and 2019 has been no different. Through the first nine months of 2019, for example, companies announced M&A of $1.67 trillion — a record high. Heightened activity of this kind naturally raises concerns about competition. Traditional economic theory holds that the higher the degree of competition there is in any given industry, the better off the economy is as a whole. In particular, economists contend, consumers benefit greatly from a high degree of competition that puts upward pressure on quality, downward pressure on prices, and incentivizes the necessary degree of innovation to drive an economy forward. But a theory in the abstract can play out much differently in real life. This process of industry consolidation, contrary to popular belief, can actually be good for taxpayers, innovation and the economy. Let me explain how. First, M&A allows companies to take advantage of economies of scale that drive prices down. This is especially true for capital-intensive industries such as technology, health care and aerospace. The more companies can spread their high fixed costs over a larger volume of production, the more downward pressure on prices. Second, stronger earnings lead to healthier retirement and investment accounts. A secondary benefit of M&A is more wealth for shareholders, and a tertiary benefit is to boost real gross domestic product through the “wealth effect.” For any given level of income in the aggregate economy, a higher level of wealth will boost consumption spending — which is about two-thirds of GDP. Third, the economies of scale from M&A allow companies to more effectively compete in international markets that have very large players — such as those frequently subsidized by foreign governments. In these markets, it takes large U.S. companies to establish and maintain a competitive edge in innovation, production and marketing. Without M&A, some U.S. companies would be at risk of failing, which would actually reduce competition. The U.S. is losing its R&D edge to China, and M&A can help reverse that dangerous trend. Fourth, by making an economy more efficient and more productive, M&A reduces inflationary pressures. With less inflation, price signals become clearer and resource allocation improves throughout the economy. And with less inflation, any given level of income and wages will generate more real demand for final goods and services, which will generate more demand for labor, which in turn creates more income. Real GDP will benefit from this virtuous disinflation cycle. Tech companies have been performing M&A for decades in order to remain competitive in this fast-moving industry. Apple bought Beats by Dre for $3 billion. Oracle acquired PeopleSoft for $10.3 billion. Facebook bought WhatsApp for $22 billion. The list goes on, with no proven harm to consumers. To the contrary, consumer have gained from the M&A, as has the overall economy. The recent T-Mobile and Sprint proposed merger, meanwhile, will enable the integration of existing capabilities to create better efficiency, while strengthening competition with nations such as China and South Korea in developing proprietary 5G technologies. Just as tech companies need to continuously compete with foreign developments, so does the U.S. aerospace/defense industry. The big story in this space is the proposed merger between Raytheon and United Technologies Corp. The combined company will have annual sales of nearly $75 billion and will be better positioned compete in the $1 trillion international aerospace industry. As a result, $500 million in savings will be passed on to taxpayers and investors are expected to receive as much as $20 billion through dividends and stock buybacks. The proposed merger has received shareholder approval and has also garnered support from government officials and industry experts. Recognizing both the need for the merger and the lack of antitrust concerns, Ellen Lord, undersecretary for Acquisitions and Sustainment, said, “There are no major concerns that I know of right now,” and gave the proposal a tentative stamp of approval from the Pentagon. Even competitor Lockheed Martin has spoken positively about the proposed merger. Its F-35 program manager, Greg Ulmer, said that he has “no concern” that the proposed merger would affect the F-35 program. There is a reason, during the Trump economy, M&A activity has picked up, just as it did under the President Reagan’s dynamic economy. The Reagan administration lifted barriers to M&A, which helped to lead the economic resurgence of the 1980s and 1990s. Firms can take advantage of the strong economy by using M&A to enhance their competitive position — which leads to increased, not decreased, competition. While we must be sure to ensure appropriate oversight remains in place, this type of corporate activity is generally a benefit to our economy, not a detriment, and should be welcomed.

#### Economic decline causes nuclear war.

Cross apply liu 18 from the Rocketdyne PIC FLOW

### 1NC - Manufacturing

#### Big defense key to sustain manufacturing.

Louis Uchitelle, 17. Journalist and author. He worked for The New York Times from 1980–2010, first as an editor in the business news department and then as a business and economics writer. He was the lead reporter for the series The Downsizing of America, which won a George Polk Award in 1996. "The U.S. Still Leans on the Military-Industrial Complex," The New York Times, September 22, 2019. https://www.nytimes.com/2017/09/22/business/economy/military-industrial-complex.html.

If you want to see what President Trump can do to expand manufacturing in America, look past his criticism of free trade and the few jobs he may have saved at Carrier. Instead, look at his plans for the military.

Manufacturing has always relied on public funding in one form or another, and in particular on outlays for weaponry, even nearly three decades after the end of the Cold War. Roughly 10 percent of the $2.2 trillion in factory output in the United States goes into the production of weapons sold mainly to the Defense Department for use by the armed forces.

And the spending shows. The United States, after all, has 10 aircraft carriers in active service versus just one for China, although China has a bigger manufacturing industry than the United States. One can argue that China is bent on big increases in weapons production and is still in the early stages. Whatever the case, America’s weapons production is still far greater than China’s, while China has burnished its reputation as a manufacturer of civilian goods for export and, increasingly, for its own citizens. The United States once went that route. In the summer of 1945, after nearly five years of wartime rationing, the civilian population of the United States was starved for new cars and appliances, new clothing and shoes, and new homes and their furnishings. So was the rest of the world, and American manufacturers prospered by meeting that need as well. Converting factories to civilian production was a no-brainer and sufficiently profitable to match wartime earnings. After the Korean War in the early 1950s, however, a somewhat similar conversion back to civilian production wasn’t as profitable. And companies that considered it in the early 1990s, like General Dynamics in Groton, Conn., decided to stick with making weapons for the Defense Department. These companies argued — accurately — that military work was more profitable and, in those days, generated more jobs. As weapons production increased, the manufacture of autos and electronics shifted partly or wholly overseas. So did the production of other civilian products — leaving behind weapons bought by the Defense Department as an ever bigger share of the nation’s factory output. While President Dwight D. Eisenhower warned of the perils of the “military-industrial complex” in his farewell address in January 1961, the Vietnam War accentuated this reliance on weapons production, which became embedded in annual budgets. That may well continue in the years ahead. In his first budget proposal in May, Mr. Trump called for significant cuts in domestic spending but roughly a 10 percent increase in military outlays. Given the history of recent decades, is it any wonder that we now have a president who, at least in part, equates “making America strong again” with an enhanced military equipped with the weaponry that an enhanced military requires? Public money flows to factory owners in many ways — often as a result of the frequent bidding by municipal governments to persuade a manufacturer to locate a factory in one community rather than another. These auctions sometimes top $100 million per factory location. A manufacturer who finally accepts a municipality’s bid collects tax breaks, a gift of land on which to put a factory and sometimes the cost of building and equipping the factory itself at taxpayers’ expense. Cities and towns are that eager to have a factory, with its network of nearby suppliers and its relatively well-paying jobs — relative, that is, to the lower paying retail and service industry work that is often the alternative for high-school- or even junior-college-educated men and women. That outlay of taxpayer money is concentrated in eight sectors of manufacturing, including ammunition, aircraft, guided missiles, shipbuilding and armored vehicles. Shut down production in those areas and factory production in America, measured as value added, would shrink 10 percent or more, according to Richard Aboulafia, a vice president of the Teal Group, a defense consulting firm. Mr. Aboulafia based his estimate, he said, on an analysis of the Defense Department budget and export data. Dan Luria, research director of the Michigan Manufacturing Technology Center, concurred with those figures. To put the matter graphically, factories in the United States churn out one rifle barrel for every nine auto fenders. Cutting back on factory production isn’t the direction the Trump administration has been going. Instead, the promise is that — whatever goods they produce — the Trump era’s factories will be big employers. But the reality is that modern factories, even when they materialize, are highly automated, which helps to explain why the manufacturing work force has bumped along at less than 13 million for nearly a decade, according to the Labor Department, although factory output – including weapons production — keeps rising smartly. These constraints make me yearn for the good old days just after World War II, when America seemed to have easier policy choices. Even inexpensive trinkets were manufactured in America, and my mother, for one, ordered her children to stay away from a neighborhood boy whose parents had bought him a BB gun. Disarmament ran deep in the late 1940s. We didn’t need to produce weapons, even BB guns, to keep manufacturing afloat. I’m afraid that we do now.

#### Manufacturing is key to deter great power war.

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Yet there are severe challenges that could result to the nation’s security interests even with 10 percent cutbacks. Despite the likely potential of lesser resources, the demand side of the equation does not seem likely to grow easier. The international security environment is challenging and complex. China’s economic, political and now military rise continues. Its direction is uncertain, but it has already raised tension, especially in the South China Sea. Iran’s ambitions and machinations remain foreboding, with its nuclear plans entering a new phase of both capability but also crisis. North Korea is all the more uncertain with a leadership transition, but has a history of brinkmanship and indeed even the occasional use of force against the South, not to mention nuclear weapons related activities that raise deep concern. And the hopeful series of revolutions in the broader Arab world in 2011, while inspiring at many levels, also seem likely to raise uncertainty in the broader Middle East. Revolutions are inherently unpredictable and often messy geostrategic events. On top of these remain commitments in Afghanistan and beyond and the frequent U.S. military role in humanitarian disaster relief. Thus, there are broad challenges for American defense planners as they try to address this challenging world with fewer available resources. The current wave of defense cuts is also different than past defense budget reductions in their likely industrial impact, as the U.S. defense industrial base is in a much different place than it was in the past. Defense industrial issues are too often viewed through the lens of jobs and pet projects to protect in congressional districts. But the overall health of the firms that supply the technologies our armed forces utilize does have national security resonance. Qualitative superiority in weaponry and other key military technology has become an essential element of American military power in the modern era—not only for winning wars but for deterring them. That requires world-class scientific and manufacturing capabilities—which in turn can also generate civilian and military export opportunities for the United States in a globalized marketplace.

### 1NC – Aerospace Turn

**US aerospace industry will lead to breakthroughs that can lead to space colonization.**

Andrew **Tarantola**, **19**. Senior Editor @ End Gadget, "Hitting the Books: We won't colonize space without a Weyland-Yutani," Engadget, June 15, 2019. https://www.engadget.com/2019/06/15/hitting-the-books-space-20-rod-pyle/

The larger goal of human settlements in the solar system depends **on the success or failure of** the **pathfinder programs** outlined above. The process of establishing long-term bases may be undertaken by governments working with traditional **aerospace contractors**, or by **private industry** alone, but will most likely be achieved **through a combination of both**. National governments will continue to pursue space settlements because they think it is important in the long term, for a variety of both rational and emotional reasons. Corporations will ultimately undertake such ventures because they know that there is potential profit in them. Extremely wealthy individuals may pilot such projects for philanthropic reasons, but nobody is wealthy enough to support an ongoing space settlement—yet. No matter the project's backers or their motivations, though, **it's going to take individuals** willing to **venture out into the unknown to make any plan a reality**. Jim Keravala is CEO of OffWorld, a company developing robots that will extract and process space resources. He has a long history in the space business. In his view, the traditional motivations for individual migration and settlement on Earth—access to opportunities and resources—will not apply to much of the settlement of the moon or Mars, at least early on. Keravala believes that day-to-day life in these places will be very hard, more akin to working on an oil rig than the luxurious existence foreseen by people such as O'Neil. However, **the opportunity to improve our circumstances in space lies just over the horizon**, in Keravala's view. He sees much of the heavy lifting for settlements being done by machines and a few human overseers, but this will lead eventually to the construction of luxuries of which we can scarcely dream on Earth. "The requisite for a better life in space is to create an oasis . . . the only reason people will settle in space, post commerce-driven, is to achieve that better life." Note that he said "post commerce-driven." This is an important point. Mining, resource extraction, and commercial services, such as telecommunications, will drive the first phase of space exploration, and it is only after this phase has set the infrastructure in place that those who are motivated primarily by the desire for "a better life" will find the final frontier appealing. "So far, there is no better place to settle than Earth," Keravala noted. "It's the baseline 1.0 definition of an oasis for now. To close the loop, we must take the issue of somewhere to live and create luxury living, total creative freedom, abundant cuisine, longevity, unlimited entertainment, an ability to explore, and [a good system of] regulation." Former NASA deputy administrator Lori Garver drilled down a bit further into human nature. "Over the long term, as you evolve space activities to benefit civilization, ultimately we have to go into space to assure our survival and to benefit civilization . . . Settling in new lands is what humans have always done, and I think we need to continue to do so, not only for resources, but for liberty and the human spirit. To be blunt, it is a combination of fear, greed, and glory. The will to survive is innate in every living thing. In general, people will want to go for their own reasons. These processes are not usually government driven. I'll add that the people who go on their own are typically the ones who stay." Jeff Greason emphasized property rights—the "greed" part of Garver's position. "If one could acquire title to portions of other planetary bodies, one could use the tried and true methods of past colonization efforts on Earth. Many such schemes have been tried in which the settlers get shares in the settlement. Up front, something like the Hudson Bay Company might put up the investment, and then offer the opportunity for people to come and work there—and subsidize them to go—but then [those settlers] have to work for some number of years in order to pay off the cost of their transportation and support." Former NASA astronaut Franklin Chang-Díaz thinks it is destiny, the oldest of trump cards that will drive settlement: "I believe it is our destiny to populate space. Space holds the key to our survival as a species. We need to prepare humanity to embark on that journey before the growing environmental and social stresses of our own planet extinguish our capacity to do so." Ultimately, whatever rationale one selects for seeking a future in space, those reasons must make sense to the stakeholders who count the most: **private enterprise**, **government**, and perhaps most importantly, you. Any efforts at space settlement must be supported by popular opinion—governments need it to survive, and private enterprise needs it for investment. **As companies** like SpaceX and Blue Origin **push the boundaries** of what can be accomplished, popular support for these ventures has been on the rise. The last major survey of public attitudes about spaceflight was conducted in the US in 2015 by the Pew Research Center. It found that 58 percent of Americans felt that it was essential that the country remain a leader in space exploration. About 64 percent felt that spaceflight was a good investment for the country. Almost 70 percent held a favorable opinion of NASA. While another major survey has not been conducted since the launch of the Falcon Heavy, media accounts reported great excitement about the accomplishment worldwide. Public support seems to be solid and appears to be increasing as people see the aspirations of Space 2.0 becoming achievements. This, along with the ever-increasing amounts of private investment in spaceflight, **portend great things ahead.**

#### But mergers and acquisitions are critical to the aerospace industry, plan wrecks that

Dr. Daniel Gouré, 21. Vice President of the Lexington Institute. He served in the Pentagon during the George H.W. Administration and has taught at Johns Hopkins and Georgetown Universities and the National War College. “How Misguided Antitrust Concerns Pose A Threat To The Nation’s Security And Health.” June 15, 2021. https://nationalinterest.org/blog/buzz/how-misguided-antitrust-concerns-pose-threat-nation%E2%80%99s-security-and-health-187782

An important tool that contributes to the private sector being more innovative and accelerating change is mergers and acquisitions. In response to the trend of reduced defense spending, as well as reductions in the number of major programs, the defense and aerospace sector has been in a continuous state of consolidation since the end of the Cold War. In addition, until the recent drive toward shortening acquisition timelines, major programs often took fifteen years or more to go from initial design to full-rate production. Scale and financial resources were also important for the ability of defense companies to survive changes in national security priorities or decisions to cancel major acquisition programs. Therefore, small and mid-sized firms often found it extremely difficult to thrive in the defense and aerospace sector. As a result of these factors, the number of major prime contractors has shrunk to, at best, two or three companies in each defense subsector. Mergers and acquisitions will continue to be an important tool for defense and aerospace companies in accelerating change, improving their performance, reducing costs, and providing the rapid innovation demanded by the Pentagon. Recent examples include the merger of L3 and Harris; the merger between Raytheon and United Technologies; the acquisition of Sanders Electronics from Lockheed Martin by BAE Systems; the acquisition of OrbitalATK by Northrop Grumman; and finally, the proposed acquisition of Aerojet Rocketdyne by Lockheed Martin. But where mergers and acquisitions may be particularly significant is in bringing unique products to bear on critical defense problems. The acquisition of small and mid-sized companies (particularly those without a foothold in the defense sector) by larger firms is an important way of providing them with the access to customers, financial and human resources, and management support required to enter and survive in the defense market. Over the past several years, the Federal Trade Commission (FTC) has pursued several misguided antitrust investigations and suits. One of these was against Qualcomm, despite senior DoD officials warning that this would harm national security. The recurring theme in these actions is the need to reign in corporations based on size or market presence. This reflects a growing sentiment at the FTC that corporate success as reflected in size or dominant performance is suspect. As a recent Wall Street Journal editorial observed, the premise of the new approach is that “big is bad.”

**Multiple threats make extinction inevitable – only colonization can solve**

Ben **Austen**, **11.** Contributing editor of Harper’s Magazine. “After Earth: Why, Where, How, and When We Might Leave Our Home Planet,” Popular science, February 2011. <http://www.popsci.com/science/article/2011-02/after-earth-why-where-how-and-when-we-might-leave-our-home-planet?page=3>

Earth won’t always **be fit for occupation**. We know that in two billion years or so, an **expanding sun** will **boil away our oceans,** leaving our home in the universe uninhabitable—unless, that is, we haven’t already been wiped out by the Andromeda galaxy, which is on a multibillion-year collision course with our Milky Way. Moreover, at least a third of the thousand mile-wide asteroids that hurtle across our orbital path will eventually crash into us, at a rate of about one every 300,000 years. Why? Indeed, in 1989 a far smaller asteroid, the impact of which would still have been equivalent **in force to 1,000 nuclear bombs**, crossed our orbit just **six hours after Earth** had passed. A recent report by the Lifeboat Foundation, whose hundreds of researchers track a dozen different existential risks to humanity, **likens that one-in-300,000 chance** of a catastrophic strike **to a game of Russian roulette: “If we keep pulling the trigger long enough we’ll blow our head off**, and there’s no guarantee **it won’t be the next pull.”** Many of the threats that might lead us to consider off-Earth living arrangements are actually man-made, and not necessarily in the distant future. The amount we consume each year **already far outstrips** what our planet can sustain, and the World Wildlife Fund estimates that **by 2030 we will be consuming two planets’ worth of natural resources annually**. The Center for Research on the Epidemiology of Disasters, an international humanitarian organization, reports that the onslaught of droughts, earthquakes, epic rains and floods over the past decade is triple the number from the 1980s and nearly 54 times that of 1901, when this data was first collected. Some scenarios have climate change leading to severe water shortages, the submersion of coastal areas, and widespread famine. Additionally, the world could end by way of **deadly pathogen**, **nuclear war** or, as the Lifeboat Foundation warns, **the “misuse of increasingly powerful technologies.”** Given the risks humans pose to the planet, we might also someday leave Earth simply to conserve it, with our planet becoming a kind of nature sanctuary that we visit now and again, as we might Yosemite. **None of the threats we face are especially far-fetched.** Climate change is already a major factor in human affairs, for instance, and our planet has undergone at least one previous mass extinction as a result of asteroid impact. “The dinosaurs died out because they were too stupid to build an adequate spacefaring civilization,” says Tihamer Toth-Fejel, a research engineer at the Advanced Information Systems division of defense contractor General Dynamics and one of 85 members of the Lifeboat Foundation’s space-settlement board. “So far, the difference between us and them is barely measurable.” The Alliance to Rescue Civilization, a project started by New York University chemist Robert Shapiro, contends that the inevitability of any of several cataclysmic events means that we must prepare a copy of our civilization and move it into outer space and out of harm’s way—a backup of our cultural achievements and traditions. In 2005, then–NASA administrator Michael Griffin described the aims of the national space program in similar terms. “If we humans want to survive for hundreds of thousands or millions of years, **we must ultimately populate other planets,”** he said. “One day, I don’t know when that day is, but there will be more human beings who live off the Earth than on it.”

### No Cyberattacks---1NC

#### No catastrophic cyberattacks---25 years of empirics prove they stay low-level and non-escalatory.

Lewis 20---senior vice president and director of the Technology Policy Program at the Center for Strategic and International Studies). Lewis, James. 2020. “Dismissing Cyber Catastrophe.” Center for Strategic & International Studies. August 17, 2020. https://www.csis.org/analysis/dismissing-cyber-catastrophe.

A catastrophic cyberattack was first predicted in the mid-1990s. Since then, predictions of a catastrophe have appeared regularly and have entered the popular consciousness. As a trope, a cyber catastrophe captures our imagination, but as analysis, it remains entirely imaginary and is of dubious value as a basis for policymaking. There has never been a catastrophic cyberattack. To qualify as a catastrophe, an event must produce damaging mass effect, including casualties and destruction. The fires that swept across California last summer were a catastrophe. Covid-19 has been a catastrophe, especially in countries with inadequate responses. With man-made actions, however, a catastrophe is harder to produce than it may seem, and for cyberattacks a catastrophe requires organizational and technical skills most actors still do not possess. It requires planning, reconnaissance to find vulnerabilities, and then acquiring or building attack tools—things that require resources and experience. To achieve mass effect, either a few central targets (like an electrical grid) need to be hit or multiple targets would have to be hit simultaneously (as is the case with urban water systems), something that is itself an operational challenge. It is easier to imagine a catastrophe than to produce it. The 2003 East Coast blackout is the archetype for an attack on the U.S. electrical grid. No one died in this blackout, and services were restored in a few days. As electric production is digitized, vulnerability increases, but many electrical companies have made cybersecurity a priority. Similarly, at water treatment plants, the chemicals used to purify water are controlled in ways that make mass releases difficult. In any case, it would take a massive amount of chemicals to poison large rivers or lakes, more than most companies keep on hand, and any release would quickly be diluted. More importantly, there are powerful strategic constraints on those who have the ability to launch catastrophe attacks. We have more than two decades of experience with the use of cyber techniques and operations for coercive and criminal purposes and have a clear understanding of motives, capabilities, and intentions. We can be guided by the methods of the Strategic Bombing Survey, which used interviews and observation (rather than hypotheses) to determine effect. These methods apply equally to cyberattacks. The conclusions we can draw from this are: Nonstate actors and most states lack the capability to launch attacks that cause physical damage at any level, much less a catastrophe. There have been regular predictions every year for over a decade that nonstate actors will acquire these high-end cyber capabilities in two or three years in what has become a cycle of repetition. The monetary return is negligible, which dissuades the skilled cybercriminals (mostly Russian speaking) who might have the necessary skills. One mystery is why these groups have not been used as mercenaries, and this may reflect either a degree of control by the Russian state (if it has forbidden mercenary acts) or a degree of caution by criminals. There is enough uncertainty among potential attackers about the United States’ ability to attribute that they are unwilling to risk massive retaliation in response to a catastrophic attack. (They are perfectly willing to take the risk of attribution for espionage and coercive cyber actions.) No one has ever died from a cyberattack, and only a handful of these attacks have produced physical damage. A cyberattack is not a nuclear weapon, and it is intellectually lazy to equate them to nuclear weapons. Using a tactical nuclear weapon against an urban center would produce several hundred thousand casualties, while a strategic nuclear exchange would cause tens of millions of casualties and immense physical destruction. These are catastrophes that some hack cannot duplicate. The shadow of nuclear war distorts discussion of cyber warfare. State use of cyber operations is consistent with their broad national strategies and interests. Their primary emphasis is on espionage and political coercion. The United States has opponents and is in conflict with them, but they have no interest in launching a catastrophic cyberattack since it would certainly produce an equally catastrophic retaliation. Their goal is to stay below the “use-of-force” threshold and undertake damaging cyber actions against the United States, not start a war. This has implications for the discussion of inadvertent escalation, something that has also never occurred. The concern over escalation deserves a longer discussion, as there are both technological and strategic constraints that shape and limit risk in cyber operations, and the absence of inadvertent escalation suggests a high degree of control for cyber capabilities by advanced states. Attackers, particularly among the United States’ major opponents for whom cyber is just one of the tools for confrontation, seek to avoid actions that could trigger escalation. The United States has two opponents (China and Russia) who are capable of damaging cyberattacks. Russia has demonstrated its attack skills on the Ukrainian power grid, but neither Russia nor China would be well served by a similar attack on the United States. Iran is improving and may reach the point where it could use cyberattacks to cause major damage, but it would only do so when it has decided to engage in a major armed conflict with the United States. Iran might attack targets outside the United States and its allies with less risk and continues to experiment with cyberattacks against Israeli critical infrastructure. North Korea has not yet developed this kind of capability. One major failing of catastrophe scenarios is that they discount the robustness and resilience of modern economies. These economies present multiple targets and configurations; they are harder to damage through cyberattack than they look, given the growing (albeit incomplete) attention to cybersecurity; and experience shows that people compensate for damage and quickly repair or rebuild. This was one of the counterintuitive lessons of the Strategic Bombing Survey. Pre-war planning assumed that civilian morale and production would crumple under aerial bombardment. In fact, the opposite occurred. Resistance hardened and production was restored.1 This is a short overview of why catastrophe is unlikely. Several longer CSIS reports go into the reasons in some detail. Past performance may not necessarily predict the future, but after 25 years without a single catastrophic cyberattack, we should invoke the concept cautiously, if at all. Why then, it is raised so often? Some of the explanation for the emphasis on cyber catastrophe is hortatory. When the author of one of the first reports (in the 1990s) to sound the alarm over cyber catastrophe was asked later why he had warned of a cyber Pearl Harbor when it was clear this was not going to happen, his reply was that he hoped to scare people into action. "Catastrophe is nigh; we must act" was possibly a reasonable strategy 22 years ago, but no longer. The resilience of historical events to remain culturally significant must be taken into account for an objective assessment of cyber warfare, and this will require the United States to discard some hypothetical scenarios. The long experience of living under the shadow of nuclear annihilation still shapes American thinking and conditions the United States to expect extreme outcomes. American thinking is also shaped by the experience of 9/11, a wrenching attack that caught the United States by surprise. Fears of another 9/11 reinforce the memory of nuclear war in driving the catastrophe trope, but when applied to cyberattack, these scenarios do not track with operational requirements or the nature of opponent strategy and planning. The contours of cyber warfare are emerging, but they are not always what we discuss. Better policy will require greater objectivity.

## Adv 2 – Heg

#### Primacy is sustainable---fundamentals keep the US ahead---only giving up alliances flips the balance.

Joseph S. Nye 20. Professor at Harvard University and former chair of the National Intelligence Council. "No, the Coronavirus Will Not Change the Global Order". Foreign Policy. 4-16-2020. https://foreignpolicy.com/2020/04/16/coronavirus-pandemic-china-united-states-power-competition/

How will the coronavirus pandemic reshape geopolitics? Many commentators predict the end of an era of globalization that has prospered under U.S. leadership since 1945. Some see a turning point at which China surpasses the United States as a global power. Certainly, there will be changes, but one should be wary of assuming that big causes have big effects. For example, the 1918-1919 flu pandemic killed more people than World War I, yet the lasting global changes that unfolded over the next two decades were a consequence of the war, not the disease.

Globalization—or interdependence across continents—is the result of changes in transportation and communication technology, and these are unlikely to cease. Some aspects of economic globalization such as trade will be curtailed but financial flows less so. And while economic globalization is influenced by the laws of governments, other aspects of globalization such as pandemics and climate change are determined more by the laws of biology and physics. Walls, weapons, and tariffs do not stop their transnational effects, though deep and persistent economic stagnation would slow them down.

This century has seen three crises in two decades. The 9/11 terrorist attacks did not kill very many people—but like jujitsu, terrorism is a game in which a smaller player can use the shock of horror to create a disproportionate impact on the opponent’s agenda. U.S. foreign policy was profoundly distorted by choices made in a state of panic that led to long wars in Afghanistan and Iraq. The second shock, the 2008 financial crisis, brought on the Great Recession, gave rise to populism in Western democracies, and strengthened autocratic movements in many countries. China’s fast, massive, and successful stimulus package contrasted with the West’s lagged response, leading many to predict that China was on course to become the world’s economic leader.

Initial responses to the century’s third crisis, the coronavirus pandemic, also went down the wrong path. Both Chinese President Xi Jinping and U.S. President Donald Trump started off with denial and misinformation. Delays and obfuscation wasted crucial time for testing and containment, and the opportunity for international cooperation was squandered. Instead, after imposing costly lockdowns, the world’s two largest economies engaged in propaganda battles. China has blamed the U.S. military for the presence of the virus in Wuhan, and Trump has spoken about the “Chinese virus.” The European Union, with an economy roughly the size of the United States’, dithered in the face of disunity. Yet a virus could not care less about borders or about the nationality of its victims.

The incompetence of its response has hurt the United States’ reputational (or soft) power. China has provided aid, manipulated statistics for political reasons, and engaged in vigorous propaganda—all in an attempt to turn the narrative of its early failure into one of a benign response to the pandemic. However, much of Beijing’s effort to restore its soft power has been treated with skepticism in Europe and elsewhere. That is because soft power rests on attraction. The best propaganda is not propaganda.

In soft power, China starts from a weak position. Despite major efforts since former President Hu Jintao announced the objective of increasing the country’s soft power at the 17th National Congress in 2007, Beijing has created its own obstacles by exacerbating territorial disputes with neighboring countries and by its insistence on repressive party control, which prevents the full talents of society from being unleashed in the way that happens in democracies. It is not surprising that global public opinion polls and rankings such as the Soft Power 30 rank China low in soft power. The top 20 spots in the index are held by democracies.

In hard power, too, the balance favoring the United States will not be changed by the pandemic. Both the U.S. and Chinese economies have been hit hard, as have those of the United States’ European and East Asian allies. Before the crisis, China’s economy had grown to two-thirds the size of the United States’ (measured at exchange rates), but China entered the crisis with a slowing growth rate and declining exports. Beijing has also been investing heavily in military power, but remains far behind the United States and may slow down its military investments in a more adverse budgetary climate. Among other things that the crisis has exposed is China’s need for major expenditures on its inadequate health care system.

Moreover, the United States has geopolitical advantages that will persist despite the pandemic. The first is geography: It is bordered by oceans and friendly neighbors, while China has territorial disputes with Brunei, India, Indonesia, Japan, Malaysia, the Philippines, Taiwan, and Vietnam. A second advantage is energy: The shale oil and gas revolution has transformed the United States from an energy importer to a net exporter. China, on the other hand, is highly dependent on energy imports passing through the Persian Gulf and the Indian Ocean, where the United States has naval supremacy. The United States also has a demographic advantages: Over the next decade and a half, according to research by Stanford University’s Adele Hayutin, the U.S. workforce is likely to grow by 5 percent, while China’s will shrink by 9 percent, mainly a result of its former one-child policy. China’s working-age population peaked in 2015, and India will soon pass China as the world’s most populous nation. And it barely needs repeating that U.S. power also results from its place at the forefront of the development of key technologies including biotechnology, nanotechnology, and information technology. U.S. and other Western research universities dominate higher education.

All this suggests that the COVID-19 pandemic is unlikely to prove a geopolitical turning point. But while the United States will continue to hold most of the high cards, misguided policy decisions could cause it to play these cards poorly. Discarding the aces of alliances and international institutions would be one such misguided decision. Another one would be a severe restriction of immigration. Long before this crisis, when I asked former Singaporean Prime Minister Lee Kuan Yew why he did not think China would surpass the United States as a global power anytime soon, one reason he cited was the United States’ ability to draw on the talents of the entire world and to recombine them in diversity and creativity. Given its ethnic Han nationalism, this kind of openness would be impossible for China. But if populism leads the United States to toss away its valuable cards of alliances, international institutions, and openness, Lee could be wrong.

### China ---1NC/2AC

#### No violent Revisionist China---it isn’t a threat to the LIO.

Koh King Kee 20. President, Centre for New Inclusive Asia (CNIA). Associate Fellow, Institute of China Studies, University of Malaya. “China’s Rise Is No Threat to the Liberal International Order “ China Focus. 01-22-2020. http://www.cnfocus.com/china-s-rise-is-no-threat-to-the-liberal-international-order/

China has given the world a sterling report card for its economic reform over the last four decades. Its achievements have won admirations and applauses across the world, from men on the street to political elites. Its success stories are inspirations to leaders of the emerging economies who see in China an alternative development model, a growth path that is strikingly different from the conventional economic text. But its meteoric rise has also **stirred concerns and fears in the West**. To the advocates of Western democracy, China is a centralized authoritarian regime, the rise of which is a threat to the liberal international order. Particularly, America views China as a revisionist power that poses an imminent challenge to its global hegemony. In a radio interview last year, U.S. Secretary of State Mike Pompeo alleged that China is “buying an empire” with its Belt and Road Initiative, and America intends to “oppose them at every turn”. **Are such allegations justified** or misguided? What sets China’s political system apart from the rest of the world? China’s centralized system is rooted in its history “The Chinese tradition of order imposed by a centralized system” is “a pattern that goes back at least 3,500 years”, says Newt Gingrich, former US House Speaker in his newly published book “Trump Vs China: Facing America’s Greatest Threat”. Newt Gingrich, a harsh critic of the Communist Party of China (CPC) has no empathy for China. However, he is right in pointing out that China’s political system under CPC is rooted in thousands of years of its history, a system that is inextricably embedded in its millennial-old civilization. Centralization has been China’s mainstream political philosophy spanning from the ancient dynasties to modern days. China has remained a unified nation after Qinshihuang’s conquest of the Warring States more than 2,000 years ago despite the rise and fall of the dynasties, thanks to the centralized system. It glues the immense territory together and prevents China from falling into the fate of Europe – disintegration into small nation states. China’s centralized system of governance is run based on meritocracy – a key tenet of Confucianism, which is the **bedrock of Chinese civilization**. “When the Great Principle prevails, the world belongs to all, rulers are selected according to their wisdom and ability (⼤道之⾏也，天下为公，选贤与能),” said Confucius. In ancient China, talents were picked based on the principle of meritocracy through an open imperial examination system to serve the ruler of the day. Likewise, in present day China, leaders are selected after they have passed through tiers of ability and loyalty mill tests. Centralization and meritocracy are the foundation of Chinese polity. Despite regime change, they have remained China’s unchanged statecraft throughout its history. CCP’s consultative democracy is, in fact, a blend of centralization and meritocracy. Advantages of China’s political system Many factors have contributed to China’s startling economic rise. Free trade and globalization are unequivocally important drivers. However, many countries with a huge population or immense territory such as India, Russia and Indonesia have not been able to achieve the same economic growth as that of China, even though the same international environment and opportunities were availed to them. Many political pundits and economists have failed to recognize that what sets China apart from others in its development path is, in fact, its unique political system. China’s centralized CPC-led system has obvious advantages over electoral democracy as it allows the government to formulate long-term economic development plans for the country as opposed to focusing on short term populist policies for voters’ satisfaction. It is not uncommon for a new government to reverse development policies of the previous regime due to different ideologies in a parliamentary democracy. Meritocracy and political stability enhance government efficiency and accountability. China is well acknowledged for its high efficiency in delivering mega infrastructure projects. It builds highways, railways, bridges, dams, power plants, airports and other infrastructure projects in record time, now come to know as “China Speed”. Typically, a HSR project in China takes about 4 years to complete irrespective of its size, whilst in other countries, a similar project may take up to a decade to build. “China Speed” speeds up China’s economic growth as infrastructure is not only the prerequisite, but also the catalyst for economic development. BRI – a platform for international cooperation China’s Belt and Road Initiative (BRI) is the biggest infrastructure built out in the history of mankind. It is a mammoth transcontinental development project that aims to build connectivity across the Eurasian landmass based on the principles of mutual consultation, joint contribution and shared benefits. “China will actively promote international cooperation through the Belt and Road Initiative. In doing so, we hope to achieve policy, infrastructure, trade, financial, and people-to-people connectivity and thus build a new platform for international co-operation to create new drivers of shared development,” said President Xi Jinping at the 19th CPC National Congress. Sound infrastructures are the prerequisite for economic development. According to ADB’s estimate, Asia alone requires $26 trillion of infrastructure investment from 2016 to 2030 in order to maintain its growth momentum, eradicate poverty and respond to climate change. China is well positioned to contribute to the global infrastructure investment needs in view of its technology and expertise in building infrastructure projects, coupled with its huge pool of foreign reserves. To deepen its reform, China must move up the global value chain, migrate its low technology industries and alleviate its excess industrial capacities by opening-up new markets. BRI connects China’s landlocked northwest provinces to the world with overland highways and railways. It opens a safe passageway to the Indian Ocean through the China-Pakistan Economic Corridor. BRI is thus a **win-win transnational development project** benefiting China and the partner countries. However, in the eyes of Washington, BRI is China’s grand strategy to project its global influence and a challenge to America’s world supremacy. Washington accused China of coercive economic diplomacy by indiscriminate lending to developing countries with poor repayment ability, eventually seizing the strategic assets of the recipients when they failed to repay the loans – a scheme propagated by the West as “debt trap”. China is developing through interaction with the world China is a member of the global village. It is developing through interactions with the world. “China has been seeking development with its door open. China has **embraced the world**, learned from the world, and contributed to the world, **through positive interaction** and shared development.” China sums up its relationship with the world in “ China and the World in the New Era”, a White Paper commemorating the 70th Anniversary of the founding of the People’s Republic of China. China promotes interconnected development and **benefits from the existing international order.** It advocates **free trade and multilateralism.** When China started its reform and opening-up to the world, the West cast a mould, expecting China to grow accordingly. However, China took a path not traversed by others – a mixed economy under the centralized authoritarian system, or as CPC puts it, Socialism with Chinese Characteristics. It is a system rooted in thousands of years of its history and civilization, a development model that suits China and produces an economic miracle never seen in human history. The Belt and Road Initiative is China’s mega initiative for globalization **aiming at win-win outcome.** It is China’s offer of public goods to the world as an emerging economic superpower, a manifestation of its age-old philosophy, “When you are rich, share your wealth with the world (达则兼济天下）.” China is now the second largest economy and top trading nation in the world, contributing about 30 percent to global growth. Inevitably, the international order should reflect the new economic dynamics of the 21st century. While China’s economic achievements offer valuable lessons to the world, it has no messianic aspirations. As President Xi Jinping has categorically said, “We will not import other countries’ models, and will not export the China model.” China’s growth is being realized within the existing international order. China has **no reason to sabotage** it nor the intention to supplant America’s global preeminence. **China’s rise is no threat to the liberal international order!**

### Chinese Tech Leadership Good---1NC

#### Chinese tech leadership is an impact filter---creates global sustainable development, education, healthcare, and just governance---Chinese expertise is key.

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2.2 Digital solutions and the barriers to development

There is a growing body of literature on the potential of digital technologies (ICTs). ICT investment may have the potential to contribute to all perspectives of development and help to remove any barriers, one way or another.

ICT as a form of information infrastructure has offered connectivity like other physical infrastructure insomuch as it can link landlocked countries or poverty-ridden regions to the outside world (Ng and Tan 2018; Alexopoulos 2018).

Economic and political activity based on the ICT infrastructures have boosted trade and financial resources across borders (Mbise et al. 2018 on financial aid for trade) and have the potential to channel agency for the population whose voices may be less heard or whose needs are considered to be less of a priority than those of the established institutions (Maurer, Nelms and Rea 2018). Not having access to digital technology thus has the potential to directly affect the opportunities of some of the most impoverished populations in the world (Yu et al. 2018).

Digital platforms and business transactions may also generate social network effects (Murendo et al. 2018) and facilitate risk-sharing (Riley 2018), and thus generate unexpected social capital (Ahmed 2018).

Access to digital technology may help to improve access to social services such as education and health care (Hong et al. 2017; Thapa and Sein 2018).

Enhancing ICT may also serve to improve environmental sustainability by monitoring environmental threats and through the assessment of environmental protection programmes (Asongu, Le Roux and Biekpe 2018; Mcdonald et al. 2002).

In this sense, digital infrastructure and the economic and social ecology based on this infrastructure would have the potential to overcome some of the barriers that had turned out to be challenging to get around or even considered to be developmental traps. However, like all technologies, digital technology can be a double-edged sword. There is a growing concern over how digital technology has been used to misinform rather than to inform (Mills 2016; Ciampaglia 2017), and to isolate rather than bridge understanding between people with differing opinions (Agarwal, Animesh and Prasad 2009). Despite the capability of digital technology to empower the less powerful, it can also empower those in power disproportionately, and enlarge rather than narrow the gaps between the developed and less developed world (Ahlfeldt, Koutroumpis and Valletti 2014; Fang et al. 2018).

3 What may the Digital Silk Road offer to the delivery of the SDGs?

It is well established that access to physical infrastructure may help to initiate trade and open doors for people from the most impoverished regions to the outside world, even if it cannot solve all the problems associated with poverty. As part of the BRI, the Digital Silk Road is an add-on to the conventional physical infrastructure. By linking countries with fibre-optic

cables, mobile structures, and e-commerce links, and introducing common technical standards in participating nations, the Digital Silk Road can function to complement or supplement physical infrastructure. As discussed earlier, digital networks may help businesses in poor countries to be better prepared; for example, gathering information about global events, especially in relation to target markets and creating efficient business links, and also through calls for charity donations. However, some countries involved in the BRI do not even have the basic ICT infrastructure to allow them to tap into the world market (James 2009) and ICT access can be disproportionate, with cities and the more affluent population having better access (Onitsuka et al. 2018).

Despite theoretical claims, there is little practical evidence that can give Chinese policymakers the needed support for the Digital Silk Road. This is due to the newness and rapid evolution of the Digital Silk Road initiative, along with the Chinese government’s different approach to governance, i.e. domestic policy inspiration is often drawn from the international experiences of the elites (Houlihan, Tan and Green 2010) and introduced top down; sometimes it is first experimented with using pilots at the local level (Ngar-Yin Mah and Hills 2014).

Yet, what has given the Chinese government the confidence to go about promoting digital infrastructure abroad is its own domestic experience with recent inland regional development; for example, in the Chongqing–Sichuan–Guizhou and Ningxia–Qinghai–Gansu regions, which were some of the poorest provinces in China. These provinces found it hard to compete with coastal cities such as Shanghai and Guangzhou. They were geographically isolated, and investors found it hard to move their businesses to these regions. Despite these barriers, they represented abundant labour resources and much cheaper labour costs than the coastal regions. Still, it was not economical for exporters to operate in these cities because of the difficulties and cost to export the goods produced. As the coastal regions thrived with sustained growth, for years these southwest regions remained suppliers of cheap migrant labourers to the more prosperous regions.

Overall, it took them several steps to move out of the poverty trap:

At the turn of the century, with the help of the Developing the Western Regions initiative, these regions invested heavily in improving infrastructure. Thanks to a more convenient connection to the main railway network, road and aviation networks, and new economic development zones, as well as the early adoption of some of the best internet networks in China, these regions managed to attract investors from coastal regions and became the fastest growing regions in terms of gross domestic product (GDP) growth in China in the early 2010s (Katz and Jones 2015). The gap in GDP per capita at provincial level during 2009 and 2016 between the western provinces and the richest provinces had been narrowed, reversing a 30-year widening trend (Li 2017).

Since 2007, with the support of some of the most advanced digital infrastructure in China, these inland cities have been able to compete with the richest regions in China on high-tech and high-end financial services in a way that they would not have dreamt of in the past (Liu and Hu 2010; McNally 2004). Guizhou, which hosts some of the poorest counties in China, started to sell premium farm produce or horticultural products through e-commerce to the wealthiest cities in the country. The much cheaper and accessible internet financial services allowed smaller businesses to gain competitiveness in the market (Turvey and Xiong 2017). More recently, connectivity within these provinces has also given them the power to take advantage of their own large markets and let their customers enjoy the benefits of more accessible services and products (Tan et al. 2011; Leong et al. 2016). These new opportunities resulted in a surge of returning migrants and talents who became entrepreneurs or who were employed by the large companies that had settled in these regions, despite the benefits of large-city living (Mohabir, Jiang and Ma 2017; Bai, Wang and Zhang 2018).

Aside from the business sector, increasingly, digital infrastructure has also changed the way Chinese governance works. Community-based digital governance platforms and government digital complaint systems were set up to generate and channel people’s voices upwards to help local governments to improve their performance (Chu, Yeh and Chuang 2008). The ability to respond to public complaints promptly has been built into the key performance indicators of the local officials concerned (Gao 2015; Almén 2018). It has been used widely in monitoring service and infrastructure accessibility and quality, and public and environmental health, as well as environmental governance (Zhang, Mol and He 2016; Li 2018).

Despite international criticism of a surveillance state potentially emerging, the broader use of digital networks has benefited the impoverished regions to deliver results in all perspectives of human development as well as sustainable development (Giroux 2014; Trojanow et al. 2015). Using online teaching or teacher training and remote health-care provision or remote health-care professional support, some of the most isolated regions are able to receive some basic services that were not available to people in the past. Despite these results, livelihoods are still far from ideal (Yang, Zhu and MacLeod 2018; Hwang et al. 2018) and emerging solutions to overcome some of the most challenging barriers to development come predominantly from continual innovation (Tu, Wang and Wu 2018).

The Chinese government’s aspiration to use digital connectivity to support development internationally via the BRI is, to a great extent, a result of having seen what it has and can achieve in China. As Xiang (2017) suggests, ICT is meant to help open the possibilities for economic development, narrow the digital divides in terms of accessibility and unequal quality among BRI countries, and at the same time provide good-value-for-money products and services for people. The data collection, transmission, and sharing among the BRI countries, or spatial information passageways, may provide supplementary information to monitor and evaluate the progress of participating countries along the Belt and Road (B&R) on sustainable development (Gong, Gu and Teng 2019). The ability to do so, with the aid of China’s experience, will be crucial for overcoming some of the barriers mentioned in Section 2.2; that is, to generate reliable monitoring, evaluation, and targets for delivering outcomes for the SDGs.

This is itself empowering or a form of capacity building for developing countries that do not necessarily have the same capacities as developed countries. The Chinese Academy of Sciences (2017) published the Report on Remote Sensing Monitoring of China Sustainable Development 2016, which argued that Chinese assistance in the development of a Digital Silk Road would lead to more open and just public administration. Li (2017) finds that enhanced internet coverage could make positive contributions to per capita GDP. The effect would be that ten more percentage points of coverage would increase GDP by 0.9 percentage points. Such findings are quite similar to those of Choi and Yi (2009) and Czernich et al. (2009) in different contexts.

#### BRI SDGs key to avoid extinction---shifts solutions to a systems thinking approach---specifically key to Central Asia

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There is an ever-increasing understanding among policymakers and academics that the solutions to the challenges the world faces require a system’s thinking approach. This means understanding how different parts of a system relate and interact with the whole. Using the system’s thinking approach, in 2015, governments around the world passed the Sustainable Development Goals (SDGs) as the overarching road map for human development focusing on its three core aspects: social, environmental, and economic. The digital revolution has provided policymakers and academics with a greater ability than at any other time in human history to understand the complex interactions between these areas on a regional and global scale. Big earth data deriving from earth observation systems and ground-based observations can be analyzed to obtain an improved understanding of regional and global issues like climate change, human migration, and land use patterns, among others. In this context, the Big Earth Data Science Plan was established under the BRI to obtain Big Earth Data in an organized way and accelerate the use of that data for its practical application in support of the implementation of the SDGs in countries participating in the BRI.

This article explores ongoing environmental, social, and economic challenges facing Central Asia in the context of the implementation of the SDGs. Moreover, it identifies some of the initiatives related to ongoing Big Earth Data projects in Central Asia and potential interlinkages with the Big Earth Data Platform of the BRI. The consequences of not fully understanding regional environmental changes in Central Asia based on robust data sources are severe. Regional security, economic growth, and overall well-being of citizens residing in Central Asia are directly linked with the sustainable use of cultural and natural resources. Therefore, the benefits of participating in the Science Plan are substantial. In order for the Belt and Road Science Plan to be effective, however, it not only needs to help build technical infrastructure and professional capacities within Central Asian countries, but it must also deal with the issue of trust between the Chinese government and Central Asian states. Knowledge platforms such as the Big Earth Data Platform of the BRI require trustful relationships with dependencies and shared responsibilities between partners in Central Asian countries. Ethics and security concerns regarding how this data will be used and interpreted must also be openly presented to potential contributors. Moreover, outreach should be made by its creators to ensure that points of collaboration are identified and synergies created between ongoing initiatives in the region. Central Asia’s participation in the Science Plan would be beneficial not only to stakeholders in Central Asian countries but also to the Chinese government as the region holds a rich array of natural resources ranging from oil and gas to rare earth metals. This article describes all of these issues in detail. It is the hope of the authors that readers will obtain a richer understand of the value of big earth data in the implementation of the SDGs in Central Asia and how the DBAR Science Plan and subsequent Big Earth Data Platform could prove to be a useful tool for integrated system’s thinking for the implementation of the Sustainable Development Goals if concerns of stakeholders are addressed in an open and transparent way

Global Environmental Challenges: A System’s Thinking Approach

The world has seen remarkable social, environmental, and economic changes since the start of the Industrial Revolution. The human population has exploded from a little over a billion people in 1800 to almost eight billion in 2020 (Chamie, 2020). We have also seen rapid urbanization. Ten years ago, the planet hit the milestone of more than half the world’s population’s living in urban areas. Urbanization is predicted to continue at a rapid rate with more than 70 percent of the world’s population living in urban settlements by 2050 (Chamie, 2020). These changes have led to a dramatic reconfiguration of the biosphere and have fundamentally altered the natural world. Once altered, natural habitats stand very little chance of being restored. Moreover, with further digitalization of the world, new technologies can help either conserve the value of “natural environment” or completely deplete it for new generations that are increasingly immersed and nurtured in urban and virtual environments, detaching them from human impacts on the natural world. Our impact as a species is so great that geologists have formally proposed to the International Commission on Stratigraphy to designate a new epoch “Anthropocene” where human activity has significantly altered the planet’s climate and ecosystems. All ecological indicators ranging from biodiversity loss to freshwater ecosystems health have deteriorated significantly over the past fifty years. For example, from 1974 to 2014, the world has seen a 60 percent decline in population of vertebrate species (Grooten & Almond, 2018). The United Nations estimates that by 2050 5 billion people could suffer from shortages of fresh water (Crellin, 2018). The above-mentioned problems are exacerbated by climate change. driven by more than 410 parts per million of CO2 in the atmosphere. The last time the climate had accumulated such a large concentration of CO2 was more than 800,000 years ago (Grooten & Almond, 2018). Rockstrom notes in his work “A Safe Operating Space for Humanity” that we must live within certain ecological limits as a species to in order make the Earth suitable for our existence. Within the nine planetary boundaries, he defines we are beyond our boundaries in three: climate change, nitrogen cycle, and biodiversity loss (Figure 1) (Rockstrom et al., 2009).

The causes for this decline are complex and consist of a variety of social, ecological, and environmental factors. What the world leaders have come to realize is that traditional ways of thinking in regard to environmental problems and subsequent policy solutions are no longer relevant to the interconnected and interrelated problems we face as a global community. One cannot look at water scarcity without looking at social patterns of migration, water consumption by citizens, and precipitation variabilities due to climate change. Therefore, system’s thinking identifies how different parts of a system—climate, migration, and water scarcity—interact with one another. In system’s thinking, information is used to ensure that actions taken on a systems level are greater than acting on their individual parts. For the first time in human history, world leaders have set the roadmap for future development of the planet using the system’s thinking approach as its framework. Under this approach, social, environmental, and economic development are linked under the umbrella of the Sustainable Development Goals (SDGs) (2015–2030). These goals are an unprecedented commitment by world leaders from around the globe to put sustainability as the overarching theme for human development.

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## FTC DA

#### **1. Algorithmic bias risks nuke war.**

Elsa B. Kania 17. Adjunct fellow with the Technology and National Security Program at the Center for a New American Security, 11/15/17. “The critical human element in the machine age of warfare.” https://thebulletin.org/2017/11/the-critical-human-element-in-the-machine-age-of-warfare/

Today, however, the human in question might be considerably less willing to question the machine. The known human tendency towards greater reliance on computer-generated or automated recommendations from intelligent decision-support systems can result in compromised decision-making. This dynamic—known as automation bias or the overreliance on automation that results in complacency—may become more pervasive, as humans accustom themselves to relying more and more upon algorithmic judgment in day-to-day life.

In some cases, the introduction of algorithms could reveal and mitigate human cognitive biases. However, the risks of algorithmic bias have become increasingly apparent. In a societal context, “biased” algorithms have resulted in discrimination; in military applications, the effects could be lethal. In this regard, the use of autonomous weapons necessarily conveys operational risk. Even greater degrees of automation—such as with the introduction of machine learning in systems not directly involved in decisions of lethal force (e.g., early warning and intelligence)—could contribute to a range of risks.

Friendly fire—and worse. As multiple militaries have begun to use AI to enhance their capabilities on the battlefield, several deadly mistakes have shown the risks of automation and semi-autonomous systems, even when human operators are notionally in the loop. In 1988, the USS Vincennes shot down an Iranian passenger jet in the Persian Gulf after the ship’s Aegis radar-and-fire-control system incorrectly identified the civilian airplane as a military fighter jet. In this case, the crew responsible for decision-making failed to recognize this inaccuracy in the system—in part because of the complexities of the user interface—and trusted the Aegis targeting system too much to challenge its determination. Similarly, in 2003, the US Army’s Patriot air defense system, which is highly automated with high levels of complexity, was involved in two incidents of fratricide. In these stances, “naïve” trust in the system and the lack of adequate preparation for its operators resulted in fatal, unintended engagements.

As the US, Chinese, and other militaries seek to leverage AI to support applications that include early warning, automatic target recognition, intelligence analysis, and command decision-making, it is critical that they learn from such prior errors, close calls, and tragedies. In Petrov’s successful intervention, his intuition and willingness to question the system averted a nuclear war. In the case of the USS Vincennes and the Patriot system, human operators placed too much trust in and relied too heavily on complex, automated systems. It is clear that the mitigation of errors associated with highly automated and autonomous systems requires a greater focus on this human dimension.

#### 2. Algorithmic bias in AI is an existential threat.

Mara Hvistendahl 19 – correspondent with Science magazine, 3/28/19. “Can we stop AI outsmarting humanity?” <https://www.theguardian.com/technology/2019/mar/28/can-we-stop-robots-outsmarting-humanity-artificial-intelligence-singularity>

Existential risks – or X-risks, as Tallinn calls them – are threats to humanity’s survival. In addition to AI, the 20-odd researchers at CSER study climate change, nuclear war and bioweapons. But, to Tallinn, those other disciplines “are really just gateway drugs”. Concern about more widely accepted threats, such as climate change, might draw people in. The horror of superintelligent machines taking over the world, he hopes, will convince them to stay. He was visiting Cambridge for a conference because he wants the academic community to take AI safety more seriously.

At Jesus College, our dining companions were a random assortment of conference-goers, including a woman from Hong Kong who was studying robotics and a British man who graduated from Cambridge in the 1960s. The older man asked everybody at the table where they attended university. (Tallinn’s answer, Estonia’s University of Tartu, did not impress him.) He then tried to steer the conversation toward the news. Tallinn looked at him blankly. “I am not interested in near-term risks,” he said.

Tallinn changed the topic to the threat of superintelligence. When not talking to other programmers, he defaults to metaphors, and he ran through his suite of them: advanced AI can dispose of us as swiftly as humans chop down trees. Superintelligence is to us what we are to gorillas.

An AI would need a body to take over, the older man said. Without some kind of physical casing, how could it possibly gain physical control?

Tallinn had another metaphor ready: “Put me in a basement with an internet connection, and I could do a lot of damage,” he said. Then he took a bite of risotto.

Every AI, whether it’s a Roomba or one of its potential world-dominating descendants, is driven by outcomes. Programmers assign these goals, along with a series of rules on how to pursue them. Advanced AI wouldn’t necessarily need to be given the goal of world domination in order to achieve it – it could just be accidental. And the history of computer programming is rife with small errors that sparked catastrophes. In 2010, for example, when a trader with the mutual-fund company Waddell & Reed sold thousands of futures contracts, the firm’s software left out a key variable from the algorithm that helped execute the trade. The result was the trillion-dollar US “flash crash”.

The researchers Tallinn funds believe that if the reward structure of a superhuman AI is not properly programmed, even benign objectives could have insidious ends. One well-known example, laid out by the Oxford University philosopher Nick Bostrom in his book Superintelligence, is a fictional agent directed to make as many paperclips as possible. The AI might decide that the atoms in human bodies would be better put to use as raw material.

Tallinn’s views have their share of detractors, even among the community of people concerned with AI safety. Some object that it is too early to worry about restricting superintelligent AI when we don’t yet understand it. Others say that focusing on rogue technological actors diverts attention from the most urgent problems facing the field, like the fact that the majority of algorithms are designed by white men, or based on data biased toward them. “We’re in danger of building a world that we don’t want to live in if we don’t address those challenges in the near term,” said Terah Lyons, executive director of the Partnership on AI, a technology industry consortium focused on AI safety and other issues. (Several of the institutes Tallinn backs are members.) But, she added, some of the near-term challenges facing researchers, such as weeding out algorithmic bias, are precursors to ones that humanity might see with super-intelligent AI.

Tallinn isn’t so convinced. He counters that superintelligent AI brings unique threats. Ultimately, he hopes that the AI community might follow the lead of the anti-nuclear movement in the 1940s. In the wake of the bombings of Hiroshima and Nagasaki, scientists banded together to try to limit further nuclear testing. “The Manhattan Project scientists could have said: ‘Look, we are doing innovation here, and innovation is always good, so let’s just plunge ahead,’” he told me. “But they were more responsible than that.”

### Turns Economy --- 2NC

#### Algorithmic bias turns the economy---drains business profitability.

Kalinda Ukanwa 21. Assistant professor of marketing at the University of Southern California’s Marshall School of Business, 5/23/21. “Algorithmic bias isn’t just unfair — it’s bad for business.” https://www.bostonglobe.com/2021/05/23/opinion/algorithmic-bias-isnt-just-unfair-its-bad-business/

These moves respond to growing concerns that algorithms have been reproducing discrimination in situations such as home lending, the allocation of health care, and decisions about who deserves parole. While many people hoped machines could help us make fairer decisions, as the use of AI has exploded it’s become clear that all too often they simply replicate and even amplify our existing prejudices.

An important part of the story has been missing, however. It’s one that might make businesses more amenable to regulation or even preclude the need for it by motivating them to act on their own. Algorithmic bias is not only a pressing ethical and societal concern — it’s also bad for business.

My research shows that over time, word of mouth about algorithmic bias among customers will hurt demand and sales and cut into profits. This damage won’t just hit a few unlucky companies that find themselves embroiled in public controversy around algorithmic discrimination. It can occur even if the inner workings and biases of an algorithm remain invisible to the public.

To understand how this can happen, consider one tech giant’s failed attempts at algorithmic design. In 2014, Amazon launched an internal tool to evaluate resumes. Although the algorithm was not programmed to look at the gender of the job applicants, it was trained using data from the company’s previous decade of hiring decisions, and the applications in that period mainly came from men. Based on past patterns, the algorithm learned to downgrade resumes that mentioned certain women-only colleges or women’s sports or clubs.

Amazon dropped that tool once these biases were discovered, but companies still widely use algorithms for recruiting and hiring. Not only are employers potentially missing out on valuable candidates, but over time these losses will compound through word of mouth. People learn about opportunities from members of their social circles, who often have race, age, gender, and other demographic characteristics in common. When women hear that their female friends and colleagues have been passed over for jobs at a particular company, they are less likely to apply, even if they know nothing about why these other candidates were rejected.

Using group characteristics to make decisions about whether and how to provide services to individual consumers may seem logical in some cases and may even be profitable in the short term. For example, a property manager might believe there are legitimate business reasons to choose tenants based on their age or education level. But my research, which uses computational methods to simulate consumer behavior, shows that these types of “group-aware” algorithms will tend to become less profitable over time.

In a study I conducted with Roland Rust, we simulated how customers would respond to two banks. One bank is “group-aware” and has various loan-approval thresholds for members of different groups. For example, women might have to meet a higher standard than men to get a loan. The other bank in the model is “group-blind”: It has the same approval threshold for every applicant.

Our model indicates that most members of the favored group meet the loan threshold at both banks, so they are likely to apply to either. But members of the group being discriminated against learn from one another to avoid the group-aware bank in favor of the group-blind one. Furthermore, members of the group experiencing discrimination also influence some members of the favored group to avoid the group-aware bank. As time passes, there is a net movement of customers toward the group-blind bank, hurting the profitability of the group-aware bank.

In short, when consumers learn from one another that a company is less likely to serve them, even if the discrimination is unintentional, they’ll avoid that company and it’ll lose revenue.

Algorithms often become group-aware when they aren’t intended to be. AI teases out correlations in the data that serve as stand-ins for group membership. For example, in our geographically segregated society, ZIP codes and other location data are a common proxy for race. Ride-sharing companies discovered the problem when a study revealed that their location-based pricing algorithms charge customers more for rides to or from neighborhoods primarily occupied by people of color. In other words, programming an AI system to ignore people’s gender or race or leaving this information out of the data set entirely isn’t enough to ensure an algorithm is group-blind.

What can companies do to make algorithms treat people fairly? Here are three key steps they can take:

1. Rather than removing group identifiers, businesses should include demographic characteristics in their data so they can continually audit their algorithms to determine whether they inadvertently discriminate against certain groups. There are a number of tools to evaluate whether bias is creeping in. IBM’s AI Fairness 360 is an open-source tool kit that helps detect bias in machine learning models. Microsoft’s FATE research group produces reports and tools aimed at reducing bias and increasing transparency and accountability in AI.

2. Companies can model how their systems’ decisions will affect demand over the long run among consumers who learn that some groups are treated differently. For example, if a bank used a model similar to the one in my study, it could easily see the long-term impact of a group-aware algorithm for making loans.

3. Whenever possible, algorithms should be designed to make decisions using context-specific data about individuals — looking at someone’s bill payment frequency in loan decisions, for example, or a patient’s cholesterol levels in health care, or a student’s grades in education — rather than trying to infer such information from other data points like their education level or where they live. The data used to train the algorithm is important too. Increasing the variation among and representation of different kinds of consumers allows algorithms to better evaluate individuals on their own merits.

Algorithms can lead to fairer outcomes, but only if they are designed and managed carefully. As computers increasingly make influential decisions about our lives, from the health care and financial services we receive to our educational and career prospects, we must remain alert to the potential for bias. There are strong ethical and moral reasons to do so, but there is also a business case to be made. We need to make sure companies understand how algorithmic bias can hurt their bottom lines.

#### Defense merger evaluations take time and expend FTC resources

Ross Wilkers, 21. Senior staff writer for Washington Technology. “Regulators seek more info out of Lockheed & Aerojet.” Feb 19, 2021. https://washingtontechnology.com/articles/2021/02/19/lockheed-aerojet-antitrust.aspx

U.S. antitrust regulators will take more time and will ask for more information about Lockheed Martin’s proposed acquisition of Aerojet Rocketdyne. The Federal Trade Commission’s so-called “second request” for additional information was one Lockheed and Aerojet expected, the companies said in a release Friday. Lockheed’s waiting period to close the transaction last for 30 days after Lockheed and Aerojet comply with the FTC’s request or if the agency terminates that waiting period earlier. “We are working cooperatively with the Federal Trade Commission as it conducts its review of the transaction and we continue to expect to complete the acquisition in the second half of 2021,” Lockheed added. Mergers and acquisitions involving large defense platform companies can take up to one year to get through antitrust review processes that involve either the FTC or Justice Department’s antitrust division, plus of course the Defense Department given supply chain implications. Competitors also can weigh in and Lockheed is seeking to bring down the concern level regarding Aerojet's ability to supply solid rocket motors to others. At a Barclays-hosted investor conference this week, Raytheon Technologies CEO Greg Hayes said they will share their concerns to the Pentagon and DOJ. Lockheed Chief Financial Officer Ken Possenriede pushed the counterpoint a few hours later.

### Link---Resource Intensive---2NC

#### The plans require heavy resources.

#### 1. It requires millions of dollars, litigation staffing, and timing conflicts. That’s Reinhart.

#### 2. The FTC doesn’t have the resources for expanded antitrust enforcement.

Alex Kantrowitz 20 – Silicon Valley-based journalist covering Big Tech and society, 9/17/20. “‘It’s Ridiculous’: Underfunded U.S. Regulators Can’t Keep Fighting the Tech Giants Like This.” https://onezero.medium.com/its-ridiculous-underfunded-u-s-regulators-can-t-keep-fighting-the-tech-giants-like-this-3b57487b4d63

As politicians, the press, and the public scrutinize the tech giants and grow wary of their power, the most important organizations tasked with restraining them — the U.S. regulatory agencies — aren’t getting enough funding to do the job. “The agencies are severely resource-constrained,” Michael Kades, an-ex FTC trial lawyer who spent 11 years at the agency, told Big Technology. The Federal Trade Commission and Department of Justice’s antitrust division have a combined annual budget below what Facebook makes in three days. The FTC runs on less than $350 million per year, the DOJ’s antitrust division on less than $200 million. Facebook made $18 billion last quarter alone. The funding disparity between the tech giants and their regulators leads to an unbalanced fight, current and ex-staffers said: The agencies can’t investigate the tech giants to the extent they’d like. They might shy away from complex cases fearing a resource-draining battle. And when they investigate the tech giants, they often see former colleagues with intricate knowledge of their strategy and ability to act (or lack thereof) representing these companies. Without significant budget increases, the tech giants may well continue to act unrestrained with little fear of repercussions. “DOJ is under-resourced, FTC it’s ridiculous,” one ex DOJ-staffer told Big Technology. This doesn’t mean these agencies are entirely hamstrung; they can typically marshall the resources to bring a clear-cut case. “They want to win,” one ex-FTC official said. “If it’s really egregious, and they find that in discovery, the attorneys are going to put a case together and go after it.” But when you can only take up a limited number of cases due to resource constraints, things inevitably slip through. “When I was there, the privacy wing had maybe 50 people, and that’s probably generous. That’s lawyers, support staff, everyone,” Justin Brookman, the former policy director at the FTC’s office of technology research and investigation, told Big Technology. “If they were to bring a case, that would tie up half the resources of the group. And they had two litigations ongoing and that took up most of everyone’s time.” The agency’s budget has barely increased since Brookman left in 2017, while the tech giants have added trillions of dollars to their market caps. Inside the FTC and DOJ, employees are aware of the tech giants’ ability to fight, and the corporations’ budgets tend to live inside their heads. “Facebook will have the ability to raise every single issue, if they want to,” Kades said. “It doesn’t have to be a winner, doesn’t have to be close to winner. If they wanted to take this position in litigation, they can make every procedural maneuver difficult, they can not cooperate on discovery, they can fight on scheduling, they don’t have to win even half of those, but it would just suck up resources.” The ability to do this, not even the action itself, can impact regulators’ thinking. Agency staffers are typically mission-driven and knowingly work for salaries below private-sector rates, but the resource-rich tech giants are now poaching directly from agencies at a rate remarkable even for Washington’s revolving door between the private and public sector.

#### 3. The FTC is looking to avoid added prohibitions.

MARIANELA LOPEZ-GALDOS 21. Global Competition Counsel at the Computer & Communications Industry Association, 7/28/21. “Policy Decisions of Antitrust Institutions Series: The Future of the FTC and Its Perils.” https://www.project-disco.org/competition/072821-policy-decisions-of-antitrust-institutions-series-the-future-of-the-ftc-and-its-perils/

But most importantly, the Section 5 Policy Guidelines acted as the guardrails to avoid situations where the FTC, in an effort to expand its enforcement authority, would lose many antitrust stand-alone Section 5 cases in court, to the detriment of the institution itself. Indeed, the Section 5 Policy Guidelines were the result of lessons learned throughout the history of the FTC and represented a tool to avoid history repeating itself. In this respect, it is important to recall that back in the 70s, under Chairman Pertschuck, and in the following years, the FTC suffered immensely due to disparities between enforcement promises and implementation capabilities. Much of the institutional suffering came from the agency not self-imposing limitations and standards to bring cases under Section 5 of the FTC Act which led to numerous litigation losses, consequential institutional reputational damage, and lack of political support.

#### 4. 2018 mergers litigation proves the finite resources link.

David McCabe 18. Tech policy reporter for Axios, 5/7/18. “Mergers are spiking, but antitrust cop funding isn't.” https://www.axios.com/antitrust-doj-ftc-funding-2f69ed8c-b486-4a08-ab57-d3535ae43b52.html

Why it matters: A wave of mega-mergers touching many facets of daily life, from T-Mobile’s merger with Sprint to CVS’s purchase of Aetna, will test the Justice Department's and Federal Trade Commission’s ability to examine smaller or more novel cases, antitrust experts say.

What they’re saying: “You have finite resources in terms of people power, so if you are spending all of your time litigating big mergers … there might be some investigations where decisions might have to be made about which investigations you can pursue,” said Caroline Holland, who was a senior staffer in DOJ’s Antitrust Division under President Obama and is now a Mozilla fellow.

#### 5. Expanding the scope of antitrust is costly and requires tradeoffs.

Sam Bowman 21. With Dirk Auer & Geoffrey Manne, 8/10/21. “Technology Mergers and the Market for Corporate Control.” https://truthonthemarket.com/2021/08/10/technology-mergers-and-the-market-for-corporate-control/

Such fears have led activists, lawmakers, and enforcers to call for tougher rules, including the introduction of more stringent merger-filing thresholds and other substantive changes, such as the inversion of the burden of proof when authorities review mergers and acquisitions involving digital platforms.

However, as we discuss in a recent working paper—forthcoming in the Missouri Law Review and available on SSRN—these proposals tend to overlook the important tradeoffs that would ensue from attempts to decrease the number of false positives under existing merger rules and thresholds.

The paper draws from two key strands of economic literature that are routinely overlooked (or summarily dismissed) by critics of the status quo.

For a start, antitrust enforcement is not costless. In the case of merger enforcement, not only is it expensive for agencies to detect anticompetitive deals but, more importantly, overbearing rules may deter beneficial merger activity that creates value for consumers.

#### 6. The plan forces tradeoffs---resources are extremely limited.

Alden Abbott 21 – Senior Research Fellow, Mercatus Center, 4/29/21. “Lack of Resources and Lack of Authority Over Nonprofit Organizations Are the Biggest Hindrances to Antitrust Enforcement in Healthcare.” https://www.mercatus.org/publications/antitrust-and-competition/lack-resources-and-lack-authority-over-nonprofit

Appropriate federal antitrust and consumer protection enforcement is good for the American economy. It promotes enhanced competition and consumer welfare. Regrettably, however, the effectiveness of federal enforcement in achieving these benefits is threatened by insufficient resources. As FTC Acting Chair Rebecca Kelly Slaughter explained in her April 20 testimony before the US Senate Committee on Commerce, Science, and Transportation, FTC employment has remained flat despite a growing workload, with merger filings doubling in recent years. Lauren Feiner reports on that testimony:

“The absence of resources means that our enforcement decisions are harder,” [Slaughter] said. “If we think that we have a real case, a real law violation in front of us, but a settlement on the table that is maybe OK but doesn’t get the job done, we have to make difficult decisions about whether it’s worth spending a lot of taxpayer dollars to go sue the companies who are going to come in with many, many law firms worth of attorneys and expensive economic experts, versus taking that settlement.”

I can attest to the accuracy of Slaughter’s observation, based on my experience as FTC general counsel in the Trump Administration. During my tenure, the FTC did indeed have to contend with resource limitations that adversely affected merger enforcement decision-making.

#### The FTC is resource strapped now. Defense mergers take up to 9 months each of their time and resources.

Joe Gould, 21. Gould is the Congress reporter for Defense News. “US antitrust regulators extend review of Lockheed-Aerojet deal.” February 19, 2021. https://www.defensenews.com/2021/02/19/us-antitrust-regulators-extend-review-of-lockheed-aerojet-deal/

U.S. antitrust regulators have extended their probe into Lockheed Martin’s proposed $4.4 billion purchase of rocket manufacturer Aerojet Rocketdyne so that the two companies can provide more information to the government, the companies announced Friday. The customary 60-day antitrust review process for the deal, announced in December, was supposed to end at midnight Thursday, but it will last 30 days longer, the companies said. “We are working cooperatively with the Federal Trade Commission as it conducts its review of the transaction and we continue to expect to complete the acquisition in the second half of 2021,” Lockheed said in a statement. Reuters reported Wednesday that regulators would likely extend the review period. The announcement comes after Raytheon Technologies CEO Greg Hayes said Wednesday it would challenge the deal with regulators. The concern is that Lockheed, a top competitor, would absorb a key supplier of its solid-fuel rocket motors, stifling completion in the missile market. Lockheed Chief Financial Officer Ken Possenriede has said the combined company would continue as a merchant supplier across the industry and be able to cut costs for the government and civil space market. Northrop Grumman bought rocket maker Orbital ATK in 2018 under similar terms, but Boeing argued when it dropped out of the Air Force’s competition to build new intercontinental ballistic missiles, Northrop’s acquisition had given it an advantage. The “second” review process is a massive, expensive undertaking in which the government typically seeks information from the companies and industry experts, said mergers and acquisition attorney Kenneth Lefkowitz, of Hughes Hubbard & Reed. From there, the government will typically negotiate with the parties on the terms of the deal. Lefkowitz speculated that because regulators with the incoming Biden administration have been swamped, it could take nine months for the Federal Trade Commission to formally act on the deal. That tracks with Lockheed’s projection that the deal could take until the second half of the year to close.

### AT: Plan =/= FTC

#### The plan is enforced by the FTC.

#### 1. FTC covers all core antitrust law.

Emilia R. Rubin 19. J.D. Candidate, University of California, Hastings College of the Law. “The Heavy Burden of a Lighter Touch Framework The Inadequacy of Antitrust Laws as a Substitute for Net Neutrality.” Summer 2019. Hastings Science and Technology Journal 10.2, 229-261.

The FCC additionally justified repealing the 2015 Order by relying on the ability of both the FTC and private citizens to bring antitrust actions challenging any anticompetitive conduct in the internet sector.115 The FTC enforces three laws with respect to antitrust law: the Sherman Act, the FTC Act, and the Clayton Act. These are the three core federal antitrust laws in effect today. The Sherman Act outlaws “every contract, combination, or conspiracy in restraint of trade,” and any “monopolization, attempted monopolization, or conspiracy or combination to monopolize.” The standard for assessing business conduct under the Sherman Act is a two-pronged approach: (1) per se illegality if the conduct is considered “so harmful to competition that they are almost always illegal;” and (2) rule of reason analysis if the conduct does not fall into an established anticompetitive category articulated under law.116

#### 2. They’re tasked with enforcing antitrust laws.

Katie Canales 20. Tech reporter at Business Insider, 12/9/20. “Facebook was just hit with 2 big antitrust lawsuits. Here's what 'antitrust' means and how 'trust-busting' laws attempt to keep the biggest firms in US history from growing too powerful.” https://www.businessinsider.com/what-is-antitrust-laws-big-tech-hearing-2020-7

There are three core federal US antitrust laws you should care about: the Sherman Act of 1890, the Clayton Act of 1914, and the Federal Trade Commission Act of 1914. The last would lead to the creation of the Federal Trade Commission, which is the main government entity tasked with enforcing antitrust laws today.

#### 3. They have authority over competition policy.

MARIANELA LOPEZ-GALDOS 21. Global Competition Counsel at the Computer & Communications Industry Association, 7/28/21. “Policy Decisions of Antitrust Institutions Series: The Future of the FTC and Its Perils.” https://www.project-disco.org/competition/072821-policy-decisions-of-antitrust-institutions-series-the-future-of-the-ftc-and-its-perils/

Let’s get started by understanding why the FTC’s antitrust policy rerouting has raised a lot of questions. The FTC is one of the two federal agencies that has authority over competition, and consumer protection matters. Throughout its enforcement, advocacy and regulatory activities, the FTC has endorsed competition policy that has inured to the benefit of consumers in the U.S. economy.

#### The FTC does the plan

Daniel Gouré, 21. Ph.D., is a Vice President of the Lexington Institute. He served in the Pentagon during the George H.W. Administration and has taught at Johns Hopkins and Georgetown Universities and the National War College. “How Misguided Antitrust Concerns Pose A Threat To The Nation’s Security And Health.” June 15, 2021. https://nationalinterest.org/blog/buzz/how-misguided-antitrust-concerns-pose-threat-nation%E2%80%99s-security-and-health-187782

Over the past several years, the Federal Trade Commission (FTC) has pursued several misguided antitrust investigations and suits. One of these was against [Qualcomm](https://www.realcleardefense.com/articles/2019/11/22/the_ftcs_suit_against_qualcomm_is_a_serious_threat_to_national_security_114864.html), despite senior DoD officials warning that this would harm national security. The recurring theme in these actions is the need to reign in corporations based on size or market presence. This reflects a growing sentiment at the FTC that corporate success as reflected in size or dominant performance is suspect. As a recent [Wall Street Journal editorial](https://www.wsj.com/articles/unfortunately-big-is-bad-is-back-11622995107) observed, the premise of the new approach is that “big is bad.” Efforts by the FTC to impose outdated antitrust standards on companies involved in multi-year defense procurement contracts could pose a [direct threat](https://carnegieendowment.org/2019/10/22/antitrust-threat-to-national-security-pub-80404) to national security. Only companies that are uniquely capable of designing, developing, and producing sophisticated stealth fighters, such as the F-35, or secure cloud environments that operate from headquarters in the U.S., such as the Joint Enterprise Defense Infrastructure (JEDI) system, can ever meet DoD’s strict requirements to do so. These companies need experience, scale, a breadth of talented personnel, and deep pockets. When it comes to bringing commercial products to the defense marketplace, it is also important to have experience in navigating the labyrinth of defense acquisition regulations, accounting standards, and approaches to funding. It is common for innovative start-ups to focus intensely on developing and proving their technologies. They may expend all their resources to get one prototype developed. Smaller or newer companies may lack the personnel and resources to move their business from the laboratory to manufacturing and distribution. In addition, when it comes to entering the defense marketplace, such companies face additional headwinds if they must wait the eighteen months to two years it often takes to get money for their specific technology included in the defense budget. This is one example of how innovative smaller companies can be set up to succeed through being acquired by a larger prime contractor. When the merger involves vertical, rather than horizontal, integration, the result is not a reduction in competition but rather an increase in efficiency and lower costs to the customer. The standard approach in a vertical merger is to address any potential competitive issues with behavioral remedies, such as contracts to guarantee pricing or access. These remedies have been proposed by Lockheed Martin in response to criticisms of its proposed acquisition of Aerojet Rocketdyne This is where the FTC’s tendency to presume harm even where none can be proven goes beyond constituting a national security threat. It can also harm the nation’s health. For example, the FTC is opposing the effort by biotech corporation Illumina to reacquire another biotech company it had spun off some years earlier, Grail, which has developed a biopsy screening test capable of identifying [more than fifty different cancers](https://www.lexingtoninstitute.org/ftcs-surrender-to-eu-degrades-u-s-law-and-delays-cancer-detection/). Illumina had branched off from Grail some years back. As in the cases of larger defense firms acquiring smaller companies that lack the resources to fully support their own innovations, Illumina can provide the support needed for Grail’s new technology to reach a global market. Any concerns about the impact of the acquisition competition can be addressed through corrective measures, which Illumina has already [proposed](https://www.illumina.com/areas-of-interest/cancer/test-terms.html?SCID=2021-270ECL5522). There is a real danger in allowing the FTC to set the kinds of limits on vertical mergers that it is seeking in the case of Illumina and Grail. Not only could this impair the ability of the medical system to detect cancers more easily, but it could also set a dangerous precedent for vertical mergers in the defense, aerospace, and other sectors.

### Algorithmic Bias---2NC

#### FTC is focused on enforcement against algorithmic bias.

#### 1. Preparing to exercise authority with AI.

Bret Cohen 6/10/21 – partner in Hogan Lovells Privacy and Cybersecurity practice group, with W. James Denvil and Filippo Raso, 6/10/21. “AI & Algorithms (Part 4): The FTC’s Guidance on AI.” https://www.jdsupra.com/legalnews/ai-algorithms-part-4-the-ftc-s-guidance-3717327/

Although the U.S. has no federal law that specifically regulates artificial intelligence (AI), the Federal Trade Commission (FTC) has indicated that it may be preparing to exercise its consumer protection authority with respect to AI deployment. In May, the FTC issued new guidance for the use of AI, building upon its 2020 AI guidance and its 2016 report on big data. And FTC Acting Chair Kelley Slaughter has stated in public remarks that the Commission will be exploring concerns relating to algorithmic harms, including bias and discrimination. Organizations deploying AI systems in the U.S. are advised to familiarize themselves with the FTC guidance in order to make sure that their uses of AI are in compliance with U.S. consumer protection requirements.

#### 2. FTC guidance proves.

Bret Cohen 7/8/21 - a partner at Hogan Lovells based in Washington, D.C., 7/8/21. “FTC authority to regulate artificial intelligence.” https://www.reuters.com/legal/legalindustry/ftc-authority-regulate-artificial-intelligence-2021-07-08/

The FTC's most recent guidance offers examples of how AI deployments could be deemed deceptive (e.g., if organizations overpromise regarding AI performance or fairness) or unfair (e.g., if algorithms impact certain racial or ethnic groups unfairly). FCRA regulates consumer reporting agencies and the use of consumer reports. The FTC's AI guidance and enforcement actions make clear that the FTC considers certain algorithmic or AI-based collection and use of data subject to the FCRA. For example, if an organization purchases a report or score about a consumer from a background check company that was generated using AI tools, and uses that score or report to deny the consumer housing, that organization must provide an adverse action notice to the consumer as required by the FCRA. The FTC has also noted that organizations that supply data which may be used for AI-based insurance, credit, employment or similar eligibility decisions may have FCRA obligations as "information furnishers." The ECOA prohibits discrimination in access to credit based on protected characteristics such as race, color, sex, religion, age and marital status. The FTC notes in both its 2020 and 2021 guidance that if, for example, a company used an algorithm that, either directly or through disparate impact, discriminated against a protected class with respect to credit decisions, the FTC could challenge that practice under the ECOA. The FTC's updated guidance provides insight into the expectations for organizations using AI. •Start with the right foundation: The FTC states that the key to addressing disparate treatment of protected groups is to assess, from the beginning, whether training data sets have gaps. And organizations should consider how they can improve their data sets or establish controls for AI to address any gaps, including limiting how and where the algorithm is used (depending on the potential data shortcomings). This builds on the FTC's 2020 guidance, which recommended that companies validate and revalidate data sets to not only ensure accuracy but also to avoid unlawful discrimination, as well as the FTC's 2016 big data report, which details the importance of relying on representative data sets and vetting data sets for bias. The FTC has previously noted that when evaluating the legality of AI, it will consider inputs to the model, "such as whether the model includes ethnically-based factors, or proxies for such factors, such as census tract." •Watch out for discriminatory outcomes: The FTC recommends testing algorithms before use and regularly thereafter to "make sure that [organizations do not] discriminate on the basis of race, gender or other protected class." Again, this builds off the 2020 and 2016 recommendations designed to make AI outcomes fair and ethical. Additionally, the FTC's 2020 guidance notes that organizations should consider the potential for disparate impact in an AI system's outcomes. Some questions the FTC suggests to assess the fairness of algorithms are: (1) How representative is the data set? (2) Does the data model account for biases? (3) How accurate are the predictions based on big data? (4) Does the particular reliance on big data raise ethical or fairness concerns? •Embrace transparency and independence: In order to reduce the potential for discriminatory outcomes, the FTC suggests embracing transparency and independent review by, for example, conducting and publishing independent audits and publishing source code for outside inspection. The 2020 guidance further notes the importance of being transparent with consumers regarding the use of automated tools – including the factors used to generate any automated decisions. •Don't exaggerate what your algorithms can do or whether it can deliver fair or unbiased results: The FTC reminds organizations to not exaggerate what their algorithms can do, as exaggerations may run afoul of the deception provisions of Section 5. This is one of the more straightforward areas for the FTC to enforce against, and typically where the FTC issues guidance about a particular technology, they are vigilant about misrepresentations related to that technology. •Tell the truth about how you use data: The FTC emphasizes in the 2021 and 2020 guidance that organizations should notify consumers about how and when consumer personal information will be used by or be used to develop AI, especially if the information is sensitive. The FTC notes that failure to properly explain how consumers can control the use of personal information to develop algorithms may lead to enforcement under Section 5. •Do more good than harm: The FTC advises organizations to ask themselves if their AI models cause more harm than good. If so, the algorithms could be considered "unfair" under Section 5 and therefore subject to enforcement. Algorithms operating in areas like housing, credit, or other circumstances in which inaccuracies could have significant negative effects on consumers should be assessed carefully. Organizations deploying AI are well-advised to consider whether they are doing so in alignment with the FTC's recommendations and to consider how best to demonstrate such use is truthful, fair, and equitable in the eyes of the FTC.

## Case

### 1NC 3

#### **Defense industry growth & acquisitions is key to the economy – GDP, exports, and jobs**

Deloitte, 12. Deloitte LLP, “The Aerospace and Defense Industry in the U.S. A financial and economic impact study,” a report commissioned by the Aerospace Industries Association, March 2012, https://timemilitary.files.wordpress.com/2012/03/deloitte\_study\_2012.pdf.

The U.S. aerospace and defense industry has been a leader in its contribution to product innovation, bringing people all over the world into contact with each other with safer and lower cost air travel and communications. It has created the technology that successfully addresses national security and helps defend the U.S. It continues to create marvels of science and technology such as airplanes that turn into helicopters, high definition pictures from space, and remote controlled armed conflict. It continues to create the technology innovations that power the economy with our just-in-time, internet-based commerce.

The industry also has a large contribution to the U.S. economy, responsible for fully 2.23% of GDP and 7.0% of exports in 2010, and is the largest net exporting industry in America.39 With direct, indirect and induced employment of 3.53 million jobs spread over the entire U.S., as well as contributing an estimated $37.8 billion in tax collections benefiting local communities, state treasury coffers and the federal government, this industry is part of the very fabric of our country’s well-being. Indeed we conclude the industry punches above its weight, when considering qualitative contributions cited.

With significant pressures to lower the budgets for defense, therefore potentially the revenues and employment by private defense contractors, there may be a potential negative impact on the industry’s capacity to continue to develop the innovations and technologies that have powered its first century. While aerospace and defense companies are addressing their needs for profitable growth with, for example, foreign military sales**,** **acquisitions** and growth in adjacent markets, **a significant reduction** in DOD spending may potentially negatively impact company funded research and development, thus the innovations and technology advances we would have expected over the coming decade.

### 1NC 4

#### **Manufacturing is key to the economy – trade, jobs, innovation, and multi-sector integration.**

Stephen Ezell, 13. Senior Analyst at the Information Technology & Innovation Foundation, Landegger International Business Diplomacy program @ Georgetown University, “Revitalizing U.S. Manufacturing,” Economic Stimulus, 11/27/13, http://issues.org/28-2/ezell-3/.

The United States suffered a precipitous decline in manufacturing during the past decade. Key to a reversal will be greatly expanded efforts to support the competitiveness of small- and medium-sized firms. At a recent Washington, DC, conference on the state of U.S. manufacturing, the head of one prominent economic policy think tank was asked, “How much of its manufacturing sector can the U.S. economy lose and yet still thrive?” The reply: “Really, we could lose all of it and be just fine.” Unfortunately, this view that the U.S. economy can thrive without manufacturing as a postindustrial, knowledge- and services-based economy has become all too prevalent among the Washington economic policy elite. Some even argue that the decline of manufacturing is a sign of U.S. economic strength, because it signals a thorough shift to an advanced services economy. After all, it’s only the laggard nations who still manufacture, they say. But as explained in The Case for a National Manufacturing Strategy, a report by the Information Technology & Innovation Foundation (ITIF), it’s impossible for large economies to remain competitive without a viable manufacturing sector for five key reasons: (1) manufacturing plays a vital role in helping countries achieve balanced terms of trade; (2) manufacturing provides large numbers of above average–paying jobs; (3) manufacturing is the principal source of an economy’s R&D and innovation activity; (4) the health of a nation’s manufacturing and services sectors are complementary and inseparable; and (5) manufacturing is essential to a country’s national security. An increasing number of U.S. competitors, including Australia, Brazil, Canada, China, Germany, Japan, Korea, and the United Kingdom, have recognized that manufacturing remains vital to their economic competitiveness and that they cannot have a healthy manufacturing sector without a healthy base of small- and medium-sized enterprise (SME) manufacturers. They recognize that because SME manufacturers account for more than 98% of manufacturing firms in almost all economies, they form the backbone of a nation’s industrial supply chain. Yet despite their importance, SME manufacturers lag larger manufacturers in adopting new technologies, increasing productivity, and exporting. Accordingly, an increasing number of countries have introduced and robustly funded a broad array of agencies, programs, and policy instruments to support the competitiveness, productivity, innovation, and export capacity of their SME manufacturers. These countries understand that supporting SME manufacturers’ adoption of new technologies and manufacturing processes as well as bolstering their R&D, innovation, and new product development activities have become indispensable to being an advanced industrial economy. They know that countries that do not have strategies in place to support their SME manufacturers are simply going to be left behind. Unfortunately, the United States is lagging badly in these efforts. Lack of support for SMEs was a key factor in the precipitous decline of U.S. manufacturing during the past decade. The United States must step up its efforts to revitalize manufacturing in general and SME manufacturing in particular. Free fall Manufacturing’s share of U.S. gross domestic product (GDP) and employment has fallen precipitously during the past decade. Yet many argue that U.S. manufacturing is actually quite healthy and that any job losses are simply a result of superior productivity gains. Others assert that manufacturing is in decline everywhere, so that the relative decline in U.S. manufacturing is not noteworthy. In contrast to these sanguine views, the reality is that, although U.S. manufacturing output and employment remained relatively healthy up until 2000, during the past decade the United States experienced the deepest industrial decline in world history. Some 54,000 U.S. manufacturers, including 42,000 SMEs, were shuttered. Manufacturing output, when properly measured, actually declined. Manufacturing employment fell by 33%, with the loss of 5.7 million jobs, a steeper decline than even during the Great Depression. Official government figures suggest that U.S. manufacturing output grew just 5% during the prior decade, even as U.S. GDP grew 18%. However, that figure is inflated because it significantly overstates output from two industries: computers/electronics and petroleum/coal products. Overestimation of the output growth from those two industries masks the fact that, from 2000 to 2009, 15 of 19 aggregate-level U.S. manufacturing sectors, which account for 79% of U.S. manufacturing, experienced absolute declines in output. The vast majority of apparent growth in manufacturing output came from the computers/electronics industry, which, according to official statistics, grew 260.5%. In other words, this one sector, which accounts for just 9% of overall U.S. manufacturing output, accounted for 80% of manufacturing output growth from 2000 to 2009, even though the number of workers in the industry declined from 1.78 million to 1.09 million. The reality, as explained in detail in The Case for a National Manufacturing Strategy, is that technical errors afflict official U.S. government measurements of manufacturing output, such that, when calculated accurately, real U.S. manufacturing output actually fell by at least 10% during the prior decade. A major cause of that decline has been a lack of investment in U.S. manufacturing. From 2000 to 2010, capital investment within the United States by U.S. manufacturers declined more than 21%, even as capital investment abroad by U.S. manufacturing firms was on average 16% higher than at home. Likewise, the notion that manufacturing job losses primarily reflect productivity gains is also mistaken. U.S. manufacturing productivity grew at similar rates between 1990 and 1999 and between 2000 and 2009—56 and 61%, respectively—yet manufacturing employment declined 3% in the former decade but 33% in the latter. Moreover, U.S. manufacturing job losses have been extreme as compared to those experienced in peer countries. Of the 10 countries tracked by the U.S. Bureau of Labor Statistics, no country lost a greater share of its manufacturing jobs than the United States between 1997 and 2009. In fact, if manufacturing output had grown at the same rate as GDP during the prior decade, the United States would have ended the decade with 2.2 million more manufacturing jobs. Given the multiplier effect that manufacturing jobs have on the rest of the economy, which is at least two to one, had U.S. manufacturing not shrunk, there would be perhaps 6 million more Americans working today. In short, the extreme job loss in U.S. manufacturing during the past decade reflects not productivity increases but rather output declines resulting from the lack of U.S. manufacturing competitivenessand the fact that U.S. manufacturers were increasingly offshoring and investing abroad. This is not the picture of a healthy domestic manufacturing sector. Finally, the notion that U.S. manufacturing decline is either inevitable or normal is also mistaken, as demonstrated by the fact that manufacturing is growing in many countries, including developed countries. For example, from 2000 to 2008, manufacturing output in constant dollars as a share of GDP increased by 10% in Austria and Switzerland, 14% in Korea, 23% in Finland, 32% in Poland, and 64% in the Slovak Republic. Moreover, from 1970 to 2008, Germany’s and Japan’s shares of world manufacturing output remained stable, even as the U.S. share declined by 12 percentage points, from 28.6 to 17.9%, and China’s share rose 13.4 percentage points, from 3.8 to 17.2%. The deindustrialization of high-wage economies is not preordained. Competitors such as Germany and Japan have avoided the sharp declines in manufacturing that befell the United States in the last decade. They have done so by remaining committed to manufacturing as a core contributor to their economies and by implementing coherent strategies to boost the productivity, innovation, and competitiveness of their manufacturing sectors, including specific programs and robust funding in support of their SME manufacturers. The growth of manufacturing extension services Argentina, Australia, Canada, Germany, Japan, Spain, the United Kingdom, and the United States have each created formal agencies or institutions to provide manufacturing extension services to SME manufacturers. These services provide hands-on outreach mechanisms to stimulate SMEs to acquire or to improve their use of technology and to stimulate innovation. Although other countries, notably Austria, China, Korea, Sweden, Singapore, and Taiwan, don’t have analogous manufacturing extension agencies, they have implemented specific programs to support SME manufacturers. In the United States, the Hollings Manufacturing Extension Partnership (MEP), located within the Department of Commerce’s National Institute for Standards and Technology, was founded in 1998 to work with SME manufacturers to help them boost productivity, increase profits, and create and retain jobs. MEP’s 1,300 technical experts, operating out of 60 regional centers located in every U.S. state, serve as trusted business advisors focused on solving manufacturers’ challenges and identifying opportunities for growth. Australia’s Enterprise Connect program, launched in 2008, is a national network of 12 manufacturing centers run by the Department of Innovation, Industry, Science, and Research, which serves as the country’s primary vehicle for delivering firm-level support. Britain’s Manufacturing Advisory Service (MAS), founded in 2002 and modeled after MEP, provides technical information and specialist support to SME manufacturers through a staff of 150 operating out of nine regional centers. Canada’s Industrial Research Assistance Program (IRAP), founded in 1962, supports SME manufacturers with a staff of 230 working out of 150 offices across 90 communities. Japan’s 162 Kohsetsushi Centers, first launched in 1902 and modeled after the U.S. agricultural extension service, has a staff of more than 6,000. As a share of GDP, Japan has 15 times the number of specialists working with SME manufacturers as does the United States. Countries’ investments in manufacturing extension services generate impressive returns and contribute strongly to broader economic and employment growth.Countries support their SME manufacturers for four key reasons. First, they recognize SMEs as key drivers of employment and technology growth. For example, Canada’s SMEs account for 80% of new jobs and 82% of new technologies created in the country. But they also recognize that a number of systemic market failures and externalities affect manufacturing activity in general and SME manufacturers in particular that justify government intervention. Thus, the second reason governments specifically assist SME manufacturers is that they lag in adopting new technologies that would make them more productive. SMEs are less likely than larger enterprises to implement new technology, to adopt modern manufacturing processes, to invest in worker training, to adopt new forms of work organization, and to deploy improved business practices. Because of this, a substantial productivity gap exists between large and small manufacturers. This gap is apparent in virtually all countries and has been growing over time. For example, on average in the United States, value added per employee in SMEs was about 80% of that of large establishments in the 1960s. By the late 1990s, this number had fallen to less than 60% of that of large establishments. Extension services play a critical role in closing knowledge and best-practices gaps between small and large manufacturers. The third rationale, as the European Commission’s Study of Business Support Services and Market Failure found, is that several types of market failure afflict the provision of public information and advisory services to SMEs. First, adverse selection issues arise when “inappropriate take-up of business support services occurs” because SMEs lack the scale to know the range of business support services available to them or the experience or knowledge necessary to adequately assess the value of those services or the quality of particular service providers. A second form of business support market failure arises when information services are not provided because no or only insufficient financial return can be made by private-sector firms. In fact, the UK’s extension service justifies its role precisely on the basis of addressing these two market failures. Finally, governments support SME manufacturers because they play critical roles in supporting healthy manufacturing ecosystems, supply chains, and even entire regional economies. As large firms increase their dependence on suppliers for parts and services, the performance and capabilities of small manufacturers become critically important to the competitiveness of all manufacturers. Because the health of an economy’s large manufacturers depends on the strength of the SME suppliers in their value chain, SMEs’ competitiveness or lack thereof has externalities that affect other enterprises throughout an economy.

#### A strong US manufacturing industry is key to economic stability and tech leadership.

Michael **Ettlinger &** Kate **Gordon 11.** Ettlinger is the VP for Economic Policy and Gordon is the VP for Energy Policy at the Center for American Progress. “The Importance and Promise of American Manufacturing.” April 7, 2011. https://www.americanprogress.org/issues/labor/report/2011/04/07/9427/the-importance-and-promise-of-american-manufacturing/

Manufacturing is critically important to the American economy. For generations, the strength of our country rested on the power of our factory floors—both the machines and the men and women who worked them. We need manufacturing to continue to be a bedrock of strength for generations to come. Manufacturing is woven into the structure of our economy: Its importance goes far beyond what happens behind the factory gates. The strength or weakness of American manufacturing carries implications for the entire economy, our national security, and the well-being of all Americans. Manufacturing today accounts for **12 percent of the U.S. economy** and about 11 percent of the private-sector workforce. But its significance is even greater than these numbers would suggest. The direct impact of manufacturing is only a part of the picture. First, jobs in the manufacturing sector are good middle-class jobs for **millions of Americans**. Those jobs serve an important role, offering economic opportunity to hard-working, middle-skill workers. This creates upward mobility and broadens and strengthens the middle class to the benefit of the entire economy. What’s more, U.S.-based manufacturing underpins a broad range of jobs that are quite different from the usual image of manufacturing. These are higher-skill service jobs that include the accountants, bankers, and lawyers that are associated with any industry, as well as a broad range of other jobs including basic research and technology development, product and process engineering and design, operations and maintenance, transportation, testing, and lab work. Many of these jobs are critical to American technology and innovation leadership. The problem today is this: Many multinational corporations may for a period keep these higher-skill jobs here at home while they move basic manufacturing elsewhere in response to other countries’ subsidies, the search for cheaper labor costs, and the desire for more direct access to overseas markets, but eventually many of these service jobs will follow. When the basic manufacturing leaves, the feedback loop from the manufacturing floor to the rest of a manufacturing operation—a critical element in the innovative process—is eventually broken. To maintain that feedback loop, companies need to move higher-skill jobs to where they do their manufacturing. And with those jobs goes American leadership in technology and innovation. This is why having a critical mass of both manufacturing and associated service jobs in the United States matters. The “industrial commons” that comes from the crossfertilization and engagement of a community of experts in industry, academia, and government is vital to our nation’s economic competitiveness. Manufacturing also is important for the nation’s economic stability. The experience of the Great Recession exemplifies this point. Although manufacturing plunged in 2008 and early 2009 along with the rest of the economy, it is on the rebound today while other key economic sectors, such as construction, still languish. Diversity in the economy is important—and manufacturing is a particularly important part of the mix. Although manufacturing is certainly affected by broader economic events, the sector’s internal diversity—supplying consumer goods as well as industrial goods, serving both domestic and external markets— gives it great potential resiliency. Finally, supplying our own needs through a strong domestic manufacturing sector protects us from international economic and political disruptions. This is most obviously important in the realm of national security, even narrowly defined as matters related to military strength, where the risk of a weak manufacturing capability is obvious. But overreliance on imports and substantial manufacturing trade deficits weaken us in many ways, making us vulnerable to everything from exchange rate fluctuations to trade embargoes to natural disasters.

# 1NR

## Prohibit PiC

#### It’s most predictable---we have the common and precise definition.

Dictionary.com “Inhibit vs. Prohibit”. https://www.dictionary.com/e/inhibit-vs-prohibit/

Prohibit is a transitive verb that means to forbid or prevent. Unlike inhibit, the word prohibit means that an action is being completely prevented. For example: “Angie’s coat was so tight, it prohibited any arm movement.” In this case, Angie isn’t able to move her arms at all. Prohibit is often used to describe the actions of authority figures. It can explain a rule or law. For example, “School rules prohibit cellphone use during class.” A street sign may say “Parking prohibited,” while a sign in a building lobby might say “Smoking prohibited by law.” All of these cases mean that cell phone use, parking in a certain area, or smoking are completely forbidden by their given authority figures, and can’t be done at all.

#### Prohibitions are absolute bans without exemption.

PEDIAA 15. “Difference Between Prohibited and Restricted”. https://pediaa.com/difference-between-prohibited-and-restricted/

Main Difference – Prohibited vs. Restricted

Prohibited and Restricted are used in reference to limitations and prevention. However, they cannot be used interchangeably as there is a distinct difference between them. Prohibited is used when we are talking about an impossibility. Restricted is used when we are talking about something that has specific conditions. The main difference between prohibited and restricted is that prohibited means something is formally forbidden by law or authority whereas restricted means something is put under control or limits.

What Does Prohibited Mean

Prohibited is a variant of the verb prohibit. Prohibited can be taken as the past tense and past participle of prohibiting as well as an adjective. Prohibited means that something is formally forbidden by law or authority. When we say ‘smoking is prohibited’, it means that smoking is not allowed at all, there are no exceptions. Prohibit indicates an impossibility. This gives out the idea that it is not at all possible under any condition or circumstance. The term Prohibited goods is used to refer to items that are not allowed to enter or exit certain countries. For example, the government of South America lists Narcotic and habit-forming drugs in any form, Poison and other toxic substances, Fully automatic, military and unnumbered weapons, explosives and fireworks as prohibited goods. The following sentences will further explain the use of prohibited.

Inter-racial marriages were not prohibited by the government.

He was proved guilty of using prohibited substances.

No one was allowed to enter the grounds; entry was prohibited.

Prohibited imports are the items that are not allowed to enter a country.Difference Between Prohibited and Restricted

What Does Restricted Mean

Restrict means to put under limits or control. Restricted can be either used as the past tense of restrict or as an adjective meaning limited. When we say something is restricted, it means that limits or conditions have been added to it. It does not mean that it is completely impossible. For example, Restricted goods are allowed to enter or exit a country under certain circumstances. A written permission can help you to import or export that item. Likewise, a restricted area does not mean that people are not allowed to enter; it means that a special permission is required to enter the place. Restricted information refers to information that are not disclosed to the general public for security purposes.

The new regulations restricted the free movement of people.

The club was restricted to its members and their family members.

Only the highest military personnel had access to the restricted area.

American scientists had only restricted access to the area.Main difference - Prohibited vs Restricted

Difference Between Prohibited and Restricted

Meaning

Prohibited means banned or forbidden.

Restricted means limited in extent, number, scope, or action

Possibility

Prohibited means that there is no possibility of doing something.

Restricted means that something can be done under certain conditions.

Adjective

Prohibited functions as an adjective derived from prohibit.

Restricted functions as an adjective derived from restrict.

Past tense

Prohibited is the past tense and past participle of prohibit.

Restricted is the past tense and past participle of restrict.

#### That means the counterplan is plan minus.

Antitrust Modernization Commission 07 Deborah A. Garza, Chair. Jonathan R. Yarowsky, Vice-Chair. Bobby R. Burchfield. W. Stephen Cannon. Dennis W. Carlton. Makan Delrahim. Jonathan M. Jacobson. Donald G. Kempf, Jr. Sanford M. Litvack. John H. Shenefield. Debra A. Valentine. John L. Warden. “Report and Recommendations”. https://govinfo.library.unt.edu/amc/report\_recommendation/amc\_final\_report.pdf

Other exemptions apply to narrow areas but provide a broader immunity—often complete immunity from the antitrust laws. Examples include antitrust immunity for marketing alliances between domestic and foreign airlines that are approved by the Department of Transportation;79 the Charitable Donation Antitrust Immunity Act, which gives antitrust immunity to charitable institutions that set the annuity rate for gift annuities or charitable remainder trust agreements;80 the Defense Production Act, which provides antitrust immunity for conduct undertaken in developing or carrying out a voluntary agreement or plan of action for the President that is necessary for the defense of the United States;81 the NeedBased Educational Aid Act, which provides an antitrust exemption to certain joint actions taken by institutions of higher education regarding awards of financial aid to students;82 and the Soft Drink Interbrand Competition Act, which provides an antitrust exemption for the grant of exclusive territories to soft-drink bottlers by soft-drink trademark holders in trademark licensing agreements.83

## Rocketdyne PiC

#### 1AC The DIB is brittle because of consolidation – how we deal with mergers now determines if we maintain heg

Dave **Deptula 9/16**, 09/16/21, "It’s Time To Reassess How We Manage The Defense Industrial Base," Forbes, <https://www.forbes.com/sites/davedeptula/2021/09/16/its-time-to-reassess-how-we-manage-the-defense-industrial-base/> ak

The proposed merger between Aerojet Rocketdyne AJRD +0.8% and Lockheed Martin LMT -0.7% is causing some heads to spin in Washington. Letters from Congress, media headlines, and a highly divided set of actors on each side of the issue have turned it into a public debate. Much of the discussion is focused on domestic economic variables, but it is time to broaden the aperture. America faces severe security threats today and they will only grow in the future. It is crucial to posture the U.S. defense industrial base not just to compete with those threats, but to win. Proponents of the merger argue that Aerojet Rocketdyne lacks the organic resources necessary to keep pace at a time when the demand for next generation high-speed propulsion for space applications and hypersonic munitions is growing. Incorporated with the means resident in Lockheed Martin, they claim Aerojet Rocketdyne products will be in a far stronger position to meet high-speed propulsion requirements. Opponents of the merger claim that another business combination in an already highly consolidated defense sector will stifle competition, hindering product price and performance. Additional concerns are that Lockheed Martin may deny its competitors access to Aerojet Rocketdyne products to boost Lockheed’s competitive advantage. Both sides have genuine concerns, but there is also a broader issue extending far past this proposed merger: national innovation advantage. PROMOTED In the decades following the Cold War, the U.S. held such an outsized military and technical advantage when compared to its competitors that military parity was never really a concern. **Defense industry merger considerations primarily looked at market factors and national competitive advantage was an afterthought, if one at all.** **Circumstances are far different today, with China rivaling U.S. capabilities and exceeding them in some areas**. This is the case in one of the core aspects of Aerojet Rocketdyne’s portfolio—hypersonics. Weapons moving at over five times the speed of sound render conventional defenses obsolete. It is a chilling proposition that keeps Pentagon leaders awake at night. Hypersonic weapons may introduce a turning point in warfare. Those who possess a technology edge in this area hold an outsized advantage over those who are simply reacting. The military implications of parity are especially significant for the U.S., for after the Cold War, we downsized our military forces to historically low levels. Today, the U.S. has fewer than 150 bombers—that is the lowest level in Air Force history. Combat fighters stand at half of what they were at the end of the Cold War, and mobility aircraft are also stretched incredibly thin amid growing demand. The premise behind these force reductions was technological advantage. With an overwhelming competitive capability advantage, capacity could be reduced and victory would still be assured. MORE FOR YOU Why Nothing Can Replace Large-Deck, Nuclear-Powered Aircraft Carriers In U.S. Strategy The New ‘Three Amigos’ AUKUS Alliance Sets The Stage For A Pacific NATO The U.S. Air Force Is Adding Floats To C-130s. They Could Be Useful In A War With China. What happened was that capacity was slashed, but so too was money for modernization. Two decades of war in Afghanistan and Iraq saw money diverted to counterinsurgency conflicts, not building the advanced forces that America needs to prevail against 21st century peer threats. China and Russia observed this and doubled down on their modernization efforts. Twenty years later, we face a world where what once was a U.S. asymmetric technological advantage no longer exists except in a few areas. Existing force structure is old and worn hard after twenty years of non-stop combat—and a decade longer in the case of the Air Force. Students of history will recognize this as a perilous position. Historically, the U.S. won its major wars through mass, industrial strength, and long-term staying power. This was the experience of the Civil War, World Wars I, II, and the Cold War. The U.S. had some technological advantages in these conflicts, but victory really came down to overwhelming force. We now have neither a technological nor a capacity advantage. Consider China’s scale from a population, industrial capacity, and economic wealth perspective and it is clear that a U.S. victory dependent on industrial might is no longer an option. Accordingly, when looking at the defense marketplace, it is important to now consider the relative innovation advantage the U.S. needs to regain as this is one area we will need to capitalize upon to prevail against modern peer threats. **How regulators choose to manage issues like corporate mergers between defense firms will go a long way in shaping whether we will be playing from a position of advantage relative to potential threats**. This is especially true given that Chinese defense firms may have corporate names but are actually extensions of the state. This affords them tremendous fiscal depth, ability to take risk without having to worry about shareholder realities, and the ability to focus on long-term strategic goals that may not see a return on investment for decades, if ever. As China expert Dr. Brendan Mulvaney recently remarked, “in China, it really is all just one big entity, a whole of government, a whole society.” These are all factors that the Federal Trade Commission reviewing cases like the Aerojet Rocketdyne-Lockheed Martin proposed merger need to consider. Defense company mergers are no longer just about commerce in the U.S. They are about effectively orienting to win in a new era of competition with peer adversaries. Twelve national security figures, including former Secretary of Defense Leon Panetta, recently expressed this perspective in a letter to Congress: “The current effort to regulate the U.S.’s largest technology companies should not be done at the expense of U.S. economic and national security.” Losing a war as we just experienced in Afghanistan may be emotionally challenging, but existential U.S. interests there were not at risk. They are with China. Their values, interests, and intent center upon one vector—Chinese domination. **This is a competition we cannot afford to lose. The regulatory arms of the U.S. government must incorporate these considerations in their future reviews to ensure our defense industrial base is postured to win.**

### 2NC/1NR Must Read

#### It’s anti-competitive behavior, but the net benefit (hypersonics) outweighs

Don Nickles, 21. CEO of The Nickles Group, a government consulting group in Washington, D.C., representing U.S. companies including Aerojet. “Opinion | Why Lockheed's acquisition of Aerojet will be a 'boon for U.S. innovation'” March 22, 2021. https://www.politico.com/news/2021/03/22/lockheed-aerojet-acquisition-477491

For acquisitions that raise questions about access to critical capabilities, government regulators sometimes require consent decrees that commit the buyer to make these technologies available to competitors at market rates and to wall off proprietary information they might obtain in the process. In recent years, antitrust agencies have not shied away from investigating and enforcing compliance with consent decrees, including in the defense industry. There is no reason to think that would change in the future. Some observers view the Lockheed Martin-Aerojet Rocketdyne merger as an early test of the Biden administration’s antitrust enforcement policies, and regulators will no doubt scrutinize it thoroughly to ensure competition is preserved. **But there’s much more at stake here: This is about how the administration intends to deal with growing threats posed by peer and near-peer adversaries, who have eroded many of the techn**ological **advantages this nation has long taken for granted**. If the U.S. is to retake, and maintain, the lead in areas like hypersonic weaponry, a healthy and vibrant propulsion industry featuring players competing on a level playing field is essential. Regulators and policymakers should **view this merger through that lens and render their decision accordingly.**

### Merger k2 Hypersonics

#### Lockheed-Aerojet merger key to hypersonics

Loren Thompson, 21. Senior Contributor at Forbes, Chief Operating Officer of the non-profit Lexington Institute. “Why A Lockheed-Aerojet Merger Is Good For Defense,” April 21, 2021. https://www.forbes.com/sites/lorenthompson/2021/04/21/why-a-lockheed-aerojet-merger-is-good-for-defense/?sh=43372a185230

Other benefits. There are numerous other potential benefits to defense customers arising from the proposed merger. Fee-on-fee arrangements that drive up costs would automatically be eliminated pursuant to cost-accounting rules. Innovation on breakthrough technology like hypersonics would be stimulated by Lockheed’s desire to grow the business and possession of sufficient resources to invest in it. The military would have more options in the future, because Lockheed would be committed to the business over the long term. Fundamentally, though, all of benefits that accrue to defense from the proposed merger result from maintaining competition in the rocket-propulsion sector. Allowing Lockheed Martin to merge with Aerojet Rocketdyne would serve that goal. Preventing the transaction would reduce competition leading eventually to a domestic monopoly, either because Aerojet was under-resourced to compete, or because its owner lacked incentives to invest.

**Hypersonics key to counter-A2/AD---only way to deter China & Russia.**

Seth **Cropsey, 21**. Senior fellow and director of the Center for American Seapower at the Hudson Institute. "Why are hypersonic weapons so important for America’s security?". Defense News. 2-16-2021. https://www.defensenews.com/opinion/commentary/2021/02/16/why-are-hypersonic-weapons-so-important-for-americas-security/

America’s enemies learned from the Gulf and Iraq wars that they could not allow the U.S. and its allies geographic access to a combat zone, and have therefore developed denial techniques. It is here that **hypersonic weapons become extremely important**. Denying an enemy access to a combat zone requires enough long-range missiles to hold U.S. forces out of their missiles’ effective range. Two methods exist to execute this task: build enough missiles and launch platforms (ships, aircraft, submarines or ground-based launchers) to overwhelm an air defense system, or build munitions that can evade air defense systems. Hypersonic weapons aid the latter aspect of this approach. Both hypersonic cruise missiles and boost-glide vehicles travel six to 10 times faster and can maneuver far more effectively at high speeds than their non-hypersonic counterparts. This allows them to threaten theater-directed point or area air defense systems like those that currently defend U.S. carrier strike groups or major bases on Okinawa, Japan, or Guam. By contrast, **hypersonic weapons provide equivalent benefits to the United States. Countering Russian and Chinese objectives requires being able to penetrate their access denial networks**. Stealth aircraft; low-cost, high-quantity warships; submarines; and unmanned systems will be critical in this mission. But **hypersonics are** equally **necessary**, considering the scale and sophistication of adversary air defenses. If capable of being launched at range, hypersonics also allow the U.S. to leverage its most flexible military tool: the big-deck supercarrier’s combat air wing. A U.S. carrier group conceivably could remain beyond the range of all but a handful of Chinese missiles and conduct “standoff” strikes against enemy air defenses, supporting broader penetration efforts.

#### US-China war goes nuclear---no constraints.

Joshua Rovner 17. John Goodwin Tower Distinguished Chair in International Politics and National Security, Southern Methodist University. “Two kinds of catastrophe: nuclear escalation and protracted war in Asia.” Journal of Strategic Studies 40(5): 696-730. Emory Libraries.

But suppose that leaders have no intention of using nuclear weapons. It is one thing to develop impressive technologies, but quite another to use them, and policymakers may blanch at the real prospect of authorizing first use. Even in these cases, there are several theoretical pathways to escalation.

The first is psychological. Cognitive biases may cause leaders to misperceive rival intentions, mistaking signals of restraint for signs of danger. Prewar expectations strongly influence how individuals interpret new information, and they will ignore or reframe dissonant information so it fits into their existing beliefs. Misperceptions intensify after the shooting starts, when information is ambiguous and incomplete. Carl von Clausewitz dwelt on the problem in the aftermath of the Napoleonic Wars, noting that intelligence reports were often contradictory and unreliable “in the thick of fighting.” Despite advances in intelligence and communications, the fog of war remains an enduring problem. Organized violence is an iterative process, and each side has incentives to hide its actions and deceive its adversary. Violence also unleashes intense emotions that obscure the material effects of battle. Commanders may not understand whether they are winning or losing, and in lieu of reliable intelligence they are likely to let passion overtake good judgment. “In short,” Clausewitz concluded, “most intelligence is false, and the effect of fear is to multiply lies and inaccuracies.” 9

Wartime leaders are prone to attribution bias, or the belief that their counterparts are inherently evil. Leaders in conflict are likely to assume the worst about their rivals or else they would not have picked a fight in the first place. Attribution bias causes them disregard the notion that their enemies have limited goals and are willing to accept partial victories. They are also prone to reject peace overtures as meaningless gestures at best, or as efforts to lull them into passivity before escalating the conflict.10 Finally, prospect theory tells us that individuals will fight harder to avoid losing a possession than they will to gain something new. If leaders equate settling with losing, then they will be tempted to risk escalation. All of these psychological pressures are exacerbated under stress and tight time constraints.11

Domestic pressures might lead to escalation if one or both governments fear that regime change will be the political penalty for battlefield failure. Escalation is also possible if the issues at stake are wrapped up in nationalism or ideologies that inflate the value of the object. Leaders will be hard pressed to accept defeat in such cases, especially if military outcome is particularly lopsided and humiliating. Leaders who depend on particularly hawkish constituencies to remain in power are especially likely to take new risks even against long odds. Rather than negotiating an end to the war, they might gamble for resurrection by escalating to the nuclear level.12 Such a move would not necessarily be irrational. Instead, resurrection succeeds by shifting the war towards the balance of interests rather than the balance of capabilities. A retreating combatant, battered in the early stages of a conflict, may still affect the enemy’s calculation by taking extraordinary risks. Escalation signals a willingness to fight to the finish and a reminder that it has powerful interests at stake. Such a strategy is admittedly risky, but it may be effective, especially if the escalating state is fighting to defend its own territory against a distant rival. Transforming a conflict into a test of resolve makes sense when a state is failing the test of arms.13

Finally, inadvertent escalation may occur when conventional attacks put the adversary’s nuclear force at risk. Under these conditions, the target state might reasonably worry that the attack is only the first phase of a larger war. There may be no way to offer credible reassurances that it is not. Fearing the destruction or incapacitation of its nuclear deterrent, the target state might face a “use it or lose it” dilemma. Inadvertent escalation is especially likely if key command and control nodes are vulnerable or if conventional and nuclear target sets are indistinguishable. The danger also increases if military organizations indulge organizational preferences for offensive action. This encourages planners to err on the side of attacking all available targets. While it might sense to allow the adversary to retain some capabilities in order to reduce the incentives for escalation, planners may bridle at the thought of consciously allowing the enemy to retain the capacity for attack.14

In recent years, China has invested heavily in capabilities that will complicate US maritime operations and threaten US bases in Japan and Guam. Equipped with a range of anti-access capabilities, China may be able to deter the United States from intervening in the case of a regional war. If it does intervene, China may attempt to damage or destroy US assets or force carrier groups to operate at prohibitively long distances from the mainland.

Chinese doctrine for using these weapons has lagged behind acquisition.15 Nonetheless, the appearance of its new “anti-access/area denial” (A2AD) systems caused concern in Washington. US officials subsequently unveiled Air–Sea Battle (ASB), an operational concept for integrating naval and air assets in order to overcome the entire range of anti-access capabilities. The concept was announced in spring 2011 by the then Secretary of Defense Robert Gates, and responsibility for developing the concept fell to the Air–Sea Battle Office in the Pentagon. In January 2015, the Department of Defense changed the name of ASB to the Joint Concept for Access and Maneuver in the Global Commons, but there is no indication that the substance has changed.16 And because ASB has influenced the debate about a hypothetical US–China conflict, I will continue to use the term here.

The Air–Sea Battle Office released some information about the concept, and leaders from the Navy and Air Force wrote about it in service publications. The most comprehensive treatment, however, came in the form of a monograph from the Center for Strategic and Budgetary Assessments (CSBA). Although it may be ahead of the Department of Defense (DOD) concept, the CSBA analysis is broadly consistent with official descriptions.17

ASB envisions two broad phases in a war against countries like China with advanced anti-access capabilities. The first is a blinding attack on key facilities, including long-range weapons that could target US bases and carrier groups, as well as the radar systems needed to cue them. Kinetic and electronic attacks would also target Chinese satellites and anti-satellite weapons. According to the CSBA report, attacks on Chinese space assets, along with land-based radars and other intelligence, surveillance, and reconnaissance (ISR) and communications platforms, would “severely limit China’s space-based situational awareness.” 18 China would struggle to organize forces after such an attack. Prompt strikes on Chinese missile launchers and C2 nodes would be equally important. “Countering or thinning the PLA offensive missile threat is a principle AirSea Battle line of operation,” the report continues. Not only would the United States regain the advantage, but ASB would also deny China any chance of a rapid and decisive victory. “Success is critical in preventing China from achieving a quick ‘knock-out blow.’”19 The second phase would seek to deny a Chinese naval breakout. Because of the vast distances involved in moving forces across the Indian and Pacific Oceans, these attacks would be required to allow time for US forces to arrive in theater.20

This is an appealing conventional approach, but it has never been tested against a great power with nuclear weapons. The danger is that ASB increases the risk that China will use them.

In fact, it opens all three pathways to escalation. ASB deliberately seeks to create confusion at the start of the war, making it very hard for the adversary to understand signals of restraint and declarations of limited intent. Coercion requires not only threats but also credible assurances that the target will not be punished if it complies. There is little reason to comply absent such promises.21 In addition, all of the psychological problems described above would be activated if the United States implemented ASB. In addition to the danger of misperceptions in the confusing aftermath of a blinding attack, attribution bias would almost surely cause the Chinese leadership to suspect the worst about the United States. Prospect theory would also likely kick in because China would suddenly fear losing an object of great national value, especially if the war is fought over Taiwan and the result is independence and permanent separation from the mainland.

ASB would exacerbate the domestic problem for the Chinese Communist Party, creating political incentives to use nuclear weapons. The Communist Party of China (CCP) long ago gave up its ideological mandate, replacing communism with a combination of nationalism and economic growth. In the event of an economic slowdown, the CCP will only have nationalism to fall back on. In these circumstances, the party might become more risk-acceptant, especially if it is fighting over a core national interest like Taiwan.22 If it stands on the edge of a monumentally humiliating loss, the CCP might well escalate the war rather than risking the end of its regime. ASB promises such a loss. It is hard to imagine a more humiliating outcome than being blinded and befuddled, forced to wait as the United States slowly husbands naval power offshore.

Finally, ASB runs the risk of inadvertent escalation. China has been steadily moving towards a posture of assured retaliation. It seems to believe it can deter other powers with a relatively small number of nuclear weapons, but only if it can assure the survivability of its arsenal.23 ASB may remove that sense of security. The targets in the hypothetical first strike would include China’s ballistic missiles and launchers, as well as space- and ground-based facilities for targeting and guidance. This means that the United States would target elements of the People’s Liberation Army Rocket Force (PLARF), which oversees both nuclear armed and conventional missiles. It also means targeting China’s intelligence and C2 networks, making it harder for leaders to determine whether their nuclear force is at risk.

China has not published a detailed and authoritative statement on its nuclear doctrine, though its defense white papers offer clues. Historically, it has chosen to enhance deterrence through ambiguity and mobile launchers in place of high numbers of warheads, obscuring its capabilities to guard what it calls a “lean and effective” force. While this might plant a seed of doubt in potential attackers, it also increases the danger of mistaken targeting, and some analysts believe the line between conventional and nuclear capabilities is getting fuzzier.24 Moreover, different variants of China’s land-based DF-21 are equipped with both conventional and nuclear warheads. In the words of a recent open-source assessment of China’s arsenal, “This potentially dangerous mix of nuclear and conventional missiles increases the risk of misunderstanding, miscalculation, and mistaken nuclear escalation in a crisis.” 25

Analysts disagree about the level of overlap, however, and there is evidence that China has taken steps to separate nuclear and conventional missiles while protecting its retaliatory force from preemptive attack. A recent survey of Chinese open sources finds that the majority of missiles are not co-located. Conventional and nuclear brigades answer to separate commands, and China has invested in more secure and redundant command and control. That said, both kinds of brigades may utilize the same C2 infrastructure, and the Central Military Commission, which commands nuclear forces, can take command of conventional forces “under special circumstances.” Finally, Chinese officials may view an attack on conventional missile brigades as proof that the United States has the capacity to destroy nuclear ones.26

The expansion of US missile defense capabilities may also affect China’s beliefs about the security of its deterrent force. The United States currently fields a modest national missile defense capability, with 30 interceptors deployed against intercontinental ballistic missile attacks. This offers some protection against small nuclear powers like North Korea but not against larger ones like Russia and China. Adding more advanced interceptors might make it harder to make this distinction. China has expressed particular concern about advances that blur the line between national and theater missile defenses, thus creating additional doubt about its second-strike capability.27

Despite these concerns, some US planners might have faith that China will continue to honor its long-standing no-first-use (NFU) nuclear declaratory policy, especially if they can conspicuously avoid certain targets as a way of reassuring Chinese leaders.28 Some launch brigades only fire nuclear missiles, and US leaders could make it clear that these are off-limits.29 Avoiding China’s emerging class of ballistic missile submarines might also signal US restraint.30

The problem is that Chinese officials might not understand the signal or believe US promises. They might not have the time to assess whether the United States is carefully discriminating conventional from nuclear forces, given its stated preference for rapid strikes against key enemy installations. Moreover, because initial strikes would also deliberately target China’s C4ISR networks, Beijing would not be able to do a quick damage assessment or communicate the results to deployed forces. Under these conditions, the US emphasis on blinding attacks, which are designed to slow down enemy operations, would actually speed up the decision to go nuclear.31

#### US-Russia war goes nuclear---tensions risk miscalc.

Robert Burns 19. The Associated Press, citing James Stavridis, a retired Navy admiral who was the top NATO commander in Europe. "The chill in US-Russia relations has some worried about stumbling into a Military conflict". 2019. https://www.militarytimes.com/flashpoints/2019/04/14/the-chill-in-us-russia-relations-has-some-worried-about-stumbling-into-a-military-conflict/

WASHINGTON — It has the makings of a new Cold War, or worse. The deep chill in U.S.-Russian relations is stirring concern in some quarters that Washington and Moscow are in danger of stumbling into an armed confrontation that, by mistake or miscalculation, could lead to nuclear war.

American and European analysts and current and former U.S. military officers say the nuclear superpowers need to talk more. A foundational [arms control agreement is being abandoned](https://www.militarytimes.com/news/your-military/2019/02/13/nato-is-getting-ready-for-a-russia-with-a-lot-more-missiles/) and the last major limitation on strategic nuclear weapons could go away in less than two years. Unlike during the Cold War, when generations lived under threat of a nuclear Armageddon, the two militaries are barely on speaking terms. "During the Cold War, we understood each other's signals. We talked," says the top NATO commander in Europe, U.S. Army Gen. Curtis Scaparrotti, who is about to retire. "I'm concerned that we don't know them as well today." Scaparrotti, in his role as [Supreme Allied Commander Europe](https://www.defensenews.com/congress/2019/03/05/top-us-general-seeks-more-troops-warships-in-europe-to-counter-russia/), has met only twice with Gen. Valery Gerasimov, the chief of the Russian general staff, but has spoken to him by phone a number of other times. "I personally think communication is a very important part of deterrence," Scaparrotti said, referring to the idea that adversaries who know each other's capabilities and intentions are less likely to fall into conflict. "So, I think we should have more communication with Russia. It would ensure that we understand each other and why we are doing what we're doing." He added: "It doesn't have to be a lot." The United States and Russia, which together control more than 90 percent of the world's nuclear weapons, say that in August they will leave the 1987 treaty that banned an entire class of nuclear weapons. And there appears to be little prospect of extending the 2010 New [Start](https://www.militarytimes.com/flashpoints/2019/04/14/the-chill-in-us-russia-relations-has-some-worried-about-stumbling-into-a-military-conflict/) treaty that limits each side's strategic nuclear weapons. After a period of post-Cold War cooperation on nuclear security and other defense issues, the relationship between Washington and Moscow took a nosedive, particularly after Russian forces entered the former Soviet republic of Georgia in 2008. Tensions spiked with Russia’s annexation of the Crimea in 2014 and its [military intervention in eastern Ukraine](https://www.militarytimes.com/news/your-military/2018/11/26/russias-conflict-with-ukraine-an-explainer/). In response, Congress in 2016 severely limited military cooperation with Russia. The law prohibits "military-to-military cooperation" until the secretary of defense certifies that Russia "has ceased its occupation of Ukrainian territory" and "aggressive activities." The law was amended last year to state that it does not limit military talks aimed at "reducing the risk of conflict." Relations frayed even further amid U.S. allegations that Russia interfered in the 2016 U.S. presidential election, although President Donald Trump has doubted Russian complicity in what U.S. intelligence agencies assert was an effort by Moscow to boost Trump’s chances of winning the White House. After a [Helsinki summit with Putin](https://www.militarytimes.com/news/pentagon-congress/2018/07/18/trump-backs-down-under-fire-clarifies-on-russia-meddling/) in July, Trump publicly accepted the Kremlin leader’s denial of interference. Marine Gen. Joseph Dunford, chairman of the Joint Chiefs of Staff, said in an interview Friday that Russian behavior is to blame for the strained relationship. "It's very difficult for us to have normal relationships with a country that has not behaved normally over the last few years," Dunford said. "There are major issues that affect our bilateral relationship that have to be addressed, to include where Russia has violated international laws, norms and standards." Dunford said he speaks regularly with Gerasimov, his Russian counterpart, and the two sides talk on other levels. "I'm satisfied right now with our military-to-military communication to maintain a degree of transparency that mitigates the risk of miscalculation," he said. "I think we have a framework within to manage a crisis, should one occur, at the senior military-to-military level." James Stavridis, a retired Navy admiral who was the top NATO commander in Europe from 2009 to 2013, says the West must confront Russia where necessary, including on its interventions in Ukraine and Syria. But he believes there room for cooperation on multiple fronts, including [the Arctic](https://www.militarytimes.com/news/your-navy/2019/04/04/with-missiles-pointing-out-to-sea-northern-clover-stakes-russian-claim-on-arctic-waters/) and arms control. "We are in danger of stumbling backward into a Cold War that is to no one's advantage," he said in an [email](https://www.militarytimes.com/flashpoints/2019/04/14/the-chill-in-us-russia-relations-has-some-worried-about-stumbling-into-a-military-conflict/) exchange. "Without steady, political-level engagement between the defense establishments, the risk of a true new Cold War rises steadily." No one is predicting a deliberate Russian act of war in Europe, but the decline in regular talks is a worry to many. Moscow says it is ready to talk. "Russia remains open for interaction aimed at de-escalating tension, restoring mutual trust, preventing any misinterpretations of one another's intentions, and reducing the risk of dangerous incidents," the Russian Ministry of Foreign Affairs said in a statement last week in response to NATO's 70th anniversary celebration. Sam Nunn, who served in the Senate as a Democrat from Georgia from 1972 to 1997, argues that dialogue with Russia is too important to set aside, even if it carries domestic political risk. "You can't call time out," he said in an interview. "The nuclear issues go on, and they're getting more dangerous." Nunn co-wrote an opinion piece with former Secretary of State George Shultz and former Defense Secretary William Perry arguing that the U.S. and its allies and Russia are caught in a "policy incapacity ~~paralysis~~" that could lead to a military confrontation and potentially the first use of nuclear weapons since the U.S. bombed Japan in August 1945. "A bold policy shift is needed," they wrote in the Wall Street Journal on Thursday, "to support a strategic re-engagement with Russia and walk back from this perilous precipice. Otherwise, our nations may soon be entrenched in a nuclear standoff more precarious, disorienting and economically costly than the Cold War." A group of U.S., Canadian, European and Russian security experts and former officials in February issued a call for talks with Russia on crisis management. "The risks of mutual misunderstanding and unintended signals that stem from an absence of dialogue relating to crisis management ... are real," the Euro-Atlantic Security Leadership Group said in a statement. It said this could lead to conventional war with Russia or, in a worst-case scenario, “the potential for nuclear threats, or even nuclear use, where millions could be killed in minutes.”