# 1AC—Dartmouth GG

## 1AC – Kentucky

### 1AC – Dynamism

#### Contention one: Dynamism

#### Dominant digital platforms gatekeep access to markets by both operating a platform and marketing their own goods on it. Only structural prohibitions prevent barriers to entries posed by companies’ structure, not just the scale of their market power.

Khan ’19 [Lina; Chairperson @ Federal Trade Commission, JD @ Yale Law School; “The Separations of Platforms and Commerce,” *Columbia Law Review* 119(4), p. 973-1098; AS]

A handful of digital platforms exert increasing control over key arteries of American commerce and communications. Structuring access to markets, these firms function as gatekeepers for billions of dollars in economic activity. By virtue of setting marketplace rules for the millions of merchants, producers, and developers dependent on their infrastructure, dominant platforms today “function as regulators.”3

As these platforms further concentrate market power, there are rising concerns about their size—usually in reference to the large share that each firm captures of its primary markets.4 Yet an equally important question concerns not the scale of these companies but their structure. One feature dominant digital platforms share is that they have integrated cross business lines such that they both operate a platform and market their own goods and services on it. This structure places dominant platforms in direct competition with some of the businesses that depend on them, creating a conflict of interest that platforms can exploit to further entrench their dominance, thwart competition, and stifle innovation.5 Consider Spotify’s effort to reach users through Apple’s iPhone while Apple sought to promote Apple Music. In 2016, Spotify revealed that Apple had blocked the streaming application from the App Store, “continu[ing] a troubling pattern of behavior by Apple to exclude and diminish the competitiveness of Spotify on iOS and as a rival to Apple Music.”6 Or take the challenge faced by Yelp, Foundem, and scores of online services to reach internet users while Google sought to build out its own competitor offerings.7

In Europe and India, competition authorities have found that Google ranks its own services higher than those offered by rivals, a “search bias” that means anyone competing with Google properties may effectively disappear from Google search results.8 Merchants that rely on Amazon to reach consumers are in a similar bind: Not only must they jostle for placement against Amazon’s own goods, but they also face the constant risk that Amazon will spot their bestselling items and produce them itself.9 Facebook, equipped with technology that lets it detect which rival apps are succeeding, would often give companies a choice: Be acquired by Facebook, or watch it roll out a direct replica.10 Competing with one of these giants on the giant’s own turf is rife with hazards.

Venture capitalists now factor this risk into their investment decisions.11 Indeed, the power of these gatekeeper platforms to steer the fate of countless other firms is described by entrepreneurs and investors as “having a profound impact on innovation in Silicon Valley”12 and “choking off the start-up world.”13 Venture capitalists now discuss a “kill-zone” around digital giants—“areas not worth operating or investing in, since defeat is guaranteed.”14 Discussing how tech platform giants today use their integrated structure to undermine rivals, a product manager who worked for Microsoft leading up to its antitrust suit observed, “It’s what we did at Microsoft.”15

Indeed, the way in which dominant online platforms threaten to undermine competition and distort markets today is not entirely new. At its core, the problem traces to a basic challenge posed by firms that capture control over a critical network or channel of distribution. Regulators and competition authorities have traditionally harnessed a set of tools to ensure that bottleneck facilities do not distort competition. These tools include common carriage, which requires firms to offer customers equal access on equal terms,16 as well as interoperability, which requires networks to maintain an open interface, enabling users to switch between platforms with ease.17 These policies respond, respectively, to problems of discrimination and lock-in.

In digital markets, however, third parties that depend on a platform risk not just discrimination and lock-in but also appropriation. Because dominant platforms monitor with unrivaled precision the business activity of third parties while also competing with them, a platform can harvest insights gleaned from a producer at the producer’s expense. This Article argues that these combined problems of discrimination and information appropriation invite recovering common carriage’s forgotten cousin: structural separations. Structural separations place clear limits on the lines of business in which a firm can engage. Rather than prohibit particular business practices, separations proscribe certain organizational structures. In antitrust, structural remedies are contrasted with behavioral ones: Whereas behavioral remedies seek to prevent firms from engaging in specific types of conduct, structural remedies seek to eliminate the incentives that would make that conduct possible or likely in the first place.18

Structural prohibitions have been a traditional element of American economic regulation. They have been applied as a standard regulatory tool and key antitrust remedy in network industries, often to prohibit a dominant intermediary from competing with the businesses that depend on it to get to market. While common carriage regimes prevent a firm from discriminating—requiring equal service on equal terms—structural prohibitions eliminate one source of the incentive to discriminate. In this way, common carriage and structural separations often functioned as complements in the service of nondiscrimination.

Today, structural separations have largely been abandoned.19 At the same time that lawmakers have significantly weakened or outright eliminated sector-specific regulatory regimes, judicial interpretation of antitrust law has drastically narrowed the forms of vertical conduct and structures that register as anticompetitive. And when antitrust enforcers have targeted these forms of conduct and structures in recent years, they’ve applied remedies that generally (1) fail to target the underlying source of the problem and (2) overwhelm the institutional capacities of the government actors assigned to oversee them.20 Neglecting structural separations results in both substantive harms and institutional misalignments—effects that are especially pronounced in digital markets.

#### Case-by-case adjudication creates slow and ambiguous enforcement of prohibitions on unfair business practices – regulatory uncertainty substantially disadvantages entrants.

Chopra & Khan ’20 [Rohit; Commissioner @ Federal Trade Commission; and Lina; Chairperson @ Federal Trade Commission, JD @ Yale Law School; “The Case for “Unfair Methods of Competition” Rulemaking,” *The University of Chicago Law Review* *87*(2), p. 357-380; AS]

Antitrust law today is developed exclusively through adjudication. In theory, this case-by-case approach facilitates nuanced and fact-specific analysis of liability and well-tailored remedies. But in practice, the reliance on case-by-case adjudication yields a system of enforcement that generates ambiguity, unduly drains resources from enforcers, and deprives individuals and firms of any real opportunity to democratically participate in the process. One reason that antitrust adjudication suffers from these shortcomings is that courts analyze most forms of conduct under the “rule of reason” standard. The “rule of reason” involves a broad and open-ended inquiry into the overall competitive effects of particular conduct and asks judges to weigh the circumstances to decide whether the practice at issue violates the antitrust laws. Balancing short-term losses against future predicted gains calls for “speculative, possibly labyrinthine, and unnecessary” analysis and appears to exceed the abilities of even the most capable institutional actors.1 Generalist judges struggle to identify anticompetitive behavior2 and to apply complex economic criteria in consistent ways.3 Indeed, judges themselves have criticized antitrust standards for being highly difficult to administer.4 And if a standard isn’t administrable, it won’t yield predictable results. The dearth of clear standards and rules in antitrust means that market actors face uncertainty and cannot internalize legal norms into their business decisions.5 Moreover, ambiguity deprives market participants and the public of notice about what the law is, thereby undermining due process—a fundamental principle in our legal system.6

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

#### FTC rulemaking improves the speed, clarity and certainty of enforcement to level the playing field for market entrants.

Chopra & Khan ’20 [Rohit; Commissioner @ Federal Trade Commission; and Lina; Chairperson @ Federal Trade Commission, JD @ Yale Law School; “The Case for “Unfair Methods of Competition” Rulemaking,” *The University of Chicago Law Review* *87*(2), p. 357-380; AS]

“Rulemaking” often evokes the idea of government imposing some inflexible prescription upon the marketplace. This is not what we are suggesting. As former Commissioner Elman rightly noted, rulemaking can also be related to “standards, guidelines, pointers, criteria, or presumptions.”41 Rules come from courts, legislative bodies, and agencies. While they were not promulgated as agency rules, certain elements of the merger guidelines eventually came to serve as rules once courts adopted them.42 The merger guidelines stipulate the analytical framework that the agencies rely on to enforce the merger law. Agency rulemaking could do the same for “unfair methods of competition.”

We see three major benefits to the FTC engaging in rulemaking under “unfair methods of competition,” even if the conduct could be condemned under other aspects of antitrust laws. As we describe above, the current approach generates ambiguity, is unduly burdensome, and suffers from a democratic participation deficit. Rulemaking can benefit the marketplace and the public on all of these fronts.

First, rulemaking would enable the Commission to issue clear rules to give market participants sufficient notice about what the law is, helping ensure that enforcement is predictable.43 The APA requires agencies engaging in rulemaking to provide the public with adequate notice of a proposed rule. The notice must include the substance of the rule, the legal authority under which the agency has proposed the rule, and the date the rule will come into effect.44 An agency must publish the final rule in the Federal Register at least thirty days before the rule becomes effective.45

These procedural requirements promote clear rules and provide clear notice. As the Supreme Court has stated, a “fundamental principle in our legal system is that laws which regulate persons or entities must give fair notice of conduct that is forbidden or required.”46 Clear rules also help deliver consistent enforcement and predictable results. Reducing ambiguity about what the law is will enable market participants to channel their resources and behavior more productively and will allow market entrants and entrepreneurs to compete on more of a level playing field.

#### Trends are unsustainable – ROI will soon equate the cost of capital – the plan ignites a gale of creative destruction to induce drastic, not incremental innovation.

Rizzo ’21 [Andrea Minuto; Head of International Affairs @ Italian Competition Authority; “Digital Mergers: Evidence from the Venture Capital Industry Suggests That Antitrust Intervention Might Be Needed,” *Journal of European Competition Law & Practice* 12(1); AS]

In recent years, a debate about the possible existence of a kill zone around technology incumbents has gone beyond venture capital circles to involve a broader audience.33 In the kill zone, incumbents allegedly have both the ability and the incentive to foreclose promising potential competitors. Their position allows them to collect large amounts of data and to identify emerging trends early and to react to them, whether by adopting aggressive exclusionary practices to protect their core market or by pre-emptive acquisitions of innovative start-ups at generous multiples.34 Exclusionary conduct and acquisitions may actually be complementary strategies, rather than substitutive ones, as the former may allow the incumbent to reduce the acquisition price.35

Despite the growing concern that the possible existence of a kill zone might negatively impact innovation, the venture capital industry itself has diverse views about the need to increase antitrust scrutiny against large digital incumbents changing the current approach to M&As. In particular, among the venture capitalists that have actively engaged with US antitrust enforcers36, even those that acknowledge the existence of a problem at the same time express their fears for the possible unintended consequences of changes introduced with the best of intentions.

Tackling incentives to innovate in the digital sector represents a multifaceted phenomenon, where the opposing sides are nevertheless part of the same coin. On one hand, venture capital has so far greatly contributed to the transformation of high-risk start-ups into fully fledged independent companies, participating in the creation of the most valuable public companies globally. Moreover, start-ups benefit in many ways from the ecosystems created by large technology incumbents, among others, by using their platforms as effective distribution channels.

Furthermore, the incumbents might simply offer a better product or service. On the other hand, however, there seems to be evidence, on the investment side, highlighting a possible reduction of venture-backed start-ups operating in the same space where digital incumbents are active. As stated during these debates ‘funds have a limited size and they have to allocate capital and they would much rather pursue a market that has tailwinds behind it as opposed to a market that has matured and that has deep entrenched incumbents’.37 In markets dominated by incumbents, ‘(... ) start-ups building superior products (... ) may also find it difficult to secure VC investment’.38

In addition, some venture capitalists have expressed their views that competition to digital incumbents might likely arise from adjacent markets. A ‘viral’ success in a separate vertical could, as it grows, spill into the core market of a dominant player. These adjacent markets might be an area where antitrust agencies could focus more.

Some of the evidence described in the previous section is consistent with the existence of reduced first-time venture-backed funding in markets dominated by digital incumbents. Despite the evidence still being limited, it nevertheless provides suggestive food for thought and should trigger more detailed research on this complex topic. First of all, the existence and the magnitude of this reduction have to be further verified, for example, through a precise identification of the companies actually competing in the same space of digital incumbents and their evolution. The second step should then verify the existence of a causal link between the alleged aggressive behaviour of the incumbents in the kill zone and the reduction of venture capital financings, especially in the early stages of start-ups.

This reduction might, indeed, not necessarily pertain to the antitrust domain as it could stem from changing requirements of start-ups themselves as their technological and commercial needs evolve. The widespread ‘blitzscaling’ 39 strategy—where start-ups enter a digital niche with a narrow focus then gradually expanding—has been made possible by developments—such as the advent of smartphones, social media and cloud computing40—that allow for global reach and scalability41 at almost no initial technological cost, while marketing and human capital budgets may be on the rise at successive stages of the start-ups’ development.42

Moreover, changes have taken place also in the investment industry landscape through an expansion of the types of capital provided. Among others, non-traditional newer investors and sovereign wealth funds have invested in later-stage companies.43 Lastly, as for the exits through a sale, generous acquisitions might, as well, reflect prospective efficiencies deriving from the synergies between the acquirer and the acquired start-up.

However, the evidence thus far collected does suggest that current digital incumbents face very little threat of entry. Competition for the market dynamics are not necessarily symptomatic of the presence of the exploitation of market power, provided that incumbents still face, actual or potential, competitive pressures and could be substituted by a more efficient rival.44 What is needed is not just incremental innovation, but the drastic innovation that makes market leadership highly contestable. This is especially true for technology markets, where, as stated by Google itself, ‘changes tend to be revolutionary, not evolutionary’.45

Some recent studies and antitrust agency reports suggest that digital markets are becoming progressively less dynamic. Among others, the UK’s Digital Competition Expert Panel (UK Report46) observes that competition for the market does not appear to be able to solve competition issues linked to winner-take-all outcomes, as the next technological revolution is likely to focus on data that existing firms control to a large extent and that successful new entrants are generally acquired by incumbents. Moreover, Organisation for Economic Co-operation and Development (OECD) research suggests that, in digital-intensive sectors, mark-ups are increasingly higher47 while the decline in business dynamism occurs faster than in other sectors of the economy.48

As highlighted by the Stigler report49, key players in the digital industry remained the same over the last two technology waves, staying dominant through the shift to mobile and the rise of artificial intelligence, without significant impact on market share or profit margins.

Lastly, worrying evidence emerges also from the application of profitability analysis to digital incumbents. High profits substantially and persistently above the cost of capital 50 could signal that the market is not functioning properly, as in the long term, return on investment should equal the cost of capital. In that regard, the UK’s Competition and Markets Authority (CMA) has found, in the context of the sector enquiry into online platforms and digital advertising51, that the return on capital employed (ROCE) of Google and Facebook has been well above any reasonable estimate of a competitive benchmark for many years. In 2018, the estimated cost of capital for both Google and Facebook was around 9%, compared to actual returns on capital of over 40% for Google and around 50% for Facebook. Even though these results have to be interpreted with caution52, they seem to indicate that digital platforms are not facing the threat of entry and this evidence is consistent with the actual exploitation of market power.

Schumpeter 53 highlighted the prospect of new competition and innovation as incessantly playing a key role in fostering dynamic competition and economic efficiency. The evidence so far described may indicate that this impulse for creative destruction is fading in digital market.

#### Even uncertainty dissuades start-up entry and investment – dynamism is at 30-year lows.

Khan ’19 [Lina; Chairperson @ Federal Trade Commission, JD @ Yale Law School; “The Separations of Platforms and Commerce,” *Columbia Law Review* 119(4), p. 973-1098; AS]

1. Are Dominant Digital Platforms Stifling Innovation? — One risk associated with foreclosure and value appropriation by dominant digital platforms is that this conduct could deter entry and chill innovation. If independent developers or producers rely on a dominant platform to reach customers and also face the constant risk that the platform will foreclose access, appropriate their business value, or both, producers may be less likely to secure funding and develop their product in the first place. In Microsoft, the district court found that Microsoft’s exclusionary conduct not only had hobbled innovation in middleware and applications software but had discouraged competition throughout the computer industry as a whole.185 The long-term effect of its conduct was to “deter[] investment in technologies and businesses that exhibit[ed] the potential to threaten Microsoft.”186

Anecdotal evidence suggests that both actual entry and the threat of entry by digital platforms into platform-adjacent markets is dampening investment in complementary segments, now known as a “kill-zone.”187 For example, a survey of more than two dozen Silicon Valley investors revealed that Facebook’s willingness to appropriate information from and mimic the functionality of apps has created “a strong disincentive for investors” to fund services that Facebook might copy.188 One founder observed, “People are not getting funded because Amazon might one day compete with them.”189 “We don’t touch anything that comes too close to Facebook, Google or Amazon,” said a managing partner at New Enterprise Associates.190 Another venture capital investor noted that the impact of dominant digital platforms on “what can be funded, and what can succeed, is massive.”191 This concern raised by venture capitalists makes sense: A potential innovator (or a potential funder of a potential innovator) decides whether to invest based on the anticipated risk and reward of realizing the innovation. Anticipating platform discrimination or appropriation will lower expected rewards, depressing the incentive to invest. Even the uncertainty of discrimination can dissuade entry by heightening risk.

Data on investment trends do not offer a decisive answer but generally seem consistent with the story told by surveyed investors. Venture capital funding as a whole appears to be booming: In 2018, the total annual venture capital invested surpassed $100 billion for the first time since the dot-com period.192 The number of angel and seed investments, meanwhile, has been declining since 2015, signaling that it has become harder for startups to secure an initial round of financing.193 Indeed, it is late-stage deals with mature companies that account for an “outsized proportion” of total capital today,194 while startups see fewer first financings, even as the deal value for startups has increased.195 In other words, venture capital markets seem to be following a winner-takemost model: Fewer firms receive funding, but those that do are raising more capital.196 These trends come against a backdrop of falling entrepreneurship: Startup formation is at a thirty-year low, contributing to a loss of business dynamism.197

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#### There are no neatly bounded ways to capture all dimensions platform power – expanding rulemaking authority for an expert agency allows separations regimes to match market realities.

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D. Application: Challenges and Unresolved Questions

Implementing a separations regime presents some first-order questions and challenges. First, how do we define platforms and to which platforms should a separation apply? Second, how does one identify the parameters of the platform, especially when integration provides heightened functionality? Third, what should be the scope of the prohibited activity and how should the prohibition be structured? And fourth, what is the proper institutional mechanism for implementing the separation? This section offers some initial suggestions for how to approach these questions. Arriving at a complete analytical framework for structuring separations in digital markets will require deeper engagement with these issues.

1. Defining Platform. — Offering a clearly bounded definition of “platform” is challenging. Most definitions look to the role that the entity plays in intermediating activity by others. One definition, for example, is “a firm that controls a network, facility, or essential input that those providing a complementary good or service” must “rely on.”635 Another set of definitions focuses on the infrastructure-like role that these firms play, by structuring access to markets or facilitating transactions.636 And some discussions use the terms “network,” “infrastructure,” and “platform” interchangeably.637

Recent studies by policymakers have also settled on the idea that dominant platforms play a unique role that regulators should recognize. In March, the Digital Competition Expert Panel—a panel convened by the U.K. government to study digital markets—issued a report proposing, among other ideas, that dominant platforms that enjoy a “powerful negotiating position” be designated as having a “strategic market status” and be required to abide by a special code of conduct.638 A report commissioned by the European Commission, meanwhile, noted that, by designing marketplace rules that govern millions of users, dominant platforms “function as regulators” that should face a special responsibility to “ensure a level playing field” on their marketplace and “not use [their] rule-setting power to determine the outcome of competition.”639 Given the challenge of offering a bounded definition of “dominant platform,” any definition will likely be under- or over-inclusive. But any definition should seek to capture the degree of market power that the platform enjoys over users.640 How essential is the platform’s infrastructure? To what degree do other businesses depend on the platform to reach users, and what is the cost to businesses of avoiding this platform and using alternative channels? Relevant factors could include: (1) the extent to which the entity serves as a central exchange or marketplace for the transaction of goods and services, including the level of market power that it enjoys in its platform market; (2) the extent to which the entity is essential for downstream productive uses, and whether downstream users have access to viable substitutes for the entity’s services; (3) the extent to which the entity derives value from network effects, and the type of network effects at play; (4) the extent to which the entity serves as infrastructure for customizable applications by independent parties; and (5) the size, scope, scale, and interconnection of the company.

There are no neatly bounded ways to capture these dimensions of platform power. When implementing “maximum separation,” the FCC initially used operating revenue as the criterion for determining which carriers must comply.641 In the context of digital platforms, market share may prove a better proxy than operating revenues, given that it is the platform’s role as a gatekeeper or bottleneck—for which there are no real adequate substitutes—that gives rise to the relevant harms.

The prohibition should be centered on the activities that the platform facilitates as a bottleneck. Since a key goal of the separations regime is to eliminate the conflict of interest that arises when a dominant platform directly competes with the firms using the platform,642 only activity that would place platforms in direct competition in this way would be subject to the prohibition. This would not prevent platforms from integrating into lines of business that do not rely on the platform market. Nor would such a separations regime target conglomeration or vertical integration categorically; it would instead focus on platform entry into markets that creates the ability and incentive to discriminate, to leverage dominance, and to use information collected on firms as customers against them as competitors.

2. Distinguishing Between Platform and Commerce. — Applying separations to digital platforms would likely raise the challenge of identifying what constitute distinct products or services. In Microsoft, for example, the court had to determine whether the operating system and the browser—the two products the government claimed Microsoft had “tied”—should be considered a single integrated system.643 Microsoft argued that bundling new functionality into old products was a basic component of technological evolution.644 A similar issue may arise with digital platforms: Android, for example, could claim that certain apps must be integrated with its operating system in order to provide basic functionality or for technical necessity.

The traditional metric for assessing whether a set of bundled products constitute separate products is consumer demand. In Microsoft, the D.C. Circuit relied on Jefferson Parish’s consumer-demand test to determine whether consumers preferred a choice in browsers.645 Applying a similar inquiry in the platform context could similarly help identify whether integration of distinct functionalities should be viewed as an integrated system or as a platform. Regulators would also have the capacity to determine, over time, whether certain apps or features were necessary for basic functionality and whether the benefits of integration were sufficiently high to offset any potential harms to innovation. There may also be specific apps or functionalities where innovation is less likely to be transformative, and therefore where integration may prove fewer risks. As with earlier regimes, periodic reassessment and revisions would prove necessary to ensure the separation continued to accord with and reflect evolving market realities.

3. Institutional Mechanism and Timing. — A separations regime separating platforms and commerce could be implemented through statute or rulemaking or as antitrust remedies (under existing or new antitrust law). A statute from Congress could also establish the principle of separating platforms from commerce—as was the case with banking— with the specific authority to design and implement separations delegated to an agency. This approach would benefit from having an expert agency design and revisit the separation. Absent new legislation, the FTC could use its Section 5 authority to implement a separations principle through rulemaking.646 Designing separations only through rulemaking would require the agency to create rules of general applicability and— absent a specific congressional mandate—could limit the agency’s ability to structure highly tailored separations. Antitrust remedies would be costlier and take significantly longer, requiring the government or a private party to successfully show anticompetitive conduct and effects stemming from a digital platform’s involvement in multiple markets.

Given the enfeebling of antitrust doctrines that police single-firm anticompetitive conduct—and the judicial requirement that remedies be carefully tailored to competitive harm—this path is likely to be significantly more challenging.647 Previous instances of structural separations offer a few models for structuring these prohibitions. An operational or functional separation requires the firm to create separate divisions within the firm, requiring that a platform wishing to engage in commerce may do so only through a separate and independent affiliate, which the platform may not favor in any manner. A full structural separation, by contrast, requires that the platform activity and commercial activity be undertaken through separate corporations with distinct ownership and management. For example, the functional approach would permit Alphabet to operate Google search and vertical services that produce content so long as the two complementary services are structured as separate affiliates. The second option would prohibit Alphabet from running both the platform service and the complementary service, requiring that one be spun off and run by an independent owner.

It’s not clear that anything short of a full structural separation would be sufficient, especially given the risks of information misappropriation. While running complementary services as affiliates could be accompanied by information firewalls, the efficacy of firewalls requires close monitoring.648 Evidence shows that the antitrust agencies have neglected to fully monitor and enforce conduct remedies in the past.649 Moreover, firewalls may prove especially difficult to monitor in the context of digital platforms, given the heightened information asymmetries between private platform firms and public enforcers. It is possible that the risk of information misappropriation may vary by platform—but dominant platforms should carry the burden of establishing why operating complementary services as affiliates would not be anticompetitive.

Finally, a basic challenge facing regulators and enforcers when dealing with high-tech industries is the role of timing. Because these markets can evolve quickly, market changes can render regulatory interventions obsolete.650 Similarly, the failure to intervene can leave exclusionary conduct unchecked, resulting in path-dependent reductions in innovation. Any subsequent attempt to impose separations should include a built-in review process every two to three years, to ensure that the remedy still matches the market conditions.65

#### Digital start-up entry prevents slow growth – only a competitive technology sector stimulates the economy.

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A growing role of science and state-of-the-art technology in ensuring sustainable economic growth has become obvious lately [1, 2]. The innovation type of development has placed a special emphasis on the use of the leading-edge technologies, the production of high-tech products, the implementation of progressive organizational and management decisions [3]. Technology has fundamentally and quickly changed the structure of the world economy and has become one of the primary factors in economic progress. The shifts have outlined the radically new global space, novel conditions for competition in world markets, and modern principles of interaction between enterprises.

The role of technology in today’s economy has long been debated among researchers [4, 5]. However, there is still a lack of studies on the reasons behind technological inequality between countries. Currently, one can observe a new bipolar configuration of the global technological space forming, where the USA and China are taking the lead and all other countries are unable to close this gap in the short term [6, 7]. The spread of technological innovations is uneven, which causes technological inequality to emerge that represents a new challenge to sustainable economic development. The availability of technology and capital exacerbates the problem of economic differentiation. At that, the modern form of uneven development can no longer be represented using the common schemes, since it is widely manifested in various fields. Such indicators as labor productivity, living standards, GDP per capita, etc. characterize the overall state of national economies, but do not specify the factors which contributed to obtaining this position. Structural analysis highlights that the technological factor is among the most significant ones determining the objective pattern of uneven development [8]. However, the question remains about the constituent parts of the technological factor (its component base), methods and approaches to assessing the influence of this factor on economic growth. Researchers have different approaches to the selection of a set of technological factor indicators. This poses a problem of methodological consistency that precludes comparative research. For this reason, the topic of this study is becoming relevant, related to the study of the influence of the technological factor on differences in economic growth and inequality between countries.

Thus, the relevant studies point to a distinctive primacy of manufacturability as the main factor in sustainable economic development. Then, we aim to clarify the role of the technological factor. However, even now one can argue that the aggravated cross-country competition implies the need for tools to assess and determine the key determinants of technological economic growth. The results are expected to confirm the significance of the technological factor, allow identifying its parameters and setting their priorities for improving economic policy aimed at sustainable development. These circumstances understood will open up opportunities for countries to narrow the technology gap.

2. Literature review on the technological factor of economic development

Economic theory pays special attention to issues of development and sustainable growth, as well as the causes of differences and factor changes. The sources of economic growth through GDP were specified in [9–13]. These researchers agree that sustainable economic growth is driven by factors such as new technologies and globalization. However, with the availability and access to these factors, it becomes important to build optimal management. The dynamics of economic growth is believed to be based on the results of structural transformations, mastering new technological principles, the introduction of innovations and an increase in labor productivity. At that, the seemingly insignificant differences in the economic growth rates bring about the substantial divergence in countries’ economic potential. Determining these discrepancies becomes a relevant scientific task.

It is becoming increasingly obvious that if the economy is not focused on technological innovation, it has no prospects for long-term development [14–17]. Some researchers, such as [14], focus on fundamentally new solutions (patents) that have commercial implementation potential. We can agree with this opinion, because it is innovation that should ensure accelerated economic growth at the expense of competitive advantages. A similar opinion is expressed by [15]. The publication [16] proves that renewed industrialization becomes an important condition for the development of technology. According to [17], entrepreneurial skills are needed to support industrialization.

Numerous studies [18–20] demonstrate that there is a direct correlation between the technological preparedness of a country and its ranking in the global economy. Research results on this issue are coordinated. These trends, if underestimated, lead to the fact that some countries can find themselves lagging behind. Here, it is important to realize the essence and the role of the technological factor, as well as the opportunities for managing the level of technological effectiveness of the economy. However, in [18, 19] there are no clear indications of quantitative measures of the technological factor.

We agree with [21], who claims that the technological factor is new technologies or their clusters that underlie the changes in the relative cost of production factors, stimulate the development of new industries and enhance the efficiency of traditional ones. Historical regularities in the emergence of fundamental technological innovations give impetus to structural changes in the economy [22]. Therefore, it is important to identify the determinants of economic growth that occurs against the background of technological structural changes. As practice shows, national economies, which for one reason or another were unable to independently create high-tech products, first applied imitation strategies within the country, and then entered foreign markets by occupying particular niches [23–25]. These researchers note the role of R&D spending and high-tech exports in economic growth. However, factor quantitative estimates are not given. The development of the USA and China are interesting cases here. For example, from a country that had mainly copied innovations, China turned into one of the leading innovation-generating nations leaving behind most other countries in terms of the level of technological development. In this context, the patterns of production, distribution, exchange and consumption of goods are largely predetermined by the peculiar nature of the technological processes [8]. At the same time, the observed temporal reduction of cycles is formed precisely due to the technical progress and the use of innovations [26].

The study of the reasons behind technological inequality is believed to lend some insight into the mechanisms that underlie economic changes. According to [27, 28], the choice of a model of economic growth should focus on mobilizing the potential to follow the technological path of evolution. Since the modern development of the theory of evolutionary economics is based, first of all, on the neo-Schumpeterian theory, which determines the need for structural technological changes in ensuring sustainable economic development, such changes provide for the formation of new industries with a high degree of processing of primary raw materials and an increase in the efficiency of traditional ones. Therefore, the issue of developing an integral strategic management system aimed at ensuring innovative structural changes becomes relevant. As we see it, these changes are of a technological nature.

Thus, the literature review demonstrates that economic growth is significantly affected by the flows of developed and exported technologies [29], as well as R&D costs [30–32]. The presence of stable patterns for these factors allows us to use them in the assessment model. The indicators proposed by the researchers (the share of ideas with the potential for commercialization [33], the share of R&D funding in GDP [34], indicators of science, technology and innovation development [35], the number of patents [36]) often reflect the multidirectional dynamics of the technological factor’ financial aspects and its qualitative components.

The review confirmed the significance of the technological factor for economic growth. At the same time, there is a clash of researchers’ opinions on key determinants. In the context of the literature review, the indicators of the technological factor need to be revised. The question about the approaches to assessing the impact of the technological factor on economic growth is left unanswered, which proves the relevance of the present research.

3. The aim and objectives of the study

The aim of this study is to develop an integrated approach to assessing the impact of a technological factor on economic growth. This will provide an opportunity for a comparative analysis on the countries for technology gaps.

To achieve the stated goal, we aim to fulfill the following objectives:

– to determine the leading countries and outsiders in terms of digitalization of the economy;

– to assess the dependence of economic growth on the technological factor.

4. Materials and methods

In the present study, technological effectiveness refers to the ability of a country to implement structural reorganization in accordance with the model of innovation development and realize its scientific and technological potential. We evaluate the level of technological effectiveness of the economy using the relevant index that serves as the basis for ranking countries. The set of technological factor indicators that will be used in our approach will be adjusted taking into account the literature review.

To calculate the Index (Ii), we use the indicators characterizing various aspects of technological development of the nations under review (Table 1), such as:

– industrial production index (ai );

– the share of the production of machinery and equipment in total value added (bi );

– the share in global value added by the economic activity ‘Production of computing, electronic and optical equipment’ (ci );

– the share in global value added by the economic activity ‘Production of machinery and equipment’ (di );

– ICT development index (ei );

– domestic R&D costs, % in GDP (fi ).

For empirical verification, we use official statistics. The frequency of data updating does not allow reflecting the most recent trends that affect economic processes (such as the impact of COVID-19). This is a research limitation. We also need to understand that some trends are short-term in nature, and their impact can be neglected.

[Chart omitted]

The method of Euclidean distances is used to rank the indicators’ values; normalization (Ixi ) is calculated by formula (1). The boundaries of normalized indicators are set in the range from 0 to 1.

[Equation omitted]

where Xi is the actual value of the indicator; Xmin is the minimum value of the indicator for the sample population; Xmax is the maximum value of the indicator for the sample population.

The level of technological effectiveness is calculated using the cumulative method as a weighted mean:

[Equation omitted]

The closer the Index value is to 1, the higher the level of technological effectiveness of economy.

To determine the econometric relationship between economic growth and indicators characterizing the technological factor, a linear multiple regression model was applied.

[Equation omitted]

where X1, X2, X3…, Xn denote factors; ɛ denotes error; β denotes a vector of the parameters under evaluation.

The gross domestic income of the United States and China for the period of 1996–2019 was taken as dependent variables (Table 2).

The independent variables were represented by the volume of electronics production (Elc), costs incurred in installation and maintenance of equipment/technologies (CTech), the volume of high technology exports (HTExp), and investment in R&D activities (RD). Data are given in Table 3.

[Table omitted]

Based on the purpose of the study, we put forward two hypotheses about the nature of the patterns observed:

Н1. Growing R&D costs accelerate economic growth. Such an increase is expected to stimulate R&D in industries with comparative advantage. Consequently, this strengthens the country’s exports (foreign trade surplus).

Н2. Arrested technological development adversely affects competitiveness and, as a result, economic growth, since outdated equipment results in higher resource intensity and low labor productivity.

We test the hypotheses and the methodology for assessing the level of technological effectiveness using the sample of 30 countries. The aggregate of research objects embraces several developed countries, developing countries with high GDP, as well as developing countries not included in leading world economies. The selection is due to the need to cover a wide range of economies characterized by a wide variety of development conditions.

5. Results comparing technological effectiveness of economies

5. 1. Leading countries and outsiders in terms of technological innovation

The global economy in the context of Industry 4.0 demonstrates a number of specific features that distinguish it from the previous development stages. Firstly, technological innovation is becoming increasingly expensive, which causes a significant increase in R&D costs [38]. Secondly, the rate of technological change has increased dramatically. The terms of development and implementation of new solutions were reduced in the first place [8]. Technological gap can now be measured exponentially [39].

Look at a range of indicators characterizing the level of technological effectiveness of national economies. The share of domestic R&D costs in GDP is one of them (Fig. 1). The highest level of R&D funding in GDP is observed in the Republic of Korea, Sweden, Japan, Germany, the United States, China and other countries leading in the Global Competitiveness Report.

Analysis of the current changes in the global economy indicates that the importance of the comparative advantages of the lower order – cheap labor, basic production resources and the availability of raw materials – is decreasing [40]. At the same time, advantages of a higher order are gaining in significance, such as the ability of countries to develop high-tech industries, to manufacture and export products with a high intellectual component and in-depth processing [41]. For instance, the United States and China account for 90 % of the market capitalization value of the world’s 70 largest digital platforms, 75 % of all patents related to blockchain technologies, more than 75 % of the world market for public cloud computing, about 50 % of global spending on IoT, 40 % of world data centers, 36 % of the global value of e-commerce [42], and 69 % of supercomputers [43]. These areas are of significant potential and can have a serious impact on economic restructuring. Therefore, a special focus of the analysis is put on such indicator as the share of high-tech production (including computing, electronic and optical technology) (Fig. 2). China, Germany, Italy, the United States and Japan have the largest share in global value added in the production of computing, electronic and optical equipment. Norway, Canada, Australia, Sweden, Romania, Poland, etc. are relatively poorly represented in these world markets.

High-tech industries focusing on domestic production can be viewed as sources of economic growth. Data on the share of machinery and equipment production in GDP show similar trends (Fig. 3). High-tech industries strongly stimulate the economic growth of the leading countries – the Republic of Korea, China, the United States, Germany, and Japan, – while countries with low competitiveness demonstrate poor results.

[Table omitted]

Analysis of the countries indicates that some of them did not demonstrate high values of the indicators reviewed, but the level of their technological effectiveness is much higher (the group of “backward” countries embraced Denmark, the Netherlands, Sweden, Norway, and Canada). To gain a comprehensive picture and rank the countries, we have calculated the integral index of the technological effectiveness that covers financial aspects of development, as well as qualitative characteristics of economic growth. The Index calculation methodology is presented in section 4 of the paper. The countries’ ranking is presented in Table 4.

[Table omitted]

5. 2. Assessment of the dependence of economic growth on the technological factor

As articulated earlier, an increase in GDP can result from various factors. To substantiate the relationship between economic growth and the technological factor, we construct a number of models. The parameters of the regression models for the USA and China are given in Tables 5, 6. The parameters of the multiple regression model were obtained using STATISTICA software.

[Table omitted]

We have obtained a model with good quality characteristics; in this case, the coefficient of determination R2=0.996, normalized R-squared=0.995, multiple R=0.998.

[Table omitted]

The model obtained for China is also characterized by good quality characteristics: the coefficient of determination R2=0.999, normalized R-squared=0.999, and multiple R=0.999. Checking of the model adequacy according to the F-test produced the following results: the calculated value F=10.09 at the level of significance p=0.01.

Having analyzed the models’ data, we can conclude that there are no factors with a high probability of insignificance (t-Statistic for each model are greater than the critical value at a significance level of p=0.01), i.e. all regressions are significant.

To evaluate the degree of adequacy of the constructed trend equation to the real process, the mean approximation error was computed. Its value (3.167 % for China and 1.54 % for the United States) indicates that the degree of the quadratic equation’s adequacy to the real conditions of the relationship between economic growth and the technological factor is high.

Fig. 4 provides a visual distribution of actual and calculated values of the regression models.

Analysis of the models for the United States and China allows us to deduce that R&D costs are significant regressants contributing to economic growth; the factor impact on GDP growth in the United States and China is 31.6% and 41.9%, respectively; export of high-tech products provides an increase in GDP by 2.7% and 4.7%, respectively. It is worth noting that the obtained negative coefficients in the regression models suggest a weak correlation between the effective feature (economic growth through GDP) and some factor variables. For China, the indicator “Costs incurred in installation and maintenance of equipment/technologies” reveals an inverse relationship with GDP. A similar trend is observed in the United States for the indicator “Production of electronics”. Our calculations confirm that the strongest relationship is observed between GDP and development costs, as well as the share of high-tech industries in global value added.

[Chart omitted]

The current research proves that countries with substantial R&D funding and a large share of high-tech products in GDP and total exports are characterized by sustainable economic growth. Thus, the H1 hypothesis was confirmed.

The H2 hypothesis was partially confirmed: countries capable of using their innovative potential effectively are characterized by an elevated level of competitiveness. However, the use of outdated technologies does not always results in a decrease in global competitiveness, since these processes can be influenced by the institutional environment, which was beyond the scope of the present study

6. Discussion of the results comparing technological effectiveness of economies

Testing the approach using the case studies of China and the United States makes it possible to extrapolate their experience to countries with a low level of technological effectiveness. For example, the China and USA lead the global market for technological innovation. The country’s competitiveness in this field is due to the highly dynamic nature of American business, strong institutional underpinnings, finance mechanisms and a powerful innovation ecosystem [1]. Index of the countries’ technological effectiveness (Table 4) confirms this trend. The calculated values of the Index indicate the leading positions of these countries. The rapid growth of the renewable energy sector is a testament to why China will continue to dominate the sectors in which it invests heavily [44]. Currently, the PRC accounts for 90 % of the world’s supply of mobile phones and personal computers. In 2018, the country’s share in global semiconductor consumption was 41 %; by 2024, it is forecasted to increase to 54 % [45]. Significant funds received from low- and medium-tech industries in China are directed to those economic sectors, which enjoy research, development and implementation of hightech solutions.

It is noteworthy that in terms of the level of technological development, Kazakhstan, Brazil and Ukraine lag significantly behind some European nations (Romania, Poland, and Bulgaria), Turkey and Mexico. These countries do not exhibit sufficient potential to introduce innovations independently, but with regard to successful transfer and adaptation of foreign high technologies, they are significantly ahead of other countries with a similar development level. India is among the countries with high technological growth potential. India is now at a stage where machine learning tools are rapidly replacing entry-level programmers in the IT sector. So far, India is ranked 15th, but the situation may change soon. The comparison showed the advantage of the proposed methodological approach. We have been able to analyze the technicality of countries using universal data sets. The Index of the countries’ technological effectiveness can be a good alternative to other methods of assessment.

During the research, we have confirmed the hypotheses put forward. Assessment of the dependence of economic growth on the technological factor showed a strong relationship between GDP and R&D costs (Tables 5, 6). These results prove that sustainable economic growth is explained in most cases by significant funding for R&D (the presence of a large share of high-tech products in the country’s GDP) and the export of high-tech products.

Therefore, technologies determine competitive advantages of states at large. However, qualitative factors of economic growth prevail in a continuous innovation process. What determines additional limitations of our methodological approach. Special focus should be placed on a specific feature of the periods when changes occur, i.e. the periods of the so-called “technological gap” [46]. This is when the foundations of the future economy are set. Technological incentives crucial for growth are based on the ability to deliver better results. If technological inequality is excessively gross, it can jeopardize economic growth. Creating favorable conditions for the use of high technologies will not only support the competitiveness of production and attract investment in the economy, but also help resolve such issues as enhancing the efficiency of resource exploitation.

Hence, scientific and technological progress is the central stimulus for economic development, which in production processes is implemented through investment and innovation. At that, the dynamics of economic growth in the long run is dependent on a wide array of factors forming supply and demand for technological change: the current techno-logical capability of the national economy [19]; the development stage of financial institutions; companies’ awareness of R&D, and the effectiveness of technology transfer within the innovation infrastructure [47]; the nature of the state scientific and technical, scientific and technological, structural, and stabilization policy, and the level of state guarantees for the protection of intellectual property rights [25]; conditions of foreign economic activity, and competitiveness of products and services in the global market [48]. The characteristics of the listed factors vary significantly across countries, but the multicausality of the factors indicates that their combinations at certain time intervals can both reduce and boost the level of technological effectiveness.

#### Slow growth causes extinction.

Oppenheimer ’21 [Michael; Clinical Professor in Center for Global Affairs @ New York University, Senior Consulting Fellow @ Scenario Planning at the International Institute for Strategic Studies, Former Executive Vice President @ The Futures Group, Member @ Council on Foreign Relations, Member in the Foreign Policy Roundtable @ Carnegie Council on Ethics and International Affairs, Member @ The American Council on Germany; “The Turbulent Future of International Relations,” in *The Future of Global Affairs: Managing Discontinuity, Disruption and Destruction*, p. 23-43]

Four structural forces will shape the future of International Relations: globalization (but without liberal rules, institutions, and leadership)1; multipolarity (the end of American hegemony and wider distribution of power among states and non-states2); the strengthening of distinctive, national and subnational identities, as persistent cultural differences are accentuated by the disruptive effects of Western style globalization (what Samuel Huntington called the “non-westernization of IR”3); and secular economic stagnation, a product of longer term global decline in birth rates combined with aging populations.4 These structural forces do not determine everything. Environmental events, global health challenges, internal political developments, policy mistakes, technology breakthroughs or failures, will intersect with structure to define our future. But these four structural forces will impact the way states behave, in the capacity of great powers to manage their differences, and to act collectively to settle, rather than exploit, the inevitable shocks of the next decade.

Some of these structural forces could be managed to promote prosperity and avoid war. Multipolarity (inherently more prone to conflict than other configurations of power, given coordination problems)5 plus globalization can work in a world of prosperity, convergent values, and effective conflict management. The Congress of Vienna system achieved relative peace in Europe over a hundred-year period through informal cooperation among multiple states sharing a fear of populist revolution. It ended decisively in 1914. Contemporary neoliberal institutionalists, such as John Ikenberry, accept multipolarity as our likely future, but are confident that globalization with liberal characteristics can be sustained without American hegemony, arguing that liberal values and practices have been fully accepted by states, global institutions, and private actors as imperative for growth and political legitimacy.6 Divergent values plus multipolarity can work, though at significantly lower levels of economic growth-in an autarchic world of isolated units, a world envisioned by the advocates of decoupling, including the current American president.7 Divergent values plus globalization can be managed by hegemonic power, exemplified by the decade of the 1990s, when the Washington Consensus, imposed by American leverage exerted through the IMF and other U.S. dominated institutions, overrode national differences, but with real costs to those states undergoing “structural adjustment programs,”8 and ultimately at the cost of global growth, as states—especially in Asia—increased their savings to self insure against future financial crises.9

But all four forces operating simultaneously will produce a future of increasing internal polarization and cross border conflict, diminished economic growth and poverty alleviation, weakened global institutions and norms of behavior, and reduced collective capacity to confront emerging challenges of global warming, accelerating technology change, nuclear weapons innovation and proliferation. As in any effective scenario, this future is clearly visible to any keen observer. We have only to abolish wishful thinking and believe our own eyes.10

Secular Stagnation

This unbrave new world has been emerging for some time, as US power has declined relative to other states, especially China, global liberalism has failed to deliver on its promises, and totalitarian capitalism has proven effective in leveraging globalization for economic growth and political legitimacy while exploiting technology and the state’s coercive powers to maintain internal political control. But this new era was jumpstarted by the world financial crisis of 2007, which revealed the bankruptcy of unregulated market capitalism, weakened faith in US leadership, exacerbated economic deprivation and inequality around the world, ignited growing populism, and undermined international liberal institutions. The skewed distribution of wealth experienced in most developed countries, politically tolerated in periods of growth, became intolerable as growth rates declined. A combination of aging populations, accelerating technology, and global populism/nationalism promises to make this growth decline very difficult to reverse. What Larry Summers and other international political economists have come to call “secular stagnation” increases the likelihood that illiberal globalization, multipolarity, and rising nationalism will define our future. Summers11 has argued that the world is entering a long period of diminishing economic growth. He suggests that secular stagnation “may be the defining macroeconomic challenge of our times.” Julius Probst, in his recent assessment of Summers’ ideas, explains:

…rich countries are ageing as birth rates decline and people live longer. This has pushed down real interest rates because investors think these trends will mean they will make lower returns from investing in future, making them more willing to accept a lower return on government debt as a result.

Other factors that make investors similarly pessimistic include rising global inequality and the slowdown in productivity growth…

This decline in real interest rates matters because economists believe that to overcome an economic downturn, a central bank must drive down the real interest rate to a certain level to encourage more spending and investment… Because real interest rates are so low, Summers and his supporters believe that the rate required to reach full employment is so far into negative territory that it is effectively impossible.

…in the long run, more immigration might be a vital part of curing secular stagnation. Summers also heavily prescribes increased government spending, arguing that it might actually be more prudent than cutting back – especially if the money is spent on infrastructure, education and research and development.

Of course, governments in Europe and the US are instead trying to shut their doors to migrants. And austerity policies have taken their toll on infrastructure and public research. This looks set to ensure that the next recession will be particularly nasty when it comes… Unless governments change course radically, we could be in for a sobering period ahead.12

The rise of nationalism/populism is both cause and effect of this economic outlook. Lower growth will make every aspect of the liberal order more difficult to resuscitate post-Trump. Domestic politics will become more polarized and dysfunctional, as competition for diminishing resources intensifies. International collaboration, ad hoc or through institutions, will become politically toxic. Protectionism, in its multiple forms, will make economic recovery from “secular stagnation” a heavy lift, and the liberal hegemonic leadership and strong institutions that limited the damage of previous downturns, will be unavailable. A clear demonstration of this negative feedback loop is the economic damage being inflicted on the world by Trump’s trade war with China, which— despite the so-called phase one agreement—has predictably escalated from negotiating tactic to imbedded reality, with no end in sight. In a world already suffering from inadequate investment, the uncertainties generated by this confrontation will further curb the investments essential for future growth. Another demonstration of the intersection of structural forces is how populist-motivated controls on immigration (always a weakness in the hyper-globalization narrative) deprives developed countries of Summers’ recommended policy response to secular stagnation, which in a more open world would be a win-win for rich and poor countries alike, increasing wage rates and remittance revenues for the developing countries, replenishing the labor supply for rich countries experiencing low birth rates.

Illiberal Globalization

Economic weakness and rising nationalism (along with multipolarity) will not end globalization, but will profoundly alter its character and greatly reduce its economic and political benefits. Liberal global institutions, under American hegemony, have served multiple purposes, enabling states to improve the quality of international relations and more fully satisfy the needs of their citizens, and provide companies with the legal and institutional stability necessary to manage the inherent risks of global investment. But under present and future conditions these institutions will become the battlegrounds—and the victims—of geopolitical competition. The Trump Administration’s frontal attack on multilateralism is but the final nail in the coffin of the Bretton Woods system in trade and finance, which has been in slow but accelerating decline since the end of the Cold War. Future American leadership may embrace renewed collaboration in global trade and finance, macroeconomic management, environmental sustainability and the like, but repairing the damage requires the heroic assumption that America’s own identity has not been fundamentally altered by the Trump era (four years or eight matters here), and by the internal and global forces that enabled his rise. The fact will remain that a sizeable portion of the American electorate, and a monolithically proTrump Republican Party, is committed to an illiberal future. And even if the effects are transitory, the causes of weakening global collaboration are structural, not subject to the efforts of some hypothetical future US liberal leadership. It is clear that the US has lost respect among its rivals, and trust among its allies. While its economic and military capacity is still greatly superior to all others, its political dysfunction has diminished its ability to convert this wealth into effective power.13 It will furthermore operate in a future system of diffusing material power, diverging economic and political governance approaches, and rising nationalism. Trump has promoted these forces, but did not invent them, and future US Administrations will struggle to cope with them.

What will illiberal globalization look like? Consider recent events. The instruments of globalization have been weaponized by strong states in pursuit of their geopolitical objectives. This has turned the liberal argument on behalf of globalization on its head. Instead of interdependence as an unstoppable force pushing states toward collaboration and convergence around market-friendly domestic policies, states are exploiting interdependence to inflict harm on their adversaries, and even on their allies. The increasing interaction across national boundaries that globalization entails, now produces not harmonization and cooperation, but friction and escalating trade and investment disputes.14 The Trump Administration is in the lead here, but it is not alone. Trade and investment friction with China is the most obvious and damaging example, precipitated by China’s long failure to conform to the World Trade Organization (WTO) principles, now escalated by President Trump into a trade and currency war disturbingly reminiscent of the 1930s that Bretton Woods was designed to prevent. Financial sanctions against Iran, in violation of US obligations in the Joint Comprehensive Plan Of Action (JCPOA), is another example of the rule of law succumbing to geopolitical competition. Though more mercantilist in intent than geopolitical, US tariffs on steel and aluminum, and their threatened use in automotives, aimed at the EU, Canada, and Japan,15 are equally destructive of the liberal system and of future economic growth, imposed as they are by the author of that system, and will spread to others. And indeed, Japan has used export controls in its escalating conflict with South Korea16 (as did China in imposing controls on rare earth,17 and as the US has done as part of its trade war with China). Inward foreign direct investment restrictions are spreading. The vitality of the WTO is being sapped by its inability to complete the Doha Round, by the proliferation of bilateral and regional agreements, and now by the Trump Administration’s hold on appointments to WTO judicial panels. It should not surprise anyone if, during a second term, Trump formally withdrew the US from the WTO. At a minimum it will become a “dead letter regime.”18

As such measures gain traction, it will become clear to states—and to companies—that a global trading system more responsive to raw power than to law entails escalating risk and diminishing benefits. This will be the end of economic globalization, and its many benefits, as we know it. It represents nothing less than the subordination of economic globalization, a system which many thought obeyed its own logic, to an international politics of zero-sum power competition among multiple actors with divergent interests and values. The costs will be significant: Bloomberg Economics estimates that the cost in lost US GDP in 2019- dollar terms from the trade war with China has reached $134 billion to date and will rise to a total of $316 billion by the end of 2020.19

Economically, the just-in-time, maximally efficient world of global supply chains, driving down costs, incentivizing innovation, spreading investment, integrating new countries and populations into the global system, is being Balkanized. Bilateral and regional deals are proliferating, while global, nondiscriminatory trade agreements are at an end. Economies of scale will shrink, incentivizing less investment, increasing costs and prices, compromising growth, marginalizing countries whose growth and poverty reduction depended on participation in global supply chains. A world already suffering from excess savings (in the corporate sector, among mostly Asian countries) will respond to heightened risk and uncertainty with further retrenchment. The problem is perfectly captured by Tim Boyle, CEO of Columbia Sportswear, whose supply chain runs through China, reacting to yet another ratcheting up of US tariffs on Chinese imports, most recently on consumer goods:

We move stuff around to take advantage of inexpensive labor. That’s why we’re in Bangladesh. That’s why we’re looking at Africa. We’re putting investment capital to work, to get a return for our shareholders. So, when we make a wager on investment, this is not Vegas. We have to have a reasonable expectation we can get a return. That’s predicated on the rule of law: where can we expect the laws to be enforced, and for the foreseeable future, the rules will be in place? That’s what America used to be.20

The international political effects will be equally damaging. The four structural forces act on each other to produce the more dangerous, less prosperous world projected here. Illiberal globalization represents geopolitical conflict by (at first) physically non-kinetic means. It arises from intensifying competition among powerful states with divergent interests and identities, but in its effects drives down growth and fuels increased nationalism/populism, which further contributes to conflict. Twenty-first-century protectionism represents bottom-up forces arising from economic disruption. But it is also a top-down phenomenon, representing a strategic effort by political leadership to reduce the constraints of interdependence on freedom of geopolitical action, in effect a precursor and enabler of war. This is the disturbing hypothesis of Daniel Drezner, argued in an important May 2019 piece in Reason, titled “Will Today’s Global Trade Wars Lead to World War Three,”21 which examines the preWorld War I period of heightened trade conflict, its contribution to the disaster that followed, and its parallels to the present:

Before the First World War started, powers great and small took a variety of steps to thwart the globalization of the 19th century. Each of these steps made it easier for the key combatants to conceive of a general war.

We are beginning to see a similar approach to the globalization of the 21st century. One by one, the economic constraints on military aggression are eroding. And too many have forgotten—or never knew—how this played out a century ago.

…In many ways, 19th century globalization was a victim of its own success. Reduced tariffs and transport costs flooded Europe with inexpensive grains from Russia and the United States. The incomes of landowners in these countries suffered a serious hit, and the Long Depression that ran from 1873 until 1896 generated pressure on European governments to protect against cheap imports.

…The primary lesson to draw from the years before 1914 is not that economic interdependence was a weak constraint on military conflict. It is that, even in a globalized economy, governments can take protectionist actions to reduce their interdependence in anticipation of future wars.

In retrospect, the 30 years of tariff hikes, trade wars, and currency conflicts that preceded 1914 were harbingers of the devastation to come. European governments did not necessarily want to ignite a war among the great powers. By reducing their interdependence, however, they made that option conceivable.

…the backlash to globalization that preceded the Great War seems to be reprised in the current moment. Indeed, there are ways in which the current moment is scarier than the pre-1914 era. Back then, the world’s hegemon, the United Kingdom, acted as a brake on economic closure. In 2019, the United States is the protectionist with its foot on the accelerator. The constraints of Sino-American interdependence—what economist Larry Summers once called “the financial balance of terror”—no longer look so binding. And there are far too many hot spots—the Korean peninsula, the South China Sea, Taiwan—where the kindling seems awfully dry.

Multipolarity

We can define multipolarity as a wide distribution of power among multiple independent states. Exact equivalence of material power is not implied. What is required is the possession by several states of the capacity to coerce others to act in ways they would otherwise not, through kinetic or other means (economic sanctions, political manipulation, denial of access to essential resources, etc.). Such a distribution of power presents inherently graver challenges to peace and stability than do unipolar or bipolar power configurations,22 though of course none are safe or permanent. In brief, the greater the number of consequential actors, the greater the challenge of coordinating actions to avoid, manage, or de-escalate conflicts. Multipolarity also entails a greater potential for sudden changes in the balance of power, as one state may defect to another coalition or opt out, and as a result, the greater the degree of uncertainty experienced by all states, and the greater the plausibility of downside assumptions about the intentions and capabilities of one’s adversaries. This psychology, always present in international politics but particularly powerful in multipolarity, heightens the potential for escalation of minor conflicts, and of states launching preventive or preemptive wars. In multipolarity, states are always on edge, entertaining worst-case scenarios about actual and potential enemies, and acting on these fears—expanding their armies, introducing new weapon systems, altering doctrine to relax constraints on the use of force—in ways that reinforce the worst fears of others.

The risks inherent in multipolarity are heightened by the attendant weakening of global institutions. Even in a state-centric system, such institutions can facilitate communication and transparency, helping states to manage conflicts by reducing the potential for misperception and escalation toward war. But, as Waheguru Pal Singh Sidhu argues in his chapter on the United Nations, the influence of multilateral institutions as agent and actor is clearly in decline, a result of bottom-up populist/nationalist pressures experienced in many countries, as well as the coordination problems that increase in a system of multiple great powers. As conflict resolution institutions atrophy, great powers will find themselves in “security dilemmas”23 in which verification of a rival’s intentions is unavailable, and worst-case assumptions fill the gap created by uncertainty. And the supply of conflicts will expand as a result of growing nationalism and populism, which are premised on hostility, paranoia, and isolation, with governments seeking political legitimacy through external conflict, producing a siege mentality that deliberately cuts off communication with other states.

Finally, the transition from unipolarity (roughly 1989–2007) to multipolarity is unregulated and hazardous, as the existing superpower fears and resists challenges to its primacy from a rising power or powers, while the rising power entertains new ambitions as entitlements now within its reach. Such a “power transition” and its dangers were identified by Thucydides in explaining the Peloponnesian Wars,24 by Organski (the “rear-end collision”)25 during the Cold War, and recently repopularized and brought up to date by Graham Allison in predicting conflict between the US and China.26

A useful, and consequential illustration of the inherent challenge of conflict management during a power transition toward multipolarity, is the weakening of the arms control regime negotiated by the US and the Soviet Union during the Cold War. Despite the existential, global conflict between two nuclear armed superpowers embracing diametrically opposed world views and operating in economic isolation from each other, the two managed to avoid worst-case outcomes. They accomplished this in part by institutionalizing verifiable limits on testing and deployment of both strategic and intermediate-range nuclear missiles. Yet as diplomatically and technically challenging as these achievements were, the introduction of a third great power, China, into this twocountry calculus has proven to be a deal breaker. Unconstrained by these bilateral agreements, China has been free to build up its capability, and has taken full advantage in ramping up production and deployment of intermediate-range ground-launched cruise missiles, thus challenging the US ability to credibly guarantee the security of its allies in Asia, and greatly increasing the costs of maintaining its Asian regional hegemony. As a result, the Intermediate Nuclear Force treaty is effectively dead, and the New Start Treaty, covering strategic missiles, is due to expire next year, with no indication of any US–Russian consensus to extend it. The US has with logic indicated its interest in making these agreements trilateral; but China, with its growing power and ambition, has also logically rejected these overtures. Thus, all three great powers are entering a period of nuclear weapons competition unconstrained by the major Cold War arms control regimes. In a period of rapid advances in technology and worsening great power relations, the nuclear competition will be a defining characteristic of the next decade and beyond. This dynamic will also complicate nuclear nonproliferation efforts, as both the demand for nuclear weapons (a consequence of rising regional and global insecurity), and supply of nuclear materials and technology (a result of the weakening of the nonproliferation regime and deteriorating great power relations) will increase.

Will deterrence prevent war in a world of several nuclear weapons states, (the current nuclear powers plus South Korea, Iran, Saudi Arabia, Japan, Turkey), as it helped to do during the bipolar Cold War? Some neorealist observers view nuclear weapons proliferation as stabilizing, extending the balance of terror, and the imperative of restraint, to new nuclear weapons states with much to fight over (Saudi Arabia and Iran, for example).27 Others,28 examining issues of command and control of nuclear weapons deployment and use by newly acquiring states, asymmetries in doctrines, force structures, and capabilities between rivals, the perils of variable rates in transition to weapons deployment, problems of communication between states with deep mutual grievances, the heightened risk of transfer of such weapons to non-state actors, have grave doubts about the safety of a multipolar, nuclear-armed world.29 We can at least conclude that prudence dictates heightened efforts to slow the pace of proliferation, while realism requires that we face a proliferated future with eyes wide open.

The current distribution of power is not perfectly multipolar. The US still commands the world’s largest economy, and its military power is unrivaled by any state or combination of states. Its population is still growing, despite a recent decline in birth rates. It enjoys extraordinary geographic advantages over its rivals, who are distant and live in far worse neighborhoods. Its economy is less dependent on foreign markets or resources. Its political system has proven—up to now—to be resilient and adaptable. Its global alliance system greatly extends its capacity to defend itself and shape the world to its liking and is still intact, despite growing doubts about America’s reliability as a security guarantor. Based on these mostly material and historical criteria, continued American primacy would seem to be a good bet, if it chooses to use its power in this way.30

So why multipolarity? The clearest and most frequently cited evidence for a widening distribution of global power away from American unipolarity is the narrowing gap in GDP between the US and China. The IMF’s World Economic Outlook forecasts a $0.9 trillion increase in US GDP for 2019–2020, and a $1.3 trillion increase for China in the same period.31 Many who support the American primacy case argue that GDP is an imperfect measure of power, that Chinese GDP data is inflated, that its growth rates are in decline while Chinese debt is rapidly increasing, and that China does poorly on other factors that contribute to power—its low per capita GDP, its political succession challenges, its environmental crisis, its absence of any external alliance system. Yet GDP is a good place to start, as the single most useful measure and long-term predictor of power. It is from the overall economy that states extract and apply material power to leverage desired behavior from other states. It is true that robust future Chinese growth is not guaranteed, nor is its capacity to convert its wealth to power, which is a function of how well its political system works over time. But this is equally the case for the US, and considering recent political developments is not a given for either country.

As an alternative to measuring inputs—economic size, political legitimacy, technological innovation, population growth—in assessing relative power and the nature of global power distribution, we should consider outputs: what are states doing with their power? The input measures are useful, possibly predictive, but are usually deployed in the course of making a foreign policy argument, sometimes on behalf of a reassertion of American primacy, sometimes on behalf of retrenchment. As such, their objectivity (despite their generous deployment of “data”) is open to question. What is undeniable, to any clear-eyed observer, is a real decline in American influence in the world, and a rise in the influence of other powers, which predates the Trump administration but has accelerated into America’s free fall over the last four years. This has produced a de facto multipolarity, whether explainable in the various measures of power—actual and latent—or not. This decline results in part from policy mistakes: a reckless squandering of material power and legitimacy in Iraq, an overabundance of caution in Syria, and now pure impulsivity. But more fundamentally, it is a product of relative decline in American capacity—political and economic—to which American leadership is adjusting haphazardly, but in the direction of retrenchment/restraint. It is highly revealing that the last two American presidents, polar opposites in intellect, temperament and values, agreed on one fundamental point: the US is overextended, and needs to retrench. The fact that neither Obama nor Trump (up to this point in his presidency) believed they had the power at their disposal to do anything else, tells us far more about the future of American power and policy—and about the emerging shape of international relations—than the power measures and comparisons made by foreign policy advocates.

Observation of recent trends in US versus Russian relative influence prompts another question: do we understand the emerging characteristics of power? Rigorously measuring and comparing the wrong parameters will get us nowhere at best and mislead us into misguided policies at worst. How often have we heard, with puzzlement, that Putin punches far above his weight? Could it be that we misunderstand what constitutes “weight” in the contemporary and emerging world? Putin may be on a high wire, and bound to come crashing down; but the fact is that Russian influence, leveraging sophisticated communications/social media/influence operations, a strong military, an agile (Putin-dominated) decision process, and taking advantage of the egregious mistakes by the West, has been advancing for over a decade, shows no sign of slowing down, and has created additional opportunities for itself in the Middle East, Europe, Asia, Latin America, the Arctic. It has done this with an economy roughly the size of Italy’s. There are few signs of a domestic political challenge to Putin. His external opponents are in disarray, and Russia’s main adversary is politically disabled from confronting the problem. He has established Russia as the Middle East power broker. He has reached into the internal politics of his Western adversaries and influenced their leadership choices. He has invaded and absorbed the territory of neighboring states. His actions have produced deep divisions within NATO. Again, simple observation suggests multipolarity in fact, and a full explanation for this power shift awaiting future historians able to look with more objectivity at twenty-first-century elements of power.

When that history is written, surely it will emphasize the extraordinary polarization in American politics. Was multipolarity a case of others finding leverage in new sources of power, or the US underutilizing its own? The material measures suggest sufficient capacity for sustained American primacy, but with this latent capacity unavailable (as perceived, I believe correctly, by political leadership) by virtue of weakening institutions: two major parties in separate universes; a winnertake-all political mentality; deep polarization between the parties’ popular bases of support; divided government, with the Presidency and the Congress often in separate and antagonistic hands; diminishing trust in the permanent government, and in the knowledge it brings to important decisions, and deepening distrust between the intelligence community and policymakers; and, in Trump’s case, a chaotic policy process that lacks any strategic reference points, mis-communicates the Administration’s intentions, and has proven incapable of sustained, coherent diplomacy on behalf of any explicit and consistent set of policy goals.

Rising Nationalism/Populism/Authoritarianism

The evidence for these trends is clear. Freedom House, the go-to authority on the state of global democracy, just published its annual assessment for 2020, and recorded the fourteenth consecutive year of global democratic decline and advancing authoritarianism. This dramatic deterioration includes both a weakening in democratic practice within states still deemed on balance democratic, and a shift from weak democracies to authoritarianism in others. Commitment to democratic norms and practices—freedom of speech and of the press, independent judiciaries, protection of minority rights—is in decline. The decline is evident across the global system and encompasses all major powers, from India and China, to Europe, to the US. Right-wing populist parties have assumed power, or constitute a politically significant minority, in a lengthening list of democratic states, including both new (Hungary, Poland) and established (India, the US, the UK) democracies. Nationalism, frequently dismissed by liberal globalization advocates as a weak force when confronted by market democracies’ presumed inherent superiority, has experienced a resurgence in Russia, China, the Middle East, and at home. Given the breadth and depth of right-wing populism, the raw power that promotes it—mainly Russian and American—and the disarray of its liberal opponents, this factor will weigh heavily on the future.

The major factors contributing to right-wing populism and its global spread is the subject of much discussion.32 The most straightforward explanation is rising inequality and diminished intergenerational mobility, particularly in developed countries whose labor-intensive manufacturing has been hit hardest by the globalization of capital combined with the immobility of labor. Jobs, wages, economic security, a reasonable hope that one’s offspring has a shot at a better life than one’s own, the erosion of social capital within economically marginalized communities, government failure to provide a decent safety net and job retraining for those battered by globalization: all have contributed to a sense of desperation and raw anger in the hollowed-out communities of formerly prosperous industrial areas. The declining life expectancy numbers33 tell a story of immiseration: drug addition, suicide, poor health care, and gun violence. The political expression of such conditions of life should not be surprising. Simple, extremist “solutions” become irresistible. Sectarian, racial, regional divides are strengthened, and exclusive identities are sharpened. Political entrepreneurs offering to blow up the system blamed for such conditions become credible. Those who are perceived as having benefited from the corrupt system—long-standing institutions of government, foreign countries and populations, immigrants, minorities getting a “free ride,” elites—become targets of recrimination and violence. The simple solutions of course, don’t work, deepening the underlying crisis, but in the process politics is poisoned. If this sounds like the US, it should, but it also describes major European countries (the UK, France, Italy, Germany, Poland, Hungary, the Czech Republic), and could be an indication of things to come for non-Western democracies like India.

We have emphasized throughout this chapter the interaction of four structural forces in shaping the future, and this interaction is evident here as well. Is it merely coincidence that the period of democratic decline documented by Freedom House, coincides precisely with the global financial and economic crisis? Lower growth, increasing joblessness, wage stagnation, superimposed on longer-term widening of inequality and declining mobility, constitute a forbidding stress test for democratic systems, and many continue to fail. And if we are correct about secular stagnation, the stress will continue, and authoritarianism’s fourteen-year run will not be over for some time. The antidemocratic trend will gain additional impetus from the illiberal direction of globalization, with its growth suppressing protectionism, weaponization of global economic exchange, and weakening global economic institutions. Multipolarity also contributes, in several ways. The former hegemon and author of globalization’s liberal structure has lost its appetite, and arguably its capacity, for leadership, and indeed has become part of the problem, succumbing to and promoting the global right-wing populist surge. It is suffering an unprecedented decline in life expectancy, and recently a decline in the birth rate, signaling a degree of rot commonly associated with a collapsing Soviet Union. While American politics may once again cohere around its liberal values and interests, the time when American leadership had the self-confidence to shape the global system in its liberal image is gone. It may build coalitions of the like-minded to launch liberal projects, but there will be too much power outside these coalitions to permit liberal globalization of the sort imagined at the end of the Cold War. In multipolarity, the values around which global politics revolve will reflect the diversity of major powers, their interests, and the norms they embrace. Convergence of norms, practices, policies is out of the question. Global collective action, even in the face of global crises, will be a long shot. To expect anything else is fantasy

Unbrave New World and Future Challenges

At the outset of this chapter we described these structural forces as interacting to produce more conflict and diminished prosperity. We also predicted a world with shrinking collective capacity to address new challenges as they arise. What specifically will such a world look like? We address below three principal challenges to global problem solving over the next decade.

Interstate Conflict

In the world experienced by most readers of this volume, conflict is observed within weak states, sometimes promoted by regional competitors, by terrorist groups, or by great powers, acting through surrogates or by indirect means. Sometimes, as in Syria, this conflict spills over to contiguous states and contributes to regional instability, and challenges other regions to respond effectively, a challenge that Europe has not met. Much of this will continue, but the global significance of such local conflicts will be greatly magnified by increasing great power conflict, which will feed—rather than manage or resolve—local instabilities and will in turn be exacerbated by them. Great powers will jockey for advantage, support their local partners, escalate preemptively. Conflicts initially confined to failing states or unstable regions will be redefined by great powers as global in scope and significance.

This tendency of states to view local conflicts in the context of a zero-sum, global struggle for power is familiar to students of the Cold War, but now with the additional challenges to collective action, expanded uncertainty and worst-case thinking associated with the power transition to multipolarity. We can easily observe increased conflict in US–China relations, as we will in US–Russia relations as future US administrations try to make up for ground lost during the Trump presidency, especially in the Middle East. We can observe it among powerful states with mutual historical grievances, now with a weakening presence of the hegemonic security guarantor and having to consider the renationalization of their defense: Japan-South Korea, Germany-France. We can observe it among historical rivals operating in rapidly changing security landscapes: India-China. We can observe it within the Middle East, as internal rivalries are appropriated by regional powers in a contest for regional dominance. We can observe it clearly in Syria, where the regime’s violent suppression of Arab Spring resistance led to all-out civil war, attracted outside support to proxy forces by aspiring regional hegemons Saudi Arabia and Iran, enabled the rise of ISIS, and eventually to great power intervention, principally by Russia. In a world of effective great power collaboration or American primacy, the Syrian civil war might have been settled through power sharing or partition, or if not, contained within Syria. The collapse of Yugoslavia, occurring during a period of US “unipolarity” and managed effectively, demonstrates the possibilities. Instead, with the US retrenching, Middle East rivals unconstrained by great powers, and great power competition rising, the Syria civil war was fed by outside powers, then metastasized into the region, and—in the form of refugee flows—into Europe, fundamentally altering European politics. Libya may be at the early stages of this scenario.

This is not the end of the Syria story. Russia has established itself as a major player in Syria and the Middle East’s power broker, the indispensable country with leverage throughout the region. China is poised to reap the financial and power benefits of Syrian reconstruction. The US has just demonstrated, in its act of war against the Iranian regime, its willingness, without consultation, to put its allies’ security in further jeopardy, accentuating the risks of security ties with Washington and generating added opportunities for Russia and China. The purpose here is not to critique US policy, but to point out the dramatically shifting power balance in a critical region, toward multipolarity. The dangers of such a shift will become apparent as some future US president attempts to reassert US influence in the region and finds a crowded playing field.

Can a multipolar distribution of power among several states whose interests, values, and political practices are divergent, all experiencing bottom-up nationalist pressures, all seeking advantages in the oversupply of regional instability, be made to work? I think not. Will this more dangerous world descend into direct military confrontation between great powers, and could such confrontation lead to use of nuclear weapons? Here the question becomes, what will this more dangerous world actually look like; what instruments of coercion will be available to states as technology change accelerates; how will states employ these instruments; how will deterrence work (if at all) among several states with large but unequal levels of destructive capacity, weak command, and control, disparate— or opaque—strategies and simmering rivalries; can conflict management work in a world of weak institutions? The collapse of the Cold War era nuclear arms control regime, the threat to the Non-Proliferation Treaty represented by the demise of the JCPOA, and multiple indications of an accelerating nuclear arms race among the three principle powers, augurs badly. Given the structural forces at play, and without predicting the worst, we are indeed entering perilous times.

Global Poverty and Inequality

Despite the challenges of volatility and disruptive change inherent in globalization, the world under American liberal leadership has managed a dramatic reduction of extreme poverty. According to World Bank estimates, in 2015, 10 percent of the world’s population lived on less than $1.90 a day, down from nearly 36 percent in 1990.34 In fact, as of September 2018, half the world is now middle class or wealthier.35 The uneven success of the UN Millennium Development Goals (MDGs) exemplifies this achievement, and demonstrates what is possible when open markets are managed through strong global institutions, effective leadership and interstate collaboration. What this liberal hegemonic system did not achieve, however, was a fair distribution of the gains from globalization within states, and among those states that for various reasons were not full participants in this system.

This record of partial achievement leaves us with a full agenda for the next fifteen years, but without the hegemonic leadership, strong institutions, ascendant liberalism or robust global growth that enabled previous gains. There are powerful reasons to question the sustainability of these poverty reduction gains, leading to doubts about the realization of the Sustainable Development Goals, which have replaced the MDGs as global development targets.36 (See Jens Rudbeck’s chapter and Sidhu’s UN chapter for SDGs). Skeptics have pointed to slowing global growth, specifically in China, whose demand for imported commodities was a major factor in developing country growth and job creation; growing protectionism in developed country markets, fueled by bottom-up forces of nationalism, and from top-down by a weakened global trading regime and increased geopolitical rivalry; the effects of accelerating climate change on agriculture, migration and communal conflict in poor countries; and the growth burst among poor countries from the rapid transition to more efficient use of resources, a transition that is now slowing down.37

Perhaps the greatest concern in this scenario is a general deterioration in the developing country foreign investment climate. Foreign direct investment (FDI) has been a major contributor to growth, job creation, and poverty alleviation among poor countries. It has incentivized growthfriendly policies, reduced corruption, introduced technology and effective management practices, and linked poor countries to foreign markets through global supply chains.38 It has stimulated growth of indigenous manufacturing and service companies to supply new foreign investments.

It has been the major cause of economic convergence between rich and poor countries. From 2000 to 2009, developing economies’ growth rates were more than four percentage points higher than those of rich countries, pushing their share of global output from just over a third to nearly half.39 However, FDI flows into poor countries are imperiled by the structural forces discussed here. Political instability arising from slower growth and environmental stress will increase investors’ perception of higher risk, reinforcing their developed country bias. Protectionism among developed countries will threaten the global market access upon which manufacturing investment in developing countries is premised, causing firms to pare back their global supply chains. As companies retrench from direct investment in poor countries, the appeal to those countries of Chinese debt financed infrastructure projects, under the Belt-Road Initiative with little or no conditionality, but at the risk of “debt traps,” will increase.

Global Warming

The question posed at the beginning of this section is whether the international system, evolving toward multipolarity and rising nationalism, will find the collective political capital to confront challenges as they arise. Global warming is the mother of all challenges, and the weakness in the system’s capacity to respond is clear. With the two major political/economic powers and greenhouse gas emitters locked in deepening geopolitical conflict (and with one of them locked in climate change denial, possibly through 2024), the chances of significantly slowing global warming or even ameliorating its effects are very slim. We are reduced to the default option, nation-specific adaptation to climate change, which will impose rising human, political and economic costs on all, and will widen the gap between rich countries with adaptive capacity (of varying degrees), and the poor, who will suffer deteriorating economic, political, and social conditions. (For a contrary, optimistic view see Michael Shank’s chapter, which credits new actors—like cities—as playing a more constructive role in climate mitigation.) This would bring to a close liberal globalization’s greatest achievement; the raising of 1.1 billion people out of extreme poverty since 1990,40 with all its associated gains in quality of life (in the WHO Africa region, for example, life expectancy rose by 10.3 years between 2000 and 2016, driven mainly by improvements in child survival and expanded access to antiretrovirals for treatment of HIV).41

Several forces are at work here. The problem itself is graver—in magnitude and in rate of worsening—than predicted by climate scientists. The UN Intergovernmental Panel on Climate Change (IPCC), the major source of information on global warming, has consistently underpredicted the rate of climate deterioration. This holds true even for its “worst-case scenarios,” meaning that what was meant as a wake-up call has in fact reinforced complacency.42 (see Michael Shank’s chapter for further discussion of climate change). The IPCC, in its 2019 report, has tried to undo the damage by emphasizing the acceleration in the rate of warming and its effects, the only partially understood dynamic of climate change, and—given wide uncertainty—the possibility of unpleasant surprises yet to come. This strengthens the scientific case for urgency—to both severely limit greenhouse gas emissions, and to increase investment in ameliorating the effects.

Unfortunately, the crisis comes at a moment when the climate for collective action is ice cold. Geopolitical competition incentivizes states to out produce each other, regardless of the environmental effects. Multipolarity complicates collective action. Economic stagnation mandates job creation, making regulation politically toxic. Bottom-up nationalism/populism causes states to pursue “relative gains,” meaning that if the nation is seen as gaining in a no-holds-barred economic competition with others, the negative environmental effects can be tolerated. A post-Trump presidency would help, with the US rejoining the Paris Agreement, and lending its weight to tighter regulation, increased R and D, and stronger economic incentives to reduce carbon emissions. Keep in mind, however, that President Obama was fully behind such efforts, but in a deeply polarized America was unable to implement measures needed to fulfill the Paris obligations through legislation, and his executive orders to do this were swiftly overturned by Trump.

Conclusion

It may be tempting to hope that post-Trump, the US can regain its global leadership and exert its considerable power in a liberal direction, but with enough self-awareness of its relative decline to share responsibility with others. This was, I believe, the broad direction of the Obama strategy, evidenced by the JCPOA and the Trans-Pacific Partnership: liberal, collective solutions to global problems, as US dominance receded.

This would constitute an optimistic scenario, and it confronts two major problems: can US internal politics support it (can, for example, the country legislate controls on carbon, essential for the global credibility and durability of such commitments); and is the world ready to reengage with American leadership, given the damage to its reputation and the structural forces discussed in this chapter?

My educated guess is no, on both counts. The rot within is extensive, the concrete evidence clear in the economic inequality/immobility numbers, the life expectancy numbers, the deep political polarization, between the two major parties, between regions, between cities and rural areas. We are in fact a long way from fitness for global leadership, and the recognition of this by others will accelerate the decline of American influence. The rest of the world is well on its way toward adjusting to post-American hegemony, some by renationalizing their defense, or by cutting deals with adversaries, by building new alliances or by seizing new opportunities for influence in the vacuum left by American retrenchment. The evidence for this will accumulate. Observe the current and emerging Middle East, where all these post-hegemonic strategies are visible.

#### Platform dependency on Chinese markets fuels digital authoritarianism – separations and start-up entrance decouples us from Chinese markets.

Sitaraman ’20 [Ganesh; Co-founder and Director of Policy @ Great Democracy Initiative, Professor of Law @ Vanderbilt University; “Too Big to Prevail: The National Security Case for Breaking Up Big Tech,” *Foreign Affairs* 99(2), p. 116-126; AS]

But the national security case against breaking up Big Tech is not just weak; it is backward. Far from competing with China, many big technology companies are operating in the country, and their growing entanglements there create vulnerabilities for the United States by exposing its firms to espionage and economic coercion. At home, market concentration in the technology sector also means less competition and therefore less innovation, which threatens to leave the United States in a worse position to compete with foreign rivals. Rather than threatening to undermine national security, breaking up and regulating Big Tech is necessary to protect the United States’ democratic freedoms and preserve its ability to compete with and defend against new great-power rivals.

DESTINATION: CHINA

Competition with China will define U.S. national security conversations for decades to come, and Americans need to think carefully about the role technology will play in this increasingly competitive environment. But to claim that the likes of Amazon and Google are helping counter China’s technological and geopolitical rise simply because they are American companies makes little sense.

Almost all big U.S. technology companies have extensive operations in China today. Google announced plans for an AI research center in Beijing in 2017 and is exploring a partnership with the Chinese Internet behemoth Tencent. Microsoft is expanding its data centers in China and has recently built an entire operating system, Windows 10 China Government Edition, for the Chinese government. Amazon’s cloud service in China is second in popularity only to that of its Chinese counterpart, Alibaba. Apple famously designs its phones in California but manufactures them in China. Facebook, notably, does not operate in China—but not for lack of trying. The company repeatedly attempted to gain access to the Chinese market only to be blocked by Chinese government officials.

Merely operating in China may seem harmless. Yet according to scholars, U.S. government officials, and even American business associations, any U.S. technology company working in China could very well be supporting the Chinese state and the expansion of digital authoritarianism. In the course of their operations in the country, U.S. companies routinely interact with Chinese companies, some of which are run or partly owned by the state. Those that are not still have informal ties to state and Communist Party officials and face strong incentives to behave as the state wishes even without direct pressure from the government. Because the Chinese market and the state are intertwined in this way, Chinese companies that partner with foreign ones are highly likely to pass along operational and technological developments to the Chinese government and military, including in ways that could advance Beijing’s emerging surveillance state and accelerate its ability to spread its model of digital authoritarianism around the world.

These challenges are particularly clear in the case of AI, as commercial innovations in that field can also have military implications. Under Beijing’s doctrine of “civil-military fusion,” Chinese researchers and private companies are working ever more closely with the government and the military, which means that technological innovations that may have originated with a foreign company active in China can find their way to supporting the People’s Liberation Army. “If you’re working in China,” Ashton Carter, a former U.S. defense secretary, has said, “you don’t know whether you’re working on a project for the military or not.”

In addition to widely known concerns about Chinese espionage and surveillance, integration with the Chinese market also opens Big Tech—and the United States—to pressure from China, which can use that influence to hurt U.S. interests. Scholars refer to this tactic—turning economic interdependence into political leverage—by a variety of terms, including “geoeconomics,” “reverse entanglement,” and “weaponized interdependence.” Whatever it’s called, China has a long track record of doing it, across countries and industries. To retaliate against South Korea’s adoption of a U.S. missile defense system in 2017, China blocked Chinese travel agencies from offering trips to the country. And after the dissident Liu Xiaobo was awarded the Nobel Peace Prize in 2010, China temporarily blocked imports from Norway.

To avoid offending Chinese officials and potentially losing access to the country’s large market, companies are adapting their behavior even outside China’s borders. Hollywood studios have been accused of rewriting scripts and editing scenes for that purpose: choosing to blow up the Taj Mahal instead of the Great Wall of China in the movie Pixels, according to Reuters, and replacing China with North Korea as the main adversary in the 2012 remake of Red Dawn, according to the Los Angeles Times. In 2019, Daryl Morey, the general manager of the NBA basketball team the Houston Rockets, tweeted in support of pro-democracy protesters in Hong Kong; soon thereafter, he deleted the post. In the days that followed, the owner of the Rockets wrote that Morey did “NOT speak” for the team, and the NBA said it was “regrettable” that Morey’s views had “deeply offended many of our friends in China.” (After a public outcry, the NBA clarified that it would not censor or fire Morey.) A year earlier, Mercedes-Benz had posted a quote from the Dalai Lama on Instagram. After an online backlash in China, the automaker quickly erased the quote, and its parent company, Daimler, said that the post had contained an “erroneous message” and had “hurt the feelings of people” in China. The People’s Daily, China’s largest newspaper, later branded Mercedes-Benz as an “enemy of the people.”

Such conduct by Western companies illustrates a broader point: they act based on their commercial interests, not in the name of abstract democratic principles or for the cause of U.S. national security. The same is true when these companies try to influence government policy. The potential stakes are high. The U.S. Department of Commerce, for instance, has the power to set export restrictions on some sensitive technologies, including AI; those restrictions may be important from a national security standpoint, even if they negatively affect some companies’ bottom lines. Yet the dominant ideology among corporate lawyers today holds that the sole aim of managers is to maximize shareholder profits, and corporate lobbyists are thus likely to advocate public policies that support those profits even if they run counter to U.S. national interests.

Practically all U.S. companies active in China are subject to such pressures to one degree or another, and how to address that predicament is another question altogether. But the size and dominance of American technology companies are part of the problem. As the U.S. technology sector becomes more concentrated and the few players in it become more dependent on the Chinese market for consumers and profits, these firms—and, by extension, the United States—become more vulnerable to pressure from Beijing. Antimonopoly policies could help remedy this problem: in a fractured market with many players, the sheer number of firms would all but guarantee that some would build supply chains that circumvented China, or build their products wholly in the United States, or simply choose not to engage in the Chinese market—whether because of idiosyncratic preferences, competitive dynamics, product differentiation, higher costs, or other factors.

Consider another industry whose structure resembles that of Big Tech: Hollywood. Like the technology industry, today’s entertainment sector consists of a handful of studios that are increasingly dominant at the box office and able to pressure theaters to give their content preferential treatment. If these big, integrated companies comply with Chinese censors out of a concern for market access, then U.S. consumers will not see content that offends the Chinese government. By contrast, in a system with a large number of small studios and competitive distribution channels, many companies would lack the size, scope, or desire to cater to the Chinese market, let alone be dependent on it. Nor would they have the power or scale to lock out new competitors through vertical integration. The result would be a market in which Americans had a range of content choices, including entertainment that might not accord with the views of foreign censors.

Of course, in theory, it is possible that a small number of big U.S. technology firms, each with monopoly-like power, might be so profitable as to have no need for the Chinese market, whereas small companies with razor-thin profit margins might depend more on that market for consumers and profits. But this hypothesis has not been borne out. The current technology sector is already highly concentrated, and yet today’s technology companies are not forsaking the Chinese market; instead, they are desperate to expand their business there.

As they do so, they will likely be subject to the same pressures bearing down on Hollywood, the NBA, Mercedes, and other entities that want to operate in China. Companies such as Amazon and Google, which both produce their own content and distribute it through their platforms, may over time be tempted to make that content palatable to Chinese censors. And because those firms have immense market power within the United States, American consumers will be left with no serious, scalable alternatives.

A more competitive technology sector, with many smaller players, would also mitigate the ill effects of lobbying, for much the same reasons. Fewer companies would be dependent on the Chinese market, and those that were would be differentiated enough to often end up on different sides of policy debates. Their lobbying efforts would be less likely to cut in a single direction and thus less likely to capture government.

THE VIRTUE OF MONOPOLY

Big Tech’s market dominance, some will argue, has benefits: free of constant worries about vicious competition, technology giants can focus on the big questions. They have the time and resources to invest copiously in cutting-edge research, where success is rare but the potential payoff—for technological innovation and thus for U.S. competitiveness and national security—is massive.

Whether or not they say it explicitly, those who want to protect Big Tech from antitrust laws and other regulations are advocating a “national champions” model—a system in which the state shields a few select big companies from competition, allowing them to spend on research and development. But there is strong evidence that this approach is imperfect, at times even counterproductive. As the legal scholar Tim Wu has noted, it is usually competition, not consolidation, that fosters innovation. Competitors have to find ways to differentiate themselves in order to survive and expand. Large, protected firms become lethargic, are slow to innovate, and rest on their laurels.

Recall the race for supremacy in the electronics industry that played out between the United States and Japan in the 1980s. Japan, according to Wu, chose to protect its national champions, giving direct government support to such powerhouses as NEC, Panasonic, and Toshiba. The United States took the opposite tack. Its largest electronics firm at the time, IBM, came under antitrust scrutiny by U.S. authorities, and the ensuing decade-long legal battle discouraged the company from engaging in conduct that might run afoul of antitrust laws. That created the space for a variety of other hardware and software companies, among them Apple, Lotus, and Microsoft, to flourish. Competition led to innovation and the creation of some of the most forward-looking companies of the era.

National champions also have an incentive to hide breakthroughs that might undermine their market power. Bell Labs, one of the pillars of AT&T’s telecommunications empire, has long been celebrated for its role as an “ideas factory.” But Bell Labs and AT&T also suppressed innovations that threatened their business model. Starting in the 1930s, for example, AT&T’s management sat on recording inventions that could have been used for answering machines, for fear this innovation might jeopardize the use of the telephone.

Skeptics might argue that this time is different—that today’s next-generation technologies are so resource-intensive that smaller companies in a competitive environment couldn’t afford the necessary investments. But even if broken up and regulated, Big Tech’s main players would have considerable money left to spend on AI, robotics, quantum computing, and other next-generation technologies. Facebook would still have billions of users without Instagram and WhatsApp. Amazon’s platform would still have enormous market power in online sales even if it wasn’t allowed to produce its own products.

Whatever resource constraints did arise could be offset by greater public investment in R & D. As the economist Mariana Mazzucato has argued, such government spending has historically been a significant driver of innovation; the Internet, for example, began as a U.S. Defense Department network. There is no reason the government could not play the same role today.

Unlike research by national-champion firms, research funded by public investment would not be tied to the profit motive. It could therefore cover a wider range of subjects, extend to basic research that does not have immediate or foreseeable commercial applications, and include research that might challenge the incumbency and business models of existing companies. Public research could also de-emphasize areas of inquiry that may be profitable but are socially undesirable. For many of the biggest technology companies, surveillance, personalized targeting, and the eliciting of particular behavioral responses lie at the heart of their business models, which means that their efforts to innovate are geared in no trivial way toward improving those tactics. An authoritarian country may see those as valuable public goals, but it is not at all clear why a free and democratic society should.

Public investment in R & D also has the potential to spread the benefits of technology, innovation, and industry throughout the United States. At present, much of the country’s technological and innovative prowess is concentrated in a few hubs—the most prominent being Northern California, Seattle, and Boston. This is not surprising, as unlike the government, technology companies have no reason to want to spread development evenly. Amazon’s competition to decide the location of its second headquarters is a good example. After inviting countless pitches from cities across the country and much public attention, the company settled on New York and Washington, D.C.—two cities that hardly need an economic boost. Public investment, as the economists Jonathan Gruber and Simon Johnson have argued, could remedy these geographic imbalances and spur successful economies in dozens of midsize cities all over the country, with spillover benefits for their regions.

Mountains of data are needed to improve AI’s precision and accuracy, and some might think that only Big Tech can collect and handle data in such vast quantities. But this need not be the case, either. The United States could create a public data commons with data collected from a variety of government sources (and regulate it with strict rules about personal privacy), for use by businesses, local governments, and nonprofits to train machines. Any new data would be fed back into the data commons, allowing the quality and quantity of the information to improve over time. Alternatively, the government could require technology companies to make their data available in interoperable formats. If those companies effectively have monopoly power over data, then they could be regulated as monopolies—with public access to the data sets as a condition for their continued protection as monopolies. No legal obstacles stand in the way of these options, and both would enable innovation and expand the number of players working on important technological developments.

SQUEEZING THE GOVERNMENT

For the moment, such public initiatives exist only as proposals. Big technology companies have considerable market power, and the U.S. government increasingly relies on their services, including to run its national security apparatus. Technology is, of course, a crucial aspect of warfare, and firms such as Amazon and Microsoft have contracts to provide cloud services to U.S. defense and intelligence agencies. These technology companies are fast becoming part of the United States’ defense industrial base—the collection of industries that are indispensable for U.S. military equipment. As they do so, the curse of monopoly capitalism that already affects the country’s overconsolidated defense sector—causing higher costs, lower quality, reduced innovation, and even corruption and fraud—will likely grow worse.

To see the challenge ahead, consider the present state of the U.S. weapons industry, which is already remarkably uncompetitive. In 2019, the Government Accountability Office found that 67 percent of 183 contracts for major weapons systems did not have a competitive bidding process. Almost half the contracts went to one of five companies—a stunning testament to the dominance of a handful of firms. And in 2018, the Defense Department released a report on the military’s supply chain that listed numerous items for which only one or two domestic companies (and in some cases none) produced the essential goods. Perhaps most striking of all, the report found that the United States no longer had the capacity to build submarines on a rapid timetable because of single suppliers and declining competition.

Unsurprisingly, as Frank Kendall, a former head of acquisitions at the Pentagon, has pointed out, large defense contractors “are not hesitant to use this power for corporate advantage.” In a recent article in The American Conservative, the researchers Matt Stoller and Lucas Kunce argue that contractors with de facto monopoly at the heart of their business models threaten national security. They write that one such contractor, TransDigm Group, buys up companies that supply the government with rare but essential airplane parts and then hikes up the prices, effectively holding the government “hostage.” They also point to L3 Technologies, a defense contractor with ambitions, in the words of its one-time CEO, to become “the Home Depot of the defense industry.” According to Stoller and Kunce, L3’s de facto monopoly over certain products means that it continues to receive lucrative government contracts even after it admitted in the settlement of a 2015 civil fraud lawsuit that it had knowingly supplied defective weapons sights to U.S. forces.

As technology becomes more integral to the future of U.S. national security, Big Tech’s market power will likely lead to much the same problems. Technology behemoths will amass defense contracts, and the Pentagon will be locked into a state of dependence, just as it is currently with large defense contractors. Instead of healthy innovation, the government will have created what Michael Chertoff, a former homeland security secretary, has called a “technological monoculture,” which is unwieldy and vulnerable to outside attack. The cost to taxpayers will increase, whether due to higher prices or fraud and corruption, and much of their money—funding that could have been available for innovation—will become monopoly profits for technology executives and shareholders.

A WAY FORWARD

That technology companies do not want to be broken up is unsurprising. They are profitable, growing, and powerful. Nor is it a mystery why they try to play the trump card of invoking national security in their defense. But even from the viewpoint of national security, the case for shielding Big Tech from competition is weak. Technology companies are not competing with China so much as integrating with it, at significant risk to U.S. interests.In the United States, competition and public investment in R & D, not today’s consolidated technology sector, will provide the best path forward to innovation.

Policymakers should embrace proposals to break up and regulate big technology companies: to unwind mergers and acquisitions such as Facebook’s decision to buy the social networking and messaging services Instagram and WhatsApp. They should require technology platforms such as Amazon to separate from businesses that operate on their platforms. They should apply nondiscrimination principles drawn from public utilities and common carrier laws to digital platforms. And they should adopt stringent privacy regulations.

In this era of great-power competition, the best way to remain competitive and innovative is through market competition, smart regulations, and public spending on R & D. Breaking up Big Tech won’t threaten national security; it will bolster it.

#### Digital authoritarianism causes global info-wars – extinction.

Manstead ’20 [Katherine; Non-Resident Fellow @ Alliance for Securing Democracy and Senior Adviser for Public Policy @ Australian National University’s National Security College; “Strong Yet Brittle: The Risks of Digital Authoritarianism”; https://securingdemocracy.gmfus.org/wp-content/uploads/2020/05/Strong-Yet-Brittle-The-Risks-of-Digital-Authoritarianism.pdf]

While digital authoritarianism can enhance regime durability and national power, it also introduces deep-seated vulnerabilities, eight of which are considered below. Significantly, digital authoritarians may find themselves in a state of constant contest with other regime types, trapped in cycles of overreach and backlash, and prone to strategic miscalculations that pull them into interstate conflict. The current turn to digital authoritarianism therefore also has broader implications for international peace and stability.

Brittle Legitimacy

Reliance on information control makes authoritarians brittle. Small chinks in their information control armor could have existential consequences, particularly during political or economic crises (i.e. when the regime needs to rely on control for legitimacy because it is not delivering for citizens). The information and ideas most dangerous to authoritarians include:

• the identity of opposition groups and leaders and their levels of support; 17

• technical means for subverting control of communications and surveillance technologies;18

• ideas about values that transcend state sovereignty, such as liberalism and human rights;19

• evidence that the central government is not delivering efficient outcomes;20 and

• ideas that undermine the myths and narratives used to legitimize authoritarian rule or the power of the ruling elite.21

Constant Contest

Since technologies and ideas are dynamic, the battle for information control is a constant struggle. It can never be ‘won.’ Authoritarians are therefore in a perpetual state of information warfare, inside and outside their regime, and feel perpetually insecure. This dynamic may lead authoritarian governments to assess that it is worth engaging in information or cyberattacks to discredit liberal ideas at their foreign source or to shape or disable systems that jeopardize their information control—despite real risks of conflict escalation and global pushback.

Overreach and Backlash

The fundamental importance of information control to authoritarians increases the likelihood of overreach, leading to cycles of backlash and reprisal. Many perceive China’s heavy-handed narrative warfare in Hong Kong and confrontational efforts to control narratives about coronavirus to be strategic missteps. For example, CCP efforts to stifle dissent by punishing online gaming company Blizzard and the National Basketball Association (NBA) arguably aided Hong Kong protester narratives;22 while CCP obfuscation about coronavirus has prompted unprecedented diplomatic rebukes from world leaders.23 Despite rising international awareness and condemnation of China’s sharp power tactics,24 China is accelerating, not muting, these behaviors.25 One explanation for this is that the CCP calculates that the risks of international backlash (and occasional overreach by its officials) are acceptable, compared with the risk of letting domestic information control falter.

Impaired Feedback Mechanisms

Authoritarians embrace technology to increase the legibility of their societies. But legibility requires cooperation from society. It is facilitated by an open information ecosystem, robust civil society, mechanisms of transparency, and protections for political speech.26 Conversely, information control and technology-enabled systems of surveillance and enforcement discourage accurate reporting and punish whistleblowing, while incentivizing officials to conceal failures and exaggerate successes.27 In 2007, Le Keqiang (before he became China’s premier) described China’s national income figures as “man-made” and unreliable, and noted that more objectively verifiable proxies should be preferred to official statistics collected by provinces.28 Without elections, authoritarians can also struggle to understand public sentiment, a problem highlighted by the Chinese government’s mismanagement of massive ongoing protests in Hong Kong. Party leaders wrongly assessed that the protestors’ grievances were primarily economic rather than political and that they did not enjoy broader public support.29 As Zeynep Tufekci has observed, the costs of China’s “authoritarian blindness” have been immense: a solvable issue (demands to withdraw a relatively unimportant extradition treaty) became “a bigger, durable crisis” with ongoing political consequences.30

China’s delayed reaction to coronavirus is a stark example of the authoritarian legibility and feedback problem. Local officials and hospital administrators in Wuhan suppressed information about the outbreak and punished doctor whistleblowers—depriving other provinces and the central government (not to mention international authorities) of vital signals that would have allowed swifter action to control the pandemic.31 Once authorities acknowledged the pandemic, China deployed the full weight of its digital surveillance capabilities. It was able to implement top-down lockdowns quickly; marshal its tech sector to build health apps; force citizens to download these apps; and access vast commercial holdings of personal data to cross-check compliance. However, it lacked critical bottom-up feedback systems that may have obviated the need for such draconian measures in the first place.32 Indeed, controlling for income and population size, authoritarian regimes appear to be more lethal than democracies during epidemics, arguably because of their closed information ecosystems.33

Overreliance on Technological Systems which ‘Fail Hard’

Many authoritarian governments are embracing AI-driven surveillance and control methods—from ‘smart cities’ to digital currencies, e-payment platforms and social apps. However, when AI systems fail, they tend to fail in unpredictable, often catastrophic ways. While citizens in democracies lament slow adoption of digital governance, authoritarians’ speed comes with the risk that authorities roll out unsafe or vulnerable systems.34 Imagine a critical failure of China’s social credit system—whether by accident or sabotage—which affected the integrity of records. The implications for regime stability could be significant.

AI systems do not need to fail to produce problematic results. They draw insights and make predictions based on correlations in vast datasets but are not good at identifying causal mechanisms. This means that AI systems often produce outcomes which humans cannot reverse engineer or routinely evaluate. Like using asbestos to build a city, AI governance systems might produce good results in the short-term, but inconsistencies or oversights in their approaches could lead to cascading failures that humans struggle to identify, let alone rectify.35

Unintended Consequences from High-Tech Modernism

Fixation by central governments on achieving targets or deploying certain technologies creates incentives for local officials to deploy “technology placebos” that do little to address underlying economic and social concerns. For example, many so-called smart city projects in authoritarian societies have failed to meet development and economic goals. They are fraught with issues such as “unclear strategic goals” (e.g. they often optimize for surveillance, not development) and “inadequate implementation.”36 This problem may be particularly pronounced for less-developed authoritarian governments which have been persuaded, for strategic reasons, to buy Chinese-exported digital surveillance tools that are not customized to local circumstances. These cities may also become locked into unstable or insecure technical architectures37 and economic dependence on China.38

Commitments to targets, and ideological fervor about technology, can also distort commercial decisions and raise unrealistic public expectations. Analysis of China’s AI industry, for example, suggests that companies are eschewing investment in basic research and focusing on quick wins in applied research.39 Additionally, China is already behind on meeting a number of its technology targets40—a lag that will likely be exacerbated by the global economic downturn following the coronavirus pandemic, and rising security fears in foreign markets about the security of Chinese technology and IP theft by its companies.

From a strategic perspective, there are risks that authoritarian governments’ fixation on technology-centric strategies will lead them to overestimate what technology can in fact achieve. For example, Chinese military strategists have posited that AI could lift the ‘fog’ of war and eliminate uncertainty and confusion on the battlefield. This is an ahistorical and unlikely prediction that could inspire miscalculation.41 Russian strategists theorize about how psychological operations might subdue adversaries without a shot being fired—an approach that may overestimate what cognitive warfare can achieve, at least without being combined with other elements of national power.42

Challenges to Social Cohesion

The medium- and long-term social consequences of digital authoritarianism are yet untested. Overreliance on surveillance and enforcement systems could attenuate relationships within a society, exacerbating authoritarians’ underlying low trust problems. Since they tend to reduce citizens to data inputs, these systems may deny citizens’ intrinsic desire for dignity and identity—with unexpected results.43 Information control tactics—such as flooding—can repress opposition, but long-term may exacerbate public uncertainty and decrease business confidence and trust in official information, with implications for social cohesion and economic progress.44

Dysfunctional Innovation Ecosystems

Information control and state-led pushes for technology dominance risk hampering innovation. For example, to achieve Xi Jinping’s ‘Made in China 2025’ goals, the CCP is supporting high-tech monopolies, restricting international collaboration, and yoking the state and market together.45 However, monopolies are notoriously inefficient and cross-border collaboration is an important driver of innovation. Further, innovation works best under free market conditions and in open societies.46 Some analysts argue that China’s success in deploying AI applications is an exception to this rule. However, there is a risk that Chinese companies are prioritizing shortterm breakthroughs (e.g. analyzing existing datasets to find new insights) at the expense of long-term investment in basic research.47 While authoritarians may excel at developing and deploying AI applications, conceptual research is arguably the real engine of AI advancement—and something that will continue to thrive in open societies.

Summary and Further Research

All states face risks in the information age, but the extent to which regime type affects the relative likelihood of these risks materializing, and their magnitude, is understudied. For example, much has been written about liberal democracies’ vulnerabilities to propaganda and foreign interference via social media.48 But while information warfare against open societies is more likely, arguably it is a higher magnitude threat for authoritarians, where control of information is core to regime survival. Similarly, analysts often lament that democratic governments have been slow to digitize governance systems and craft forward-looking technology policy.49 But while digital authoritarians might outcompete democracies in the roll-out of advanced technologies, this creates new vulnerabilities and risks. Inappropriate safeguards and accidents may result in cascading failures, while heavily digitized governance systems may be susceptible to foreign attack. Regime type may also affect the relative ability of authoritarians and democracies to mitigate their information age risks. For example, a democracy can build resilience to cyber and information threats through a variety of civil society and market-based interventions. Digital authoritarians must rely on a more limited set of top-down policy tools. Ultimately, a more systematic effort to map the comparative strengths and vulnerabilities of authoritarians and democracies in the information age could help both to better understand the other’s threat perceptions and manage escalation risks. It might also highlight ways in which democracies can hold digital authoritarians’ core interests at risk, in order to deter authoritarian interference in their own digital environments.

### 1AC – Plan

#### The United States federal government should adopt the principle of separating platforms from commerce for platforms in the private sector.

### 1AC – Dependency Trap

#### Contention two: Dependency Trap

#### Digital platform conglomeration generates a dependency trap that threatens inclusive growth – separating platforms from commerce protects small firms in the developing world.

Krauspof ’21 [Patrick et al; Professor for Competition Law and Head of the Center for Competition Law and Compliance @ ZHAW School of Management and Law (Switzerland); “Competition and Consumer Protection Policies”; The United Nations; <https://unctad.org/system/files/official-document/ditccplp2021d2_en_0.pdf>; AS]

Making markets more inclusive not only addresses social imperatives, but also can make markets more competitive and benefit consumers. Most economists see a large and vibrant small business sector as essential in providing dynamism, growth and employment opportunities to an economy. Digital start-ups play the same role, especially in terms of dynamism through innovation. Consumer benefits may manifest themselves in lower prices, but equally important are the benefits from greater choice, and better privacy protection and innovation. Indeed, the open banking initiative in the United Kingdom has seen the most benefits from increased innovation by challengers but also the incumbents that have been forced to innovate more with their own data, which is now also accessible to challengers.

However, there is a distinct risk that the digital age could threaten this inclusion in two ways. First, there is a risk that digital markets are dominated by developed economy global giants exploiting the vast economies of scale and scope that exist. Second, there is also a risk that digital markets become dominated by a few large digital conglomerate firms even if they are domestically owned.

Conglomeration is a clear trend in digital markets, with larger digital platforms rapidly moving into adjacent markets, including producing or providing the products sold on their platforms. This is in stark contrast with the most recent trend of the industrial age, which is to focus on core competencies and abandon conglomeration which was often punished by investors. Various factors are driving this trend. One is the economies of scope associated with data gathered or consumers accessing those platforms, which can then be monetized in various ways. Rather than exchanging this data, firms have sought to exploit it themselves. Amazon’s move from online retailing of books to all other products, including its own brands, is a classic case. A second is the enormous resources at their disposal. For example, Amazon invested early in data centres to support the development of its e-commerce activities but then later decided to enter the market for cloud services (through Amazon Web services).44 The third way that inclusion 44 Bourreau M and de Streel A. (2019). Digital Conglomerates and EU Competition Policy. CRIDS Namur Digital Institute. can be undermined is that the control of consumer access enables platforms to displace those that depend on it. Amazon and Google shopping are examples for commercial goods, but Facebook and Apple do the same with apps.45 Finally, the observation of global trends indicate that digital conglomerates are much more likely to acquire start-ups than be challenged by them.46 Conglomeration is not only a global platform phenomenon. The same economic forces can support local conglomeration. South Africa has its own Internet giant, Naspers, which built its position through acquiring shares in Chinese social networking and gaming firm Tencent early on. Naspers has been building its local e-commerce and digital online platforms, in part through a series of acquisitions. It has also been expanding the product range of such platforms. Furthermore, the gradual expansion of the highly successful South African healthcare insurer Discovery into life insurance, short-term insurance and now banking is a more “old economy” example of how such data and consumer access can be leveraged into adjacent markets.

Conglomeration by global and local digital market firms has the potential to negatively impact inclusion, even if there is sufficient competition among these larger players to maintain price and non-price market outcomes at competitive levels. This is particularly concerning in the South African context, where market concentration levels are already high, and the likely impact of increased conglomeration are heightened barriers to entry for potential entrants since the large digital platforms become “gatekeepers” to access markets.

Therefore, from a competition policy perspective, more needs to be done to ensure that digital markets are also open to domestic start-ups and challengers, and that global firms share in the rewards that they derive from developing markets. Locally, additional tools will be required to address the threat of conglomeration. For example, merger control needs to be revisited not only for killer acquisitions, which have attracted most attention, but also to combat increased conglomeration through merger creep. Such acquisitions do not necessarily kill a potential competitor, but rather gives the conglomerate platform a foothold in an adjacent market that can be leveraged later.47

Merger control also needs to be alert to the removal of a potential entrant of another sort. In a developing country context, there is also a tendency for global platforms to acquire the largest local home-grown platform rather than enter themselves. Such mergers deny consumers the benefit of additional competition and a potentially less concentrated market in the future. In addition, taking a tougher stance on conglomerate strategies, such as self-preferencing, exclusive and most favoured nation agreements, may also be appropriate. In its draft buyer-power enforcement guidelines48 the CCSA has already highlighted that behaviour such as self-preferencing would be considered as unfair trading practice by dominant online platforms that bring together thirdparty suppliers and consumers, such as e-commerce platforms.

Developing domestic firms to compete in this space is another area for competition and even industrial policy. Online businesses can sell products globally without a physical presence in the countries they service. Such global reach and costless replication mean that the previous drivers of localized production are frequently left out. For instance, transport costs for raw materials, import tariffs or domestic distribution all provided a rationale for a local presence. That rationale may be missing in many (but not all) future digital markets. As a result, the driving force of innovation and back-end jobs created by these firms may remain in their headquartered country, leading to even greater exclusion of developing countries. Furthermore, global platforms may choose to shift their profits to low-tax jurisdictions – a strategy not necessarily viable for local platforms – that provide these global firms with a significant competitive advantage over local platforms.

If this is to be avoided, then developing countries will need to provide industrial policy incentives for global firms to station operations in their jurisdictions. It will also need to support the development of local digital firms to participate in the digital age, much like the infant industry arguments of old times. It will also require investment in skills and capital financing. This must include the funding of research through universities and will require regulators such as the CCSA to invest in-house talent focused on digitalization of the economy.

Policymakers and regulators in developing countries must also focus their efforts on how to support entrepreneurs to unleash these opportunities and deconcentrate markets. Doing so would directly address the twin objectives of competition policy, namely, more competitive and more inclusive markets. This support may be best achieved through proactively unblocking whatever hindrances remain for these digital entrants, particularly from incumbent firms. Ownership of data and access to consumers or distributional channels are market features that favour large firms purely by dint of their size and incumbency, rather than guaranteed superior product offerings.

3. Data portability and interoperability

Data is seen as a source of significant advantage in the digital age. Data is also the basis for many new and old services. While data portability and interoperability are at the heart of loosening the ~~FAAGs’~~ [GAFA’s] gatekeeper power, there is also tremendous scope for a general regime on data portability and interoperability to open markets to new innovative businesses, while ensuring privacy and security of personal data. Such a regime may be an effective tool in addressing the market power of existing “brick and mortar” incumbents by reducing barriers to entry, allowing new entrants to disrupt traditional industry and have an impact across all markets. Data is not the only area. The European Union expert report’s findings on digital markets around strategies to frustrate new entry deployed by digital firms also resonate to a large extent with existing old economy platforms such as financial service Consideration needs to be given to whether such rule changes should have broader application in markets where incumbents fight digital disruptors. Another benefit of a proactive approach is that it may well prevent emerging digital markets from becoming concentrated and less inclusive over time. A potential advantage of developing countries is that some of these digital markets are not as well developed, or there is still scope for new entry and market growth as a large part of the population is not yet connected. This means that there is still space to keep these markets competitive and not have the difficult task of either regulating entrenched monopolists or seeking to develop entrants in their presence. After all, if there is one lesson for competition policy from the ~~FAAGs’~~ [GAFA’s] debate, it is that it is extremely hard to address economic power once it is in place, especially for a competition regulator in a developing country.

The European Union expert report on digital markets has suggested a shift in onus for dominant digital firms on certain conduct.50 However, a developing country competition regulator should also consider whether there are additional rules which could be imposed even on non-dominant digital firms to ensure competitive markets in the future. For example, rules on data interoperability, limitations on most favoured nation or best price clauses, and limits to self-preferencing on digital platforms more generally could be imposed in competition law enforcement regardless of dominance. Limiting large platforms from selling in competition with those that access consumers through them might be another area for consideration.51

#### Structural separations between platforms and commerce equalize international bargaining power – now is key to prevent feedback effects from locking in dependency.

Johannsen & Gonzalez ’21 [German; PhD Candidate and LLM @ Max Planck Institute for Innovation and Competition; and Andrés; LLM and Chilean Competition Law Compliance Officer; “Digital Platforms & Economic Dependence in Chile Any Room for Competition Theories of Harm without Dominance?”; <https://law.haifa.ac.il/images/ASCOLA16/GJAG.pdf>; 15 June 2021; AS]

1. Platforms and economic dependence

As transactions —both economic and social— move to the Internet, the role of digital intermediary platforms (hereinafter "platforms") in the economy has increased as facilitators of interactions between the several economic agents (users, buyers, sellers, advertisers, suppliers, etc.). At a global level, some platforms have reached a large size, in some cases becoming part of digital conglomerates with a multinational presence, among which are the so-called TechGiants.7 In Chile, while there is a consolidated presence of platforms that base their business on exploiting the attention of users (e.g. social networks or video platforms), in other sectors platforms are in early stages of expansion8 (e.g. e-commerce in Chile9 ).

In their expansive or developing stage, the platforms seek to increase the amount of users who interact through them. In general terms, more users on one side of the platform, gives more value to the users of that side and/or the other sides (direct and indirect network effects). Already in the world-renowned US Microsoft case this effect was reported when it was pointed out that developers preferred writing applications for operating systems that had enough consumers, and consumers preferred operating systems that already had multiple applications, an effect that is recognized as a barrier to entry.10 Additionally, in the data economy, the more members, the more and better data, which allows for improved service/user experience (databased network effects).11 In other words, by acting as an intermediary, the platform captures revenue, but also internalizes positive externalities, adding value to its whole infrastructure. The positive feedback generated by network effects, in addition to economies of scale and scope, can lead to a platform reaching a size where, for its rivals, it is no longer profitable to compete.12 Once this tipping point is reached, it is easier for the platform to win the whole market.13 This economic rationale defines how and for what purpose platforms compete. On the other hand, the platforms' business models seek to create a long-term relationship with users and suppliers.14 In this regard, the platform can track those who participate in it (via personal accounts and devices) and extract data to create profiles, study preferences and predict behaviour.15 This generates efficiencies related to the personalization of services, which reduces the efforts to match supply and demand. The information obtained from the data analysis generates value that, added to the positive network externalities, increases switching cost for users and suppliers.16 Regarding users, switching costs could be lower if they interact through several platforms (multi-homing).17 However, many times this is not the case since users incur in convenience costs or the platform sets strategies to make muti-homing unlikely.

18 Regarding suppliers, switching costs also depend on whether they had to adapt their technology and business model to the platform’s requirements. 19 Increasing switching costs can make it unrealistic for a provider to switch platforms and still operate in an economically viable way.20 The result is an asymmetry of bargaining power to the detriment of those who depend on the platform. In other words, there is an economic dependence, asis known in comparative doctrine.21 The brick-and-mortar retail sector,22 several agro-industrial sectors,23 and in the context of digital platforms show different market structures leading to dependence. 24 Yet, in the latter, there are two major differences. On one hand, economic dependence can be a decisive factor in the winner-takes-all race. On the other hand, platforms can be placed in a strategic position, as the orchestrator of marketplaces where other players —most of them not rivals of the platform— are going to compete. Therefore, it is critical to understand to what extent economic dependence regarding a platform may affect the wellfunctioning of the market.

2. Dominant power and uneven bargaining power

Economic dependence accounts for an unequal distribution of bargaining power.25 This imbalance allows the holder of such power to exercise aggressive negotiation strategies both at the contractual level (e.g. tied sales, arbitrary interruption of trade relations) and extracontractual level (e.g. refusal to buy or sell), which end up imposing an excessive economic burden on the weaker party. In comparative law, this type of uneven bargaining power is often called superior bargaining position or relative market power26 (hereinafter, indistinctly, “bargaining power” or “relative power”). The exercise of relative market power can have, in turn, a feedback-loop effect, as it reinforces the existing situation of economic dependence.

Regarding digital platforms that provide services as a distribution channel, their strategic position as an intermediary and the size of suppliers who offer goods through it —many of which are small or medium businesses— allows them to be in a position of relative power visà-vis many suppliers. Under these circumstances, the platform can incur in various forms of abuses. The most obvious would be to increase unilaterally the commissions for transactions or enter into exclusivity contracts. A less obvious would be to use the information it obtains as intermediary to favour the marketing of its own branded products 27 or deny access to data that is relevant to users (e.g. about recommendations) and suppliers (e.g. about ranking).28 Not being able to access such data can increase the cost of switching platforms, as it makes data portability more difficult, which in turn may increase the degree of dependence.

While these commercial practices are a manifestation of economic and contractual freedom, in some cases they might be abusive as they could undermine good faith and/or fairness in commercial relationships. In other words, these normative foundations serve as a basis for establishing a boundary between practices with relative market power that are socially acceptable and those which are not. Both at a national and comparative law, the materialization of this dividing line is found mainly in the field of contract law and unfair commercial practices laws. 29

On the other hand, from the perspective of the market’s functioning, although imbalances of bargaining power are inherent in all markets —so much so that they are usually considered a sign of competition—, 30 the exercise of relative market power could, under certain circumstances, cause negative effects on the market structure. As such, a second normative foundation for limiting relative market power could be competition. 31

For instance, taking the commissions’ example, if the platform’s relative market power allows it to raise commissions only to certain suppliers, the resulting differentiated charges can lead to a downstream distortion of competition. 32 On the other hand, in the refusal to grant access to data example, while a vertical-bilateral approach would enable a claim for damages generated on those who cannot access their data, a horizontal-collective approach allows an analysis of whether there are artificial barriers that obstruct competition in the platform market. Moreover, the imposition of exclusive distribution clauses or other formulas that increases switching costs can cause the same effect. 33

Platforms have incentives to be the first to adopt this type of strategy, because by doing so they can take advantage in the winner-takes-all race. 34 In this context, one of the main questions is when these aggressive strategies should be regarded as anti-competitive. To this end, competition law usually resorts to the rule of dominance.35 Dominant power is a legal fiction that —based on economic parameters— distinguishes whether a firm has sufficient market power to behave with independence from competitors36 and/or customers37 on a constant basis. If so, their behaviour is scrutinised to assess whether it has an economic justification or, on the contrary, whether it was carried out to exclude competitors or exploit the market. Yet, in digital platform markets (and in the data economy in general) this rule faces several difficulties.38 First, since platforms have multiple sides, it is complex to understand the distribution of power among them.

39 Second, in the data economy it is complex to know what the true utility or value of a company's accumulated data is and how important it is to access this data for third parties to compete.40 On the other hand, the rule of dominance seems not able to handle all cases of economic dependence threatening competition. Indeed, according to the examples we saw, a third difficulty is that there could be a scenario of dependence distorting downstream or upstream competition (where the platform does not compete, or competes, but is not dominant). Finally, a fourth difficulty is that, even without dominance, a platform can make strategic use of dependence to reach a position of dominance that will later allow it to win the whole market.

#### Structural separations can reorient the coordinates of geo-economic power – smart economies need smarter regulations.

Gurumurthy et al. ’20 [Anita “Unskewing the Data Value Chain: A Policy Research Agenda for Equitable Platform Economies”; (September 1, 2020); Available at SSRN: <https://ssrn.com/abstract=3872492>; AS]

Development is about how developing countries can move out of highly competitive activities with low margins to higher value activities with higher knowledge premiums, a process that has been recognized as structural transformation (Mann & Iazzolino, 2019). Fuelled by digital intelligence, all sectors of the economy are today undergoing a rapid makeover; a transition that requires developing countries to ensure that their productivity gains and digital capabilities are in a virtuous cycle. However, the “intelligence premium” harvested by dominant platform-lead firms in global data value chains constitutes a barrier to entry, impairing the global competitiveness of developing countries (Gurumurthy et al., 2019). The private enclosures of data and digital intelligence unfairly cement the competitive advantage of rich countries in global data value chains and thwart the potential for structural transformation of developing countries. Hence, while the data paradigm presents an urgency for systemic coordination towards national digital industrialization, it also represents a highly contested faultline in global resource redistribution.

The development question for the digital economy then is this: how can the data value chain be unskewed for redistributive equity and inclusion?

This conundrum has been the topic of significant, even if nascent, debates. Both traditional and new age policy proposals are being put forth from various quarters: institutional reform proposals from multilateral agencies and regional political blocs such as OECD, policy review assessments initiated at the national level, and unconventional and radical solutions from progressive civil society networks and scholars.

The emerging proposals can broadly be divided into three main areas: reining in Big Tech power, carving out a new resource governance regime for data resources, and building intelligence infrastructure capabilities in the Global South. Admittedly, many of the ideas involved are fledgling and demand in-depth exploration and robust debate before they can coalesce into clear and effective policies. But the juggernaut of Big Tech impunity and a yawning democratic deficit in global/regional policies in critical areas like trade, taxation and capital flows demand bold and agile action that eschews incremental, status quoist measures. They call for a conceptual overhaul that accounts for the realpolitik of geo-economic power.

The following sections take stock of noteworthy policy proposals that have emerged in each of the three areas, examining them critically and posing priority directions for a research agenda11 that can answer the following questions:  How are current policy directions and emerging institutional mechanisms able to address questions of market fairness and economic equity in the digital economy?  How do emerging global policy frameworks on data and AI impact national development priorities and pathways?

Area 1. Reining in Big Tech power through traditional policy instruments

In mainstream policy discourses in the digital arena, there is increasing recognition that competition and taxation policy reform are urgently needed to effectively curb Big Tech power in global data value chains.

With respect to competition policy, there is mounting consensus that industrial era competition law frameworks need to be overhauled so that they are able to effectively address the anti-competitive risks of network-data effects in data value chains. In 2020, the European Commission for Competition announced an in-depth study aimed at the updation of its merger assessment rubrics to address the realities of asset light, data heavy platform business models of the digital age (Modrall, 2020). The United States House Judiciary Committee has just concluded an investigation into the structural separations to be effected in data value chains to ensure that corporations controlling essential platform infrastructures are not also competing with the businesses that transact goods and services on them, the urgently needed “separation of platforms and commerce” that legal scholar, Lina Khan, has flagged in her study of Amazon’s antitrust behavior (Khan, 2017; 2019). Such interventions to overhaul traditional competition laws are urgently needed in the Global South as well.12

Currently, the European Union is exploring a limited form of structural separation by prohibiting specialized data sharing services from deploying the data that they transact for other uses, in an attempt to establish boundaries between data intermediation and intelligence services layers. But as the proposed regulation in its current form does not extend to cloud service providers, content intermediaries, and data exchange platforms developed in the context of IoT, it can be argued that this regulatory solution does not go far enough.1

#### Digital inequality undermines the LIO and sparks populist backlash.

Flaherty & Rogowski ’21 [Thomas; PhD Candidate and NSF Graduate Fellow @ University of California – San Diego; and Ronald; Distinguished Professor of Political Science @ University of California – Los Angeles, Weatherhead Scholar @ Harvard University; “Rising Inequality as a Threat to the Liberal International Order,” *International Organization* 75(2), p. 495-523; AS]

Presiding over the November 2016 meeting of the International Political Economy Society, which followed that year’s US presidential election by only three days, David Lake began by saying, “To our theories, this result unfortunately comes as no surprise.” And indeed the field at large has believed that the growing “populist”1 backlash against the Liberal International Order (LIO)—not just the Trump victory but Brexit, the election of illiberal governments in Hungary, Poland, Turkey, the Philippines, and Brazil (to name only a few), and growing support for anti-immigrant and illiberal parties and candidates in many other democracies—has followed almost inevitably from the very changes the LIO has wrought, including of course increased trade and migration but also one major concomitant, rising economic inequality within states. According to our traditional economic theories,2 advanced and even middle-income countries are abundantly endowed with human capital, and poorly endowed with low-skill labor. And it is a rudimentary implication of international economics that, in those countries, expanded trade—or, even more, immigration of low-skill workers—will benefit the highly skilled and harm the less educated. Inequality will rise, and—perhaps the most prescient conclusion of the traditional analysis—partisanship will correlate increasingly with possession of human capital: opposition to the LIO will be strongest among the least educated and will decrease monotonically with more years of schooling.

The evidence, which we survey briefly, admits of no doubt that in almost all of the wealthier (and not a few semiwealthy) countries, inequality has risen, often quite sharply; returns on education3 have risen markedly; and education, even more than occupational status, has emerged as one of the most important predictors of electoral support for antiglobalization parties. What our theories however did not anticipate, and so far cannot explain, may well prove to have been even more important:

1. Not all who are well endowed in human capital, but chiefly a very thin upper layer—the top 1 percent, or even 0.1 percent—have harvested most of the gains from globalization.

2. The antiglobalization movements we observe • adopt a populist rhetoric that often excoriates not just globalization or immigration but also allegedly nefarious elites, who conspire, both domestically and across borders, to enrich each other at the expense of their fellow citizens;4 • benefit chiefly parties of the radical Right; and • have in important cases attracted non-negligible support among university-educated segments of the electorate, albeit far less than among the less skilled.5

We suggest that the extreme inequality and the anomalies are related, and that some insights from recent work in international economics may help explain them. Three advances in trade theory predict extreme inequality. “New new” trade theory (NNTT), with its emphasis on superstar firms, offers a natural framework. So too does an “enriched” neo-H-O-S-S (Heckscher-Ohlin-Stolper-Samuelson) perspective that explores how superstar workers arise in the context of heterogeneous talent.6 Finally, economic geography, explored thoroughly by Broz, Frieden, and Weymouth in this issue, shows how globalization gives rise to superstar cities.7 These three trade theories predict top-heavy inequality primarily by allowing for unit heterogeneity—an assumption that the actors our traditional theories treated as identical actually differ in important ways. Firms within sectors differ in productivity, workers within a factor class differ in innate talents, and regions within countries differ in agglomeration economies.

None of this suggests, of course, that rising inequality is the only, or even necessarily the most important, cause of the growing popular backlash against the LIO. Skill-biased technological innovation and resistance to cultural change also matter, as we discuss more fully later. We do find, however, at least from a cursory analysis of European elections, that backlash against shocks from immigration and imports is conditional on high inequality, disappearing where inequality is low; and we suspect that rising “top-heavy” inequality is related to a particularly prominent strain, within the antiglobalization movements, of anti-elite and anti-expert sentiment.

We go on to suggest why rising inequality matters, not only as a source of opposition to the LIO but as an impediment to economic growth and an exacerbant of domestic polarization and international conflict.

We assess the implications of top-heavy inequality for the LIO. What remedies have been proposed? And if they lack sufficient political support, what sources of resilience can sustain the LIO under top-heavy inequality? Relatedly, we return to the question of why antiglobalization sentiment has benefited the political Right more than the Left. Finally, we chart a course for future research on models of top-heavy inequality, and discuss how they illuminate “blind spots” in the literature on international political economy.

First, however, we survey briefly the extent of growing economic inequality in advanced economies and its seeming relation, chiefly through a human-capital channel, to antiglobalization and anti-elite attitudes and voting.

Convergence Across Countries, Divergence Within Them

The triumph of the LIO in the 1980s and 1990s—the collapse of Communism, the dismantling of trade barriers, the strengthening of institutions of international governance—coupled with, and facilitated by, breakthrough innovations in transport, communication, and finance, affected economic inequality in two ways that standard factor-endowment theories predicted: inequality declined significantly between countries, thus beginning to erode three centuries of the Great Divergence between rich and poor nations; but inequality within countries, especially among the advanced economies, increased almost as sharply.

• Between countries. As late as 1990, the richest 10 percent of the world’s population earned on average over ninety times what the poorest decile received; only twenty years later, that ratio had fallen to sixty-five times,8 or only slightly more than the within-country ratio of Brazil, where in 2008 the average income of the richest decile was about fifty times that of the poorest.9

• Within countries. Beginning even earlier, inequality of incomes, whether measured as the Gini index or the share of total income accruing to the top decile, has risen in virtually all of the advanced economies,10 and indeed in many of the middle-income ones.11 Bourguignon notes that the collapse of the Soviet empire and the opening of China, India, and Latin America injected roughly “a billion workers, for the most part unskilled, into international competition.”12 That will have drastically lowered the global capital-labor ratio and hence further raised returns on human and physical capital, while reducing those on low-skill labor, in virtually all but the poorest, most labor-abundant countries. In short, across much of the globe, the enormous overall gains from trade have benefited the highly skilled, the inventive entrepreneurs, and the owners of capital; the incomes of the less skilled and the capital-poor have risen more slowly, stagnated, or actually declined—exactly the development whose early manifestations alarmed Dani Rodrik two decades ago.13

Surely not all of the rise in inequality stems from globalization.14 Many analyses attribute much of the widening within-country gap—in the US, perhaps as much as four-fifths15—not to globalization but to skill-biased technological innovation.16 Bourguignon contends, to be sure, that innovation has been largely endogenous to globalization: wider markets and intensified competition have raised the returns on cost-reducing innovation.17 Cheaper labor, however, whether from offshoring or the competition of low-wage imports, might be expected to curtail the demand for labor-saving technologies, not to increase it.18 A stronger case is implied by “new new” trade theory: if managerial pay correlates closely with firm size, and if the most successful firms in a globalized economy tend to be the largest, it follows that globalization contributes directly to the rise in top incomes.19 Perhaps most importantly, however, whatever skill-biased innovation may have contributed to the gains of the top quintile or decile, it can say little about the gains of the top 1, or 0.1, percent of the distribution.20 Trade, as we argue, can more readily explain those disproportionate gains.

Rising Skills Premia

Also consistent with mainstream theory were the rising returns on education and the widening gap between high- and low-skill workers’ attitudes toward trade and migration. Exactly as theory would lead us to expect, antiglobalization sentiment rose sharply, and was increasingly concentrated, among voters with the least human capital—that is, the less educated.

Returns on education have indeed risen sharply. In the US in the 1970s, workers with a college degree earned only about a quarter more than ones of comparable ethnicity and age who had completed only high school; by 2010, that gap had risen to almost 50 percent.21 The “raw” difference in annual earnings (i.e., without controlling for ethnicity and age) between college graduates and those who have completed only high school is now 64 percent in the US, and on average in the OECD economies 45 percent.22

At the same time, less educated voters have mobilized strongly against globalization in almost all of the advanced economies. In the US, whites with less than a college education, having up to the year 2000 differed little in their partisanship from whites with university degrees, began to tilt Republican in the early 2000s23 and supported Trump in 2016 by a margin of more than two to one (64 to 28 percent).24 In the Brexit referendum, similarly, 70 percent of voters with only a General Certificate of Secondary Education, roughly equivalent to a US high-school diploma, supported leaving the European Union, while those with university degrees voted by almost the same margin (68 percent) to remain.25 And a recent International Monetary Fund working paper finds that since 2002 tertiary (i.e., university or equivalent) education has correlated, more than any other single variable, with not voting for a populist party in European parliamentary elections—an effect that has grown only stronger since 2012.26

The Riddle of the 1 Percent

In many ways, then, a standard factor-proportions picture of globalization’s distributional and political effects holds up. What it cannot explain, as economists have by now noted repeatedly,27 is why so much of the bounty has gone to the top 1 percent and why even the remainder of the top decile, let alone the highly educated generally, have benefited comparatively little. This pattern is reflected in average real income trends since 1991 across five advanced economies (Figure 1). Much of the real income growth of the top 10 percent owes to gains by the top 1 percent (compare panels 1 and 2); the next 9 percent (i.e., the remainder of the top decile) have seen a comparatively paltry increase. At the same time, the incomes of next 9 percent, which stagnate or even decline after about 2000, mirror those of the middle 40 percent (compare panels 2 and 3). Taken together, the three panels demonstrate the extent to which a narrow elite has risen above the rest of society’s otherwise skilled workers.

Haskel and colleagues more vividly make this case in the US with data on returns on education, finding that the median income of the top 1 percent had risen by 60 percent between 1990 and 2010, while the returns on university education, even for holders of advanced degrees, had declined in real terms after about 2000, virtually erasing their modest gains from the previous decade.28

The seemingly inexorable rise of the 1 percent, when contrasted with the relative stagnation of the rest of the top decile, and of owners of human capital in the middle 40 percent, raises at least three questions. Can our standard theories be modified to explain this “top-heavy” form of inequality? Would such a modified theory still provide a plausible link to globalization? And does such a theory help us understand the simultaneously anti-elitist and antiglobalization character of recent populist movements?

Heterogeneous Workers, Firms, and Regions: Three Ways Globalization Affects Top-Heavy Inequality

We argue that the top-heavy inequality we observe is consistent with three recent advances in trade theory. Each highlights how the bulk of globalization’s gains concentrate in a narrow subset of superstar workers, superstar firms, or superstar cities. An “enriched” H-O-S-S model shows how globalization concentrates wages in a small share of highly talented workers. New new trade theory implies that globalization concentrates profits in a few multinational corporations. Finally, economic geography, extensively reviewed by Broz, Frieden, and Weymouth (in this issue), predicts that globalization concentrates economic growth in a few metropolitan regions.29 By producing far more extreme inequality than traditional models suggest, these theories may help explain the puzzling composition of antiglobalization interests and why these movements adopt a populist tone that demonizes elites.

In presenting these advances, we spare the reader their mathematical exposition and instead focus on their sometimes subtle intuitions. We then explore their similarities and differences, as well as how they illuminate the puzzles of LIO backlash.

Neo-H-O-S-S

The first advance injects new life into the increasingly disesteemed, yet still heavily used, factor-endowments framework of Heckscher-Ohlin and Stolper-Samuelson. It turns out that modest enhancements introduced by Haskel and colleagues yield productive insights into the puzzles of LIO backlash.30 The key amendment introduces heterogeneous workers with varying degrees of innate talent. To state briefly the salient and surprising implications of that model, a drop in the relative price of labor-intensive goods, whether induced by globalization or by technology, can not only reduce the wages of low-skill workers, as in traditional models, but also distribute almost all of the resultant gains to a thin layer of highly talented people—and, at least as importantly, induce stagnation, or actual decline, in the earnings of highly skilled but less talented workers.31 And, once we observe that such a shift is both quite recent and plausibly linked to globalization, we may have shed some light on (a) the rabidly anti-elitist and antiglobalization tinge of the populist movements, (b) why such movements have recently peaked, and (c) why they gain (and may well continue to gain) support not only from the “usual suspects” among low-skill workers but also from those with moderate or even relatively high endowments of human capital.32

For those who appreciate a more rigorous introduction, we offer a graphical exposition of the “richer” H-O-S-S model in online Appendix A2. More intuitively, the key to understanding that model is what happens to high-skill workers when the relative price of capital rises.33 First consider the unsurprising fact that within most firms, sectors, and professions, some workers possess natural talent while the majority are perfectly average. Naturally, the most talented employees are far more productive than their average colleagues, even when everyone works with the same amount of capital. In Hollywood, for example, all actors may read the same script, but only A-list talent like Meryl Streep, Denzel Washington, or Tom Hanks can turn that script into an Oscar-winning performance.

In the classic model, trade lowers wages and raises the relative cost of capital; in the enriched model, the owners of capital make up for that higher cost by lowering the wages of mediocre employees and raising the wages of superstars. Capital owners become less able to afford mediocre workers whose productivity cannot keep up with rising capital costs. Instead, they hire the superstars, whose superior productivity can more than cover the increased costs of capital.

Consider the Hollywood example that Haskel and colleagues used, where film scripts represent intellectual capital, indeed the most important form of capital for the entertainment industry. As the world’s tastes and purchasing power increase demand for Hollywood entertainment, the price of scripts rises—those of stellar scripts, most of all. As that price rises, studios or streaming services become less and less likely to hire actors of only middling quality to perform such a script. The studios’ investment in a high-quality script will pay off, and bring their film the requisite audience, only if it stars actors of extremely high talent: Robert Downey Jr., Scarlett Johansson, or Samuel L. Jackson (or all three in the same film!).34

Admittedly, this analysis assumes, rather than explains, that we can attribute the rise of the top 1 percent to differences in talent but a lot of evidence supports the thesis. For one thing, in almost all countries—including such improbable cases as France and Spain—half to two-thirds of the income of the top 1 percent consists of salaries (compensation for work). Rarely, in any present-day advanced economy, do returns on capital constitute more than a quarter of the incomes of the top 1 percent (in the US, it is less than 15 percent), Thomas Piketty’s arguments notwithstanding.35 As one observer notes, “The fact that so many of [today’s] top earners work for a living is striking,”36 given that a century ago the great majority of elite incomes came from investments in property, bonds, or equities. For another, the model accurately predicts the kind of “fractal” inequality that so far has seemed to prevail almost everywhere in advanced and semi-advanced economies.37 That is, inequality seems to have grown not only between, but within firms and occupations: the top lawyers, academics, physicians, middle managers, and even shop floor workers, have begun to earn far more than the median member of their profession, or even the median co-worker of equal qualifications in their firm.

Once we grant that such differences in talent can become important, the model suggests that any globalization-induced rise in the relative price of capital-intensive goods (or, equivalently, decline in the relative price of labor-intensive products) in advanced economies will depress (or threaten to depress) the wages not only of low-skill workers but also of high-skill ones of less than superlative talent. It thus raises the prospect that the growing resistance to global markets may be embraced, sooner rather than later, not only by low-skill workers but by a growing segment of those with higher education or advanced training.

New New Trade Theory

“New new” trade theory (NNTT) offers an alternative firm-centric view of top-heavy inequality.38 Whereas neo-H-O-S-S focuses on how workers of different talents select into different sectors, NNTT focuses on how firms of different productivity levels sort into import-export activities. One of its salient implications is that increases in foreign trade concentrate the distribution of profits into the largest and most productive firms in each sector.39

The intuition is simple: import and export activities require large upfront costs, such as setting up global logistics networks and investing overseas—costs that only the largest firms can afford. The benefits of trade, access to larger markets, for example, then make these large firms even larger, which subsequently allows them to out-compete their smaller domestic rivals. Armed with global economies of scale, superstars like Walmart and Amazon flood the domestic market with lowcost goods and services. This squeezes out the smallest firms, for example, local mom-and-pop establishments, while reducing the profits of the midsize firms, whose middling productivity permits them to sell only domestically. In sum, NNTT implies, and offers evidence to show, that superstar firms in each sector reap the lion’s share of the gains from globalization.

In its earliest formulation, NNTT implied no wage inequality, because it assumed workers to be homogeneous. Recent advances draw implications for wage inequality by allowing some profits to pass through to workers—what the literature calls rentsharing. One modification allows firms to screen, and bargain over quasi-rents with, workers of varying abilities.40 More productive exporting firms pay higher wages to attract higher-ability talent. In the end, rent-sharing allows inequality in firm profits to spill over into inequality in workers’ wages.41

NNTT implies that globalization-induced inequality should manifest itself principally at the level of the firm, pulling up the compensation of all workers in the larger and more successful firms, and leaving behind all of those employed in smaller, domestically oriented firms (or those unemployed through the demise of the smallest firms). This is exactly what Helpman and colleagues find in Brazil, where 70 percent of overall inequality occurs within sectors and occupational categories; similar results were obtained by Akerman and co-authors in an analysis of wage inequality in Sweden from 2000 to 2007.42

Economic Geography

Economic geography explores the origins and effects of one of society’s most readily observable features: the unequal distribution of economic activity across space, a phenomenon commonly called agglomeration.43 Broz, Frieden, and Weymouth (in this issue) document how globalization’s effects appear most clearly at the level of communities, and operate through the mechanisms specified by economic geography.44 Here we complement their account by situating economic geography within only the broader set of trade models that contribute to extreme inequality. Globalization, we contend, exacerbates regional inequality by inflicting economic stagnation and decline on all but a handful of superstar cities. The mechanism works through the joint effect of agglomeration forces and trade costs. Globalization facilitates the lowering of trade costs (not just those of transportation and communication, but also costs imposed by tariff policies), and this frees up firms to locate in the places that confer the greatest advantage.

The literature identifies many advantages to urban agglomerations. Large cities increase access to suppliers of intermediate inputs, as well as to transportation infrastructure, large pools of specialized talent, and diverse consumers. Moreover, they facilitate the exchange of information about changes in competition, technology, and consumer tastes.45 Some locations also offer a fixed advantage such as access to deep ports or natural resources. Overall, large cities exist and continue to grow because they confer some large basket of benefits on those who locate there.46 The link to globalization seems obvious: the cheaper transportation becomes, and the farther tariff barriers fall, the easier it is for firms and workers to realize the benefits of agglomeration.

For regional inequality to speak to the puzzle of earnings inequality, it must be true that changes in regional growth both reflect and pass through to the wages of resident workers. We find this plausible and consistent with evidence of the stark spatial inequality in returns on skills. A growing literature documents the “end of spatial wage convergence” since 1980, with the bulk of wage gains going to high-skill workers concentrating in just a handful of large cities.47 However, enormous wage inequality within the largest cities suggests that between-region inequality provides only a partial picture. In reality, heterogeneity among workers and firms likely overlaps with, and is accentuated by, the effects of large cities.

Notable Similarities and Differences

All three advances in trade theory point to the same pessimistic outcome, that globalization produces extreme inequality, where a narrow segment of society benefits to the exclusion of the rest. Each theory identifies a different set of “superstars” within this narrow segment: workers with superlative talents, extraordinarily productive firms, or urban agglomerations. Despite varying mechanisms, each arrives at the conclusion of extreme inequality by introducing some form of unit heterogeneity—an assumption that the actors we once treated as identical actually differ from one another in important ways. Workers of similar education differ in innate talent; firms in the same sector vary in productivity; and regions in the same country vary in their advantages of agglomeration. This heterogeneity suggests a radically different perspective on the politics of globalization, one where we should not be surprised that populist protectionist movements arise; that they vilify elites; or that, despite finding their base constituency among lowskill workers, they enjoy nontrivial support from high-skill workers across many sectors.

We highlight two differences among these theories. First, they arrive at the implication of extreme inequality by varying degrees of theoretical complexity. In this regard, neo-H-O-S-S offers a clear advantage: its general framework requires no added assumptions about heterogeneous firms, economies of scale, locational mobility, or rent sharing.

Second, and at least as important, is the empirical accuracy of key theoretical assumptions. In the case of NNTT, evidence for the crucial rent-sharing assumption is decidedly mixed.48 For economic geography, countries almost certainly differ in the degree to which factors are spatially mobile. The neo-H-O-S-S model of differently talented workers will enjoy the most traction in longer-run analyses of wage outcomes, where factors are fully mobile across sectors and regions. Overall, the evident variance in empirical support for different modeling assumptions should caution users to validate these assumptions in their particular research contexts.

Finally, these unit heterogeneity models are not mutually exclusive—they likely reinforce one another in interesting ways. The most talented workers can earn the highest wage by working for the largest firms that can afford them. Regional agglomeration facilitates this advantageous match by locating these superstar workers and superstar firms in the same city. Thus, the top-heavy inequality we observe may very well arise at the intersection of heterogeneous workers, firms, and regions.

Hypothesis

Under any of the three trade theories described here, globalization produces topheavy inequality, wherein a thin margin of workers benefits while the rest are left behind. This drives a populist strain of backlash that views globalization as a struggle of the masses versus the elites. To our mind, this casts a different light on recent research that sees the backlash as a response to shocks from immigration or imports. To state our key hypothesis:

H: when top-heavy inequality is high, shocks from trade, whether in goods, services, or factors of production, increase public support for populist parties.49 In the absence of top-heavy inequality, however, such shocks have no effect on support for populism.50

This assumes that inequality reflects the long-run wage effects of trade and migration. That is, if our trade theories accurately predict wage outcomes, then we should observe extreme, or top-heavy, inequality. As previously discussed, even though much of the inequality we observe does reflect trade patterns, inequality also derives from other sources, such as technological change.51

Inequality and Antiglobalization: Evidence from European Elections

We offer a very preliminary test of this hypothesis in the context of two recent studies of populist far-right vote shares in Europe. Their wide empirical coverage, spanning between them twenty-eight countries over twenty-six years (1988 to 2014), affords a high degree of external validity, at least among economically developed nations in recent decades. Also, the two studies focus on different aspects of globalizationrelated shocks, one on immigration and the other on imports. Finally, both papers offer rigorous research designs. In further examining and extending their findings, we introduce as few modifications as possible to the original designs.

Immigration and Inequality

The study by Georgiadou, Rori, and Roumanias (hereafter GRR) requires the least modification.52 It explores the role of immigration shocks and inequality in all national and European Parliament elections in the twenty-eight member states of the European Union between 2000 and 2014. In particular, the authors study, at the level of Eurostat’s NUTS-2 regions,53 the vote shares obtained by “populist radical right” parties,54 which rose dramatically in the wake of the 2008–09 financial crisis (from 0.05 to 0.15 mean vote share across all countries).

In their original analysis, GRR find a positive association between right-populist vote share and both inequality and immigration, controlling for unemployment, immigration, and economic growth.55 Figure 2 replicates this result under the model labeled GRR2018.56

IO2020 extends that model simply by interacting their measures of inequality and immigration. We report the coefficients in standardized units for visual comparability and ease of interpretation. These models are also posted in Table A2 in the online appendix. Two findings follow from our analysis. First, GRR’s original finding remains intact: an increase of one standard deviation in national-level inequality, all else equal, is associated with a 2.8-percentage-point increase in populist vote shares (p < .01). Since this exercise holds immigration constant, it suggests that inequality independently undermines support for the LIO. This likely reflects, as we discuss later in the paper, inequality’s well-known effects on economic growth, polarization, and external conflict.

Second, our interaction model produces strong evidence for our key hypothesis, that surges in populist support from immigration shocks (which GRR found to have a modest and imprecisely estimated effect) are important but highly conditional on the level of inequality: magnifying backlash at extreme levels and nullifying backlash at lower levels. We visualize this result in a marginal effects plot in Figure 3. The differences in magnitudes are impressive. A one-standard-deviation (0.3 percentage point) increase in the share of migrants in the local population is associated with precisely zero change in vote shares for populist parties at even moderate levels of inequality (Gini < 0.29). At high levels of inequality (Gini > 0.34), the same one-standard-deviation increase in the share of migrants relates to a twenty-point increase in vote share for populist parties. These magnitudes are striking, given that the average NUTS-2 vote share for these parties is 6 percent, with a maximum of 54 percent. Rising immigration, it seems, poses a populist threat to the LIO only when paired with an income distribution that is, or has become, highly unequal.

Imports and Inequality

That inequality mediates shocks from immigration raises the obvious parallel question: does it similarly mediate import-related shocks? To this end, we repeat the earlier analysis, this time employing the data set from Colantone and Stanig (hereafter CS), who examine “China trade shocks” in the European context: fifteen Western European countries over the years 1988 to 2007.57 They report strong effects of Chinese imports on vote shares for radical Right parties58 at the level of the electoral district.59 We replicate their principal results, including their two-stage least squares estimators,60 in specifications 1 and 2 of Table A3 (in the online appendix).

The CS data set does not include a measure of income inequality. To test our interactive hypothesis, we employ inequality measures from the World Inequality Database.61 We report top 1 percent shares of post-tax income at the country level.62 We also apply logarithmic transformations to address issues of fit resulting from extreme outliers.63 Finally, we adopt a multilevel estimator that serves our particular data needs.64 The results rely on this preferred hierarchical estimator.65 Table A3 (in the online appendix) documents how these modifications affect the original CS findings.66

The results for import shocks closely mirror those for immigration. Figure 4 plots the coefficients of our preferred model (IO2020) alongside a baseline model in CS (CS2018). As expected, the positive association between Chinese imports and populist vote shares is highly conditioned by inequality. The coefficient on the China shock remains significant only when interacted with top-1-percent income shares. The marginal effects plot in Figure 5 translates this into real-world terms. At low to medium top-heavy inequality (top 1 percent shares < 0.09), a one-standard deviation increase in imports (approximately 170 EUR per NUTS-2 worker) relates to no statistically significant change in district vote shares for populist parties—that is, no populist backlash from rising imports. However, in countries where the top 1 percent earns approximately 10 percent or more of national income, the same magnitude of imports is associated with a 25-to-50-percent increase in district vote shares, on average, for right-populist parties.

In combination with the results from immigration shocks, this analysis provides strong support for our hypothesis that the politics of LIO backlash are best understood from the perspective of the three recent advances in trade theory that predict topheavy inequality. Trade in goods, or in factors of production, in the context of heterogeneous firms, workers, and regions, produces top-heavy inequality that, we argue, sets the stage for a particularly populist form of backlash. We provide suggestive evidence from European elections that is largely consistent with this; migration and imports drive support for populist parties only where we observe high inequality.

Possible Remedies and Sources of Resilience

An optimistic reading of this analysis is that national redistribution provides an effective remedy against right-populist backlashes. This finding is consistent with the “compensation hypothesis,” that government redistribution to globalization’s losers increases public support for trade.67 Our paper contributes to this literature by suggesting that redistribution targeted at top-heavy inequality (superstar earners, regions, and firms) to the benefit of otherwise skilled workers in smaller firms and cities would be especially effective.

However, democracies famously fail to address rising inequality with redistribution.68 This leads us to a more pessimistic conclusion that, even though lower inequality increases support for globalization, there is little evidence that governments will redistribute in countries with already high top-heavy inequality. We therefore agree with Atkinson that more redistribution of the large gains from globalization would be both possible and effective; but mass support for it, paradoxically, is weak.69 There is hope for other policy suggestions, as well. Investment in education, even if it could achieve the requisite political support, would fail to address the central problem: outsized gains from “superstar” talent, cities, and firms. Global forms of redistribution, such as the world “Tobin tax” on cross-border financial transactions, promise to tax capital without encouraging capital flight. However, such visions have been dismissed as “utopian.”70 They would also raise the substantial issues of global governance that Rodrik’s “globalization trilemma” has highlighted: who would enact such a tax, and to whom would the revenues flow?71

Instead, governments are far more likely to enact protection—restrictions on imports and immigration that reduce welfare but undeniably also reduce inequality. Williamson shows that the choking-off of US immigration from the 1920s to the 1960s contributed significantly to the “great leveling” of American inequality, including the Great Migration of African Americans out of the US South, as Northern employers began to substitute Black for immigrant labor.72 Restricting low-wage imports would of course have a similar effect. These options offer the losers from globalization only a larger slice of a (likely much) smaller pie.

If governments under pressure from top-heavy inequality continue to substitute protectionism for redistribution, can the LIO that stands for globalization nonetheless be sustained? We see two possible sources of resilience. First, powerful interests in the LIO can be expected to defend it.73 Second, international institutions still matter. The retreat of the US, as a principal guarantor of the LIO, poses an undeniable threat to its institutions and to the peace and cooperation they foster. However, IR research cautions against premature reports of its demise. Despite declining US support, international institutions will continue to serve vital functions for their members—functions that make these institutions “sticky” in the face of shocks.74 More recent scholarship in this vein suggests that the international institutions that were hardest to create, and whose rules are flexible, are the most likely to weather the shock of declining US support.75 To the extent that other institutions were created with less effort and exhibit less flexibility, however, other powerful states will seek to install alternatives that better serve them.

Limitations and Future Research

Future research in this area will need to address at least three shortcomings of our analysis: imprecise measurement, identification, and external validity. First, our nationallevel measures of inequality cannot discriminate among the three possible trade theories, since all predict top-heavy inequality. One solution would require decomposition of earnings into worker, firm, and region heterogeneity.76 Future measures should also be mindful of several indirect routes by which inequality undermines the LIO, independent of globalization shocks. It slows economic growth,77 probably by restricting the formation of human capital.78 It exacerbates domestic polarization79 and, seemingly, induces aggressiveness in foreign policy, especially among less welloff voters.80 And, to the extent that it installs governments of the Right, it further increases inequality.

Second, the lack of a careful identification strategy leaves much for future research, which must isolate the variation in top-heavy inequality that is independent of technological change (as discussed earlier), institutions, and redistributive politics, among other sources of endogeneity. Instrumental variable approaches, such as those featured by Enamorado and colleagues, offer one promising direction.81

Future research will also need to account for non-economic aspects of globalization and inequality. Our analysis assumes that inequality operates narrowly through economic mechanisms. We doubt that material interests alone explain the variance in attitudes to globalization.82 Surely status anxiety and cultural threats matter too in ways not reflected in the theory here.83 We know that some voters do not consider trade salient enough,84 or find it too complicated,85 for economics alone to determine vote preferences. Relatedly, attitudes on trade and migration partially reflect sociotropism and out-group anxieties.86 Nonetheless, an at least equally large literature confirms that economic shocks accurately predict election outcomes,87 and our own analysis shows that these economic shocks especially drive voting where inequality is high. Clearly, both economic and cultural factors matter, probably in mutually reinforcing ways. To know for sure, future research will need to test our three trade theories with individual-level data.88 What we contribute to this important debate is a way to sharpen the way international political economy thinks about the economic side of globalization politics.

Third, future research will need to investigate whether these results extend, as recent research suggests,89 to low- and middle-income countries.90 We also expect, although we lack the data to prove it, that our analysis does not extend to support for left-populist parties.

Why does rising inequality move many voters toward right-wing populism rather than left-wing populism? Put simply, the Left’s failure to enact adequate redistribution91 has pushed many of its own voters to support right-wing parties whose protectionist policies offer a plausible alternative to redistribution.92 In the US, the pattern of “Obama-toTrump” voters, particularly among less educated workers, is well documented.93 In Germany, the right-populist Alternative für Deutschland received about 15 percent of its support from traditional left-wing parties in 2017, and similar patterns seem to have driven support both for France’s Le Pen and for the right-populist FPÖ (Freedom Party) in Austria.94 In all three cases, manual workers demonstrably form the core of right-populist support.95 These shifts from redistributive to protectionist parties, we suspect, are exacerbated by the Left’s growing association with elitism, expertise, and globalization: all things that those farther down in the income distribution have come to distrust, or even to despise.

Conclusion

The openness to trade in goods, services, and factors of production the LIO has so effectively advanced over decades has concentrated real income growth in a very thin layer of workers. While this rise in top-heavy inequality doubtless has other causes, chief among them skill-biased technological innovation, trade openness has contributed mightily, particularly since the “China shock” of 2001;96 and certainly the populist movements that reject the LIO cast openness to trade and migration as the chief villain.

The ways in which rising inequality has threatened the LIO expose lacunae in international political economy’s intellectual apparatus—“blind spots” that require remediation. Most importantly, our basic economics are, if not wrong, at least outdated. The field’s adherence to classical trade models blinds us to the distributional effects revealed by top-heavy inequality: far more people lost from globalization, and fewer gained, than traditional theories (factor proportions and specific factors) suggested. While economists rapidly updated their trade models to account for the emerging reality of extreme inequality, political science largely stayed the course —and ran the danger, now realized, of misapprehending the domestic politics of globalization.

The trade literature offers three explanations for top-heavy inequality. The “enriched” Heckscher-Ohlin model of Haskel and colleagues shows how only a thin layer of extraordinarily talented individuals within the larger set of high-skill workers unambiguously benefits from a rise in the relative price of a skill-intensive product; the wages of both the less talented high-skill and the low-skill workers stagnate or fall.97 New new trade theory shows how a similarly narrow subset of very large and productive firms, and their employees, absorb the bulk of trade’s gains at the expense of all other firms. Finally, economic geography suggests that trade concentrates economic growth in a few large metropolitan regions while inflicting stagnation and decline elsewhere. Each offers a pessimistic view of the politics of globalization in which variously defined superstars gain a far larger share than the society at large.

We validate these theories of top-heavy inequality with data on local election outcomes from as many as twenty-eight countries over twenty-six years. We find that public support for right-populist parties rises dramatically with exposure to imports and immigration, but only in those countries with high top-heavy inequality. The fact that the huge gains from trade and technology have flowed to such a small elite, while earnings in other categories have stagnated, may go far to explain why the antiglobalization movements blame not only crucial elements of the LIO, but increasingly a small and nefarious global elite, for what one politician luridly portrayed as the “carnage” among many regions and sectors of the advanced economies.

That these movements, with rare exceptions, seek relief in restrictions on trade and migration from populist movements of the Right, rather than in redistribution or training, probably owes much to the failure of the political Left to redistribute sufficiently.98 That so much of these parties’ electoral support, both in Europe and in the US, comes from manual workers and former supporters of the political Left lends credence to this conjecture.

The ill effects of rising inequality, however, extend well beyond the rising tide of antiglobalization movements and politicians. They extend to slower economic growth (bound to exacerbate existing resentments), increased political polarization, and even a heightened risk of international conflict.

While eminent scholars have advanced quite plausible and growth-enhancing remedies for rising inequality, none elicits, or seems likely to elicit, sufficient political support. Tragically, inequality will likely be reduced, in any serious way, only by what Scheidel has accurately counted as one of history’s “great levelers,” our current high-mortality pandemic.99 While COVID-19 mercifully inflicts nothing approaching the death toll of history’s worst plagues, in the long run its combined effects of labor shortage, capital abundance, and panicky deglobalization will likely result—despite short-term unemployment and recession—in greater equality (but also less prosperity) in the advanced economies, greater inequality in the less developed countries, and greater between-nation inequality. Those developments may partially reduce developed-country hostility to the LIO; but, to survive, the LIO will have to find stronger sources of resilience among business elites and political leaders.

We thus conclude by disagreeing with Lake’s morning-after observation about the 2016 election. While it seemed that the populist backlash came as “no surprise” to the field of international political economy, some of its most important aspects, including the link to top-heavy inequality and the rejection of elites and expertise, were neither foreseen nor understood by our conventional theories. As Abraham Lincoln said during an earlier time of trial, “As our case is new, we must think anew and act anew.”100

#### LIO collapse causes extinction.

Harari ’20 [Yuval Noah; Professor in Department of History @ Hebrew University of Jerusalem; “How to Survive the 21st Century: Three Existential Threats to Humanity,” *Journal of Data Protection & Privacy* 3(4) p. 463-468]

As we enter the third decade of the 21st century, humanity faces so many issues and questions, that it is really hard to know what to focus on. So I would like to use the next 20 minutes to help us focus on all the different issues we face. Three problems pose existential challenges to our species. These three existential challenges are nuclear war, ecological collapse and technological disruption. We should focus on them. Now nuclear war and ecological collapse are already familiar threats, so let me spend some time explaining the less-familiar threat posed by technological disruption. In Davos, we hear so much about the enormous promises of technology — and these promises are certainly real. But technology might also disrupt human society and the very meaning of human life in numerous ways, ranging from the creation of a global useless class to the rise of data colonialism and of digital dictatorships. SOCIO-ECONOMIC UPHEAVAL Automation will soon eliminate millions upon millions of jobs, and while new jobs will certainly be created, it is unclear whether people will be able to learn the necessary new skills fast enough. Suppose you are a 50-year-old truck driver, and you just lost your job to a self-driving vehicle. Now there are new jobs in designing software or in teaching yoga to engineers — but how does a 50-year-old truck driver reinvent himself or herself as a software engineer or as a yoga teacher? And people will have to do it not just once but again and again throughout their lives, because the automation revolution will not be a single watershed event following which the job market will settle down into a new equilibrium. Rather, it will be a cascade of ever bigger disruptions, because artificial intelligence (AI) is nowhere near its full potential. Old jobs will disappear, new jobs will emerge, but then the new jobs will rapidly change and vanish. Whereas in the past humans had to struggle against exploitation, in the 21st century, the really big struggle will be against irrelevance. And it is much worse to be irrelevant than exploited. Those who fail in the struggle against irrelevance would constitute a new ‘useless class’ — people who are useless not from the viewpoint of their friends and family, but useless from the viewpoint of the economic and political system. And this useless class will be separated by an ever-growing gap from the ever more powerful elite. THE AI REVOLUTION CREATING UNPRECEDENTED INEQUALITY BETWEEN CLASSES AND COUNTRIES In the 19th century, a few countries like Britain and Japan industrialised first, and they went on to conquer and exploit most of the world. If we are not careful, the same thing will happen in the 21st century with AI. We are already in the midst of an AI arms race, with China and the US leading the race, and most countries being left far, far behind. Unless we take action to distribute the benefit and power of AI between all humans, AI will likely create immense wealth in a few high-tech hubs, while other countries will either go bankrupt or become exploited data colonies. Now we are not talking here about a science fiction scenario of robots rebelling against humans. We are talking about far more primitive AI, which is nevertheless enough to disrupt the global balance. Just think what will happen to developing economies once it is cheaper to produce textiles or cars in California than in Mexico? And what will happen to politics in your country in 20 years, when somebody in San Francisco or Beijing knows the entire medical and personal history of every politician, every judge and every journalist in your country, including all their sexual escapades, all their mental weaknesses and all their corrupt dealings? Will it still be an independent country or will it become a data colony? When you have enough data, you do not need to send soldiers in order to control a country. THE RISE OF DIGITAL DICTATORSHIPS AND GLOBAL MONITORING This danger can be stated in the form of a simple equation, which I think might be the defining equation of life in the 21st century: B ×C×D =AHH! Which means? Biological knowledge multiplied by computing power multiplied by data equals the ability to hack humans, ahh! If you know enough biology and have enough computing power and data, you can hack my body and my brain and my life, and you can understand me better than I understand myself. You can know my personality type, my political views, my sexual preferences, my mental weaknesses, my deepest fears and hopes. You know more about me than I know about myself. And you can do that not just to me, but to everyone. A system that understands us better than we understand ourselves can predict our feelings and decisions, can manipulate our feelings and decisions and can ultimately make decisions for us. Now in the past, many governments and tyrants wanted to do it, but nobody understood biology well enough, and nobody had enough computing power and data to hack millions of people. Neither the Gestapo nor the KGB could do it. But soon at least some corporations and governments will be able to systematically hack all the people. We humans should get used to the idea that we are no longer mysterious souls — we are now hackable animals. That is what we are. The power to hack humans can be used for good purposes — like providing much better healthcare. But if this power falls into the hands of a 21st-century Stalin, the result will be the worst totalitarian regime in human history. And we already have a number of applicants for the job of 21stcentury Stalin. Just imagine North Korea in 20 years, when everybody has to wear a biometric bracelet that constantly monitors your blood pressure, your heart rate, your brain activity 24 hours a day. You listen to a speech on the radio by the great leader, and they know what you actually feel. You can clap your hands and smile, but if you are angry, they know, you will be in the gulag tomorrow. And if we allow the emergence of such total surveillance regimes, do not think that the rich and powerful in places like Davos will be safe, just ask Jeff Bezos. In Stalin’s USSR, the state monitored members of the communist elite more than anyone else. The same will be true of future total surveillance regimes. The higher you are in the hierarchy — the more closely you will be watched. Do you want your chief executive officer or your president to know what you really think about them? So it is in the interest of all humans, including the elites, to prevent the rise of such digital dictatorships. And in the meantime, if you get a suspicious WhatsApp message, from some Prince, do not open it. Now if we indeed prevent the establishment of digital dictatorships, the ability to hack humans might still undermine the very meaning of human freedom. Because as humans will rely on AI to make more and more decisions for us, authority will shift from humans to algorithms and this is already happening. Already today billions of people trust the Facebook algorithm to tell us what is new, the Google algorithm tells us what is true, Netflix tells us what to watch, and the Amazon and Alibaba algorithms tell us what to buy. In the not-so-distant future, similar algorithms might tell us where to work and who to marry, and also decide whether to hire us for a job, whether to give us a loan, and whether the central bank should raise the interest rate. And if you ask why you were not given a loan, and why you the bank did not raise the interest rate, the answer will always be the same — because the computer says no. And as the limited human brain lacks sufficient biological knowledge, computing power and data — humans will simply not be able to understand the computer’s decisions. So even in supposedly free countries, humans are likely to lose control over our own lives and also lose the ability to understand public policy. Already now, how many humans understand the financial system? Maybe 1 per cent, to be very generous. In a couple of decades, the number of humans capable of understanding the financial system will be exactly zero. Now we humans are used to thinking about life as a drama of decision-making. What will be the meaning of human life when most decisions are taken by algorithms? We do not even have philosophical models to understand such an existence. The usual bargain between philosophers and politicians is that philosophers have a lot of fanciful ideas, and politicians basically explain that they lack the means to implement these ideas. Now we are in an opposite situation. We are facing philosophical bankruptcy. The twin revolutions of infotech and biotech are now giving politicians the means to create heaven or hell, but the philosophers are having trouble conceptualising what the new heaven and the new hell will look like. And that is a very dangerous situation. If we fail to conceptualise the new heaven quickly enough, we might be easily misled by naïve utopias. And if we fail to conceptualise the new hell quickly enough, we might find ourselves entrapped there with no way out. Technological disruption of not just our economy, politics and philosophy but also our biology In the coming decades, AI and biotechnology will give us godlike abilities to reengineer life, and even to create completely new life forms. After four billion years of organic life shaped by natural selection, we are about to enter a new era of inorganic life shaped by intelligent design. Our intelligent design is going to be the new driving force of the evolution of life and in using our new divine powers of creation, we might make mistakes on a cosmic scale. In particular, governments, corporations and armies are likely to use technology to enhance human skills that they need — like intelligence and discipline — while neglecting other humans skills – like compassion, artistic sensitivity and spirituality. The result might be a race of humans who are very intelligent and very disciplined but lack compassion, artistic sensitivity and spiritual depth. Of course, this is not a prophecy. These are just possibilities. Technology is never deterministic. In the 20th century, people used the same industrial technology to build very different kinds of societies: fascist dictatorships, communist regimes, liberal democracies. The same thing will happen in the 21st century. AI and biotech will certainly transform the world, but we can use them to create very different kinds of societies. And if you are afraid of some of the possibilities I have mentioned, you can still do something about it. But to do something effective, we need global cooperation. GLOBAL PROBLEMS THAT DEMAND GLOBAL SOLUTIONS Whenever a leader says something like ‘My country first!’ we should remind that leader that no nation can prevent nuclear war or stop ecological collapse by itself, and no nation can regulate AI and bioengineering by itself. Almost every country will say, ‘Hey, we don’t want to develop killer robots or to genetically engineer human babies. We are the good guys. But we can’t trust our rivals not to do it. So we must do it first’. If we allow such an arms race to develop in fields like AI and bioengineering, it does not really matter who wins the arms race — the loser will be humanity. Unfortunately, just when global cooperation is more needed than ever before, some of the most powerful leaders and countries in the world are now deliberately undermining global cooperation. Leaders like the US president tell us that there is an inherent contradiction between nationalism and globalism, and that we should choose nationalism and reject globalism. But this is a dangerous mistake. There is no contradiction between nationalism and globalism. Because nationalism is not about hating foreigners. Nationalism is about loving your compatriots. And in the 21st century, in order to protect the safety and the future of your compatriots, you must cooperate with foreigners. So in the 21st century, good nationalists must be also globalists. Now globalism does not mean establishing a global government, abandoning all national traditions or opening the border to unlimited immigration. Rather, globalism means a commitment to some global rules. Rules that do not deny the uniqueness of each nation, but only regulate the relations between nations. THE WORLD CUP: AN EFFECTIVE MODEL FOR GLOBAL COOPERATION The World Cup is a competition between nations, and people often show fierce loyalty to their national team. But at the same time, the World Cup is also an amazing display of global harmony. France cannot play football against Croatia unless the French and the Croatians agree on the same rules for the game. And that is globalism in action. If you like the World Cup — you are already a globalist. Now hopefully, nations could agree on global rules not just for football, but also for how to prevent ecological collapse, how to regulate dangerous technologies and how to reduce global inequality. How to make sure, for example, that AI benefits Mexican textile workers and not only American software engineers. Now of course, this is going to be much more difficult than football — but not impossible. Because the impossible, well we have already accomplished the impossible. We have already escaped the violent jungle in which we humans have lived throughout history. For thousands of years, humans lived under the law of the jungle in a condition of omnipresent war. The law of the jungle said that for every two nearby countries, there is a plausible scenario that they will go to war against each other next year. Under this law, peace meant only ‘the temporary absence of war’. When there was ‘peace’ between — say — Athens and Sparta, or France and Germany, it meant that now they are not at war, but next year they might be. And for thousands of years, people had assumed that it was impossible to escape this law. But in the last few decades, humanity has managed to do the impossible, to break the law and to escape the jungle. We have built the rule-based liberal global order that, despite many imperfections, has nevertheless created the most prosperous and most peaceful era in human history. Peace has changed ‘Peace’ no longer means just the temporary absence of war. Peace now means the implausibility of war. There are many countries that you simply cannot imagine going to war against each other next year — like France and Germany. There are still wars in some parts of the world. I come from the Middle East, so believe me, I know this perfectly well. But it should not blind us to the overall global picture. We are now living in a world in which war kills fewer people than suicide, and gunpowder is far less dangerous to your life than sugar. Most countries — with some notable exceptions like Russia — do not even fantasise about conquering and annexing their neighbours. Which is why most countries can afford to spend maybe just about 2 per cent of their gross domestic product on defence, while spending far, far more on education and healthcare. This is not a jungle. Unfortunately, we have gotten so used to this wonderful situation that we take it for granted, and we are therefore becoming extremely careless. Instead of doing everything we can to strengthen the fragile global order, countries neglect it and even deliberately undermine it. The global order is now like a house that everybody inhabits and nobody repairs. It can hold on for a few more years, but if we continue like this, it will collapse — and we will find ourselves back in the jungle of omnipresent war. We have forgotten what it is like, but believe me as a historian — you do not want to be back there. It is far, far worse than you imagine. Yes, our species has evolved in that jungle and lived and even prospered there for thousands of years, but if we return there now, with the powerful new technologies of the 21st century, our species will probably annihilate itself. Of course, even if we disappear, it will not be the end of the world. Something will survive us. Perhaps the rats will eventually take over and rebuild civilisation. Perhaps, then, the rats will learn from our mistakes.

#### Underdevelopment accelerates civil wars.

Tollefsen ’17 [Andreas Forø; Peace Research Institute Oslo, PhD in Human Geography @ University of Oslo; “Experienced poverty and local conflict violence,” *Conflict Management and Peace Science* 37(3) p. 323-349]

Civil wars are more frequent than any other type of conflict in the modern era, with the majority occurring in low-income countries (Hegre and Sambanis, 2006; Jakobsen et al., 2013). While most country-level studies find that poverty and inadequate economic development increase the risk of conflict—a relationship that appears to be causal (Braithwaite et al., 2016)—we lack consensus on the precise mechanisms driving this phenomenon (Justino, 2009). Researchers have explained a correlation between low GDP per capita and conflict using diverse hypotheses, including lowered opportunity costs for individuals to rebel (Collier et al., 2009) and responses to a state’s weak capacity (Fearon and Laitin, 2003).

However, as argued by Hegre (2016), development’s highly correlated indicators make it difficult to distinguish between the theoretical mechanisms underlying the development– conflict nexus. Moreover, previously proposed models often represent processes operating on various geographical scales at individual, group, and state levels. Few researchers have backed up theoretical expectations with data at scientifically fitting levels of analysis, consequently ignoring intra-country variations of explanatory variables and outcomes. Furthermore, aggregated measures are incapable of capturing significant variations in economic conditions (Elbers et al., 2003) and conflict intensity (Rustad et al., 2011) within countries. In addition, conflict areas are, in general, atypical of a nation as a whole (Buhaug and Lujala, 2005), which calls for a subnational level analysis.

Addressing these disconnects—and the fact that most conflict operates at a local level (Rustad et al., 2011)—a recent body of studies has focused on how subnational variations in poverty determine the locations within a country where conflicts break out (Buhaug et al., 2011; Hegre et al., 2009; Østby et al., 2009). To date, their findings are largely mixed, with no consensus yet on strength, direction, or mechanisms behind the relationship. The problem here may be the use of varying proxies for poverty that are only loosely linked to the rationale for conflict and/or insufficient attention on the local sociopolitical context.

The present study’s empirical contributions seek to help rectify the inadequate measures of poverty that have come to characterize the literature. To begin with, the article improves our understanding of whether and where a local poverty–conflict nexus exists by deploying experiential data on individuals’ actual wellbeing—which I argue is more closely connected to people’s motives and rationale for taking up arms. Second, the article examines the sociopolitical context’s conditioning effect on the poverty–conflict nexus. This is achieved by including data on individuals’ perceptions surrounding the quality of their local institutions, the presence of group grievances, and local unemployment rates. These factors, I argue, are more closely linked to reasons for fighting than are common proxies such as night-time luminosity and estimates of economic activity, both of which are often derived from dividing GDP per capita by local population counts.

Poverty—a state in which individuals’ basic needs go unmet—has been shown to motivate people to join rebellions. Humphreys and Weinstein (2008), for instance, found that poverty predicted inscription in the Revolutionary United Front during Sierra Leone’s civil war. Barrett (2011) similarly saw how promises of loot lured the poor to enlist in the 1997– 1998 dispute in Nigeria’s local government area known as Toto. Combatants of the Toto conflict were also more likely to join the rebellion if they stood to gain personal protection, food, and shelter.

For the present study, I developed a dataset by aggregating survey responses from the pan-African Afrobarometer survey to subnational districts and combining the results with information on post-survey violent conflicts. The dataset consists of 4008 subnational districts, spanning 35 African countries. As most districts were only assessed once, thus restricting study of within-unit variation, survey responses were also aggregated to higher-order subnational regions, resulting in a dataset of 111 regions that were surveyed at least twice; this permitted a region-level fixed-effects model design.

Using a pooled cross-sectional dataset of districts, I found that high levels of poverty were linked to increases in local conflict-based violence. Districts with a large share of poor individuals, both in absolute terms and relative to country average, had a higher risk ofconflict than more affluent areas. This relationship held in a coarsened exact matching setup, as well as in a region-level fixed effects design with repeated measurements across time. While the results reveal a local poverty–conflict link, they do not aid in uncovering underlying mechanisms.

Using interactions models, I found that poverty increased the risk of conflict, although only where local institutions are weak. The results also show that poverty-stricken areas in which individuals strongly perceive group injustice have a greater risk of conflict than similarly impoverished regions with no aggrieved population. A departure from the local individual opportunity cost explanation, local economic opportunities do not seem to condition the poverty–conflict nexus. In sum, the results suggest that while poverty is significantly connected to conflict, high-quality institutions and inclusiveness of ethnic groups can prevent violence. Although a wide range of robustness checks and alternative model specifications were implemented, including matching and fixed-effects models, the issue of endogeneity could not be ruled out; doing so would require some kind of exogenous instrument, which I have been unable to identify.

The remainder of this article elaborates on the theoretical framework linking subnational poverty to local conflict-based violence. This is followed by a discussion of existing methods for measuring local poverty and their potential shortcomings. Next presented is the study’s research design and modeling strategy, followed by a discussion of empirical results. The conclusion considers the study’s limitations and proposes avenues for future research on poverty in locations that support rebel groups.

Poverty and conflict

A direct link

A connection between low income and risk of conflict is among the most robust findings in the literature on civil wars (Hegre and Sambanis, 2006). However, there is little consensus on the mechanisms through which poverty may produce conflict. Collier and Hoeffler (1998) claimed that low per-capita income lowers the opportunity cost of rebellion because when they have less to lose from taking up arms, poorer individuals become more inclined to rebel. Fearon and Laitin (2003) observed that poorer countries experience more conflict because they are unable to monitor and control all of their territory, thereby creating pockets of hospitable conditions for insurgents; Tollefsen and Buhaug (2015) identified a similar scenario at the local level.

#### Draws in great powers – extinction.

Heath ’19 [Nathanael C. Heath, 2nd year MALD Candidate at Fletcher School of Law and Diplomacy. He focuses primarily on political risk and negotiations in the Middle East, North Africa, and the Horn of Africa; “A Red Sea Geopolitics Primer”; The Fares Center for Eastern Mediterranean Studies; August 2019; https://sites.tufts.edu/farescenter/a-red-sea-geopolitics-primer/]

These terrific opportunities for prosperity rooted in trade, energy, and innovation face risks posed by complex economic and military competition among both regional and global owners. For one, African rivalries stretching from Egypt to Djibouti are adding to the Red Sea region’s volatility. Egyptian and Ethiopian relations, although somewhat improved since the transitions to the al-Sisi and Abiy regimes, respectively, remain tense over the Grand Ethiopian Renaissance Dam (GERD). Ethiopia views the dam as a strategic necessity, while Egypt fears the dam will deplete its water resources. Although Ethiopia’s relations with Somalia and Eritrea have improved from Addis’s historically hostile positions towards Asmara and Mogadishu, Ethiopia’s access to the Red Sea ports remains a point of negotiation between the three countries. Sudan has also become increasingly problematic for its neighbors, as its resources, access to the sea, and ongoing political violence have attracted the attention of Turkey and the Gulf Nations, frustrating Egypt given Cairo and Khartoum’s historically close relationship. And Djibouti remains caught in a tug of war between an ever-growing number of regional and global powers.

The Middle East is home to its own set of conflicts fueling military and economic competition in the Red Sea. The primary regional rivalry continues to be between Iran and Saudi Arabia, who are each vying for regional supremacy via either direct or proxy engagement in conflicts. Iran’s allies are Syria, Lebanon, and the Houthi rebels in Yemen (and also Qatar to a limited extent). Saudi Arabi is allied with the UAE, Bahrain, and Egypt, and the Qataris have historically been Saudi allies but have in recent years struck a more independent foreign policy that resulted in their blockade by Saudi Arabia, Egypt, Bahrain, and the UAE. The conflict between Riyadh and Tehran presents the most probable risk of a regional conflagration that could threaten the political and economic stability of the Red Sea region. At the moment, the risk of a tanker war or all-out military conflict between the U.S. and Iran is quite high, and the closure of the Strait of Hormuz or even the disruption of trade through the Gulf of Oman is a troubling and possible outcome of such an event.

The formation of Middle East-African alliances has added a further risk of conflict to the region. In addition to its relationship with Sudan (where Saudi Arabia and Iran have competed with Eritrea), Turkey has poured significant aid and investment into Somalia, and Istanbul now owns all of the country’s major ports. Saudi Arabia and the UAE have sparred with Ethiopia over influence in Eritrea. Additionally, Qatar’s alignment with the Turks, Saudis, and Emiratis at different times has increased Doha’s influence in nations along the Horn of Africa. It is in Djibouti, however, that the greatest risk to the Red Sea itself lies, as the city-state has drawn the attention of the great powers.

In addition to a slew of Middle Eastern and African powers including Qatar, the UAE, Saudi Arabia, Turkey, Ethiopia, Somalia, Eritrea, and Egypt, a number of global powers have set their sights on Djibouti as a strategic asset. The U.S., China, Russia, Japan, France, and Italy have all secured or pursued military bases in Djibouti, which is situated close to the critical Strait of Bab-el-Mandeb. China’s first overseas military base, positioned in Djibouti, is situated just miles from Camp Lemonnier, the only significant U.S. military base in Africa. Russia failed to secure a base in Djibouti and has looked further inland for African military partnerships; France, Italy, and Japan maintain smaller operations. The U.S.-China base rivalry in Djibouti (if it could be thought of as such), is symptomatic of the larger continental rivalry between two Great Powers, as both Washington and Beijing continue to vie for influence in Africa with rival political ideologies and systems of economic development. Djibouti is thus a true powder key, not merely for regional rivalries but also for the larger Great Power game between the U.S. and China. An economic and military conflict between Washington and Beijing would impact Djibouti, threatening to disrupt trade routes passing through the Red Sea.

In the near future we can expect to see increasing economic competition in the Red Sea as both traditional fossil fuels and renewable energy sources bolster already-significant levels of trade and innovative projects such as Neom and the GERD. The struggle for economic power will fuel increased investment by developed or middle-income regional powers such as Egypt, Turkey, or Saudi Arabia, Qatar, or the UAE into developing countries such as Sudan, Somalia, and Eritrea. Furthermore, global powers such as the U.S., China, EU, and Japan will be increasingly drawn to key Djibouti and other key ports to protect access to key trade routes. With shifting alliances and economic competition, however, comes increased risk of conflict in a region already home to numerous zones of instability. To minimize risk to the global supply chain, powers with military, economic, or political interests in the Red Sea region will have to work together to ensure that conflicts are contained or prevented altogether in the interest of stabilizing both regional and global markets.

# 2AC

## Dynamism

### 2ac—AT: Digital Authoritarianism Turn

#### Technological parity encourages Chinese aggression---that goes nuclear.

Gerald C. Brown 21, Defense Analyst, Valiant Integrated Services, "Understanding the Risks and Realities of China’s Nuclear Forces," Arms Control Association, 06/01/2021, https://www.armscontrol.org/act/2021-06/features/understanding-risks-realities-chinas-nuclear-forces.

Nevertheless, China’s capabilities represent a substantial threat that must not be ignored. Quantitative comparisons of nuclear arsenals are a relatively crude manner of understanding nuclear risks and, in the case of the U.S.-Chinese relationship, wholly insufficient. More than ever, U.S. policymakers need to understand Chinese nuclear strategy. In the U.S.-Chinese context, policymakers should be more focused on how conventional weapons and related strategies could impact the nuclear calculus between the two countries.

Chinese Nuclear Strategy

Unlike Russia and the United States, China has found nuclear weapons to be of rather limited utility in war-fighting. It built what it describes as a “lean and effective” nuclear deterrent, with the intentions of deterring a nuclear attack and preventing nuclear coercion.1 Strategists in Beijing have long thought that the destructive force of nuclear weapons limits their utility, while conventional forces are more flexible and usable in conflict. Conventional forces are thought to be where wars are won or lost.2 In that sense, China’s nuclear forces are intended to check U.S. nuclear dominance while winning conventional conflicts at lower levels of escalation. To make that happen, China is seeking to build a nuclear force capable of surviving a nuclear first strike and retaliating with an unacceptable level of damage. Experts have perhaps best described China’s nuclear strategy as one of “assured retaliation.”3 Instead of seeking parity with other nuclear states and being able to engage in counterforce campaigns, China finds it sufficient to maintain a more modest, secure, and survivable force. If China can sufficiently absorb a first strike and retaliate, even with only a few warheads, Beijing believes an adversary is unlikely to decide that the risk of attacking China is worth the benefit.

Since China’s first nuclear test in 1964, it has consistently maintained a public, declaratory no-first-use policy, adhering to what it describes as a “self-defensive nuclear strategy” that would anticipate using nuclear weapons only as a “counterattack in self-defense.”4 Western analysts have rightfully pointed out that a no-first-use pledge may not be entirely credible on its own. Although the pledge may be sincerely held, during a crisis, escalation could be unpredictable. Additionally, a small number of Chinese analysts have suggested that what China defines as a counterattack may be ambiguous under certain, limited conditions, such as conventional attacks seeking to neutralize China’s nuclear forces.5

Despite Western doubts, the fact remains that Chinese strategists believe that the pledge holds true. An unambiguous no-first-use stance remains the official stance of the Chinese government, and China’s nuclear strategy is built around this concept. Authoritative texts on Chinese military thinking have described three major missions for Chinese nuclear forces. In peacetime, they seek to deter enemies from launching a nuclear war with China. In wartime, they constrain the scope of war, preventing a conventional conflict from escalating to a nuclear exchange. If war does escalate to nuclear conflict, they serve to conduct nuclear counterattacks.6 The texts consistently describe only one envisioned use of nuclear weapons, the nuclear counterattack operation, in response to a nuclear strike.7

Operational practices have reinforced this. Beijing maintains a highly centralized nuclear warhead storage and handling system, with warheads typically thought to be stored unmated from their delivery vehicles rather than loaded and ready for launch.8 Further, training for nuclear brigades reflects the practice of counterattacking under nuclear conditions. Yet, there are indications of evolution. Recent U.S. government reports have suggested that some People’s Liberation Army Rocket Force (PLARF) brigades may spend time on higher alert and may seek to shift to a launch-on-warning posture in the future in order to increase survivability under nuclear attack. China has been developing a space-based early-warning system with assistance from Russia that could support this.9

Nuclear Force Projections

As the U.S. annual threat assessment noted, there are signs of recent substantial changes in Chinese nuclear forces. The most important changes have been primarily qualitative, but notable quantitative changes are also occurring. These are understandably alarming to U.S. policymakers. Although the size of Chinese nuclear forces may still be dwarfed by the U.S. arsenal, its growth represents a substantial complication for the United States. Further, although the United States and Russia are modernizing their arsenals, they have been reducing their stockpiles over the past few decades slowly but significantly. China’s nuclear expansion represents a concerning shift away from its obligations under the nuclear Nonproliferation Treaty to reduce its arsenal, and that is likely to impact U.S. and Russian decision-making.

Yet, understanding these changes in the context of China’s nuclear strategy is important. Instead of trying to reach parity with or exceed the U.S. nuclear arsenal, China seems intent on ensuring that it has an assured retaliatory capability following U.S. strikes. Given U.S. nuclear and technological superiority, China likely has never had a sufficiently survivable nuclear deterrent against the United States, a goal that was more aspirational than anything else. Revolutions in intelligence, surveillance, and reconnaissance technologies, coupled with advances in conventional precision weapons, have long rendered China’s nuclear forces vulnerable. The U.S. ballistic missile defense program threatens to intercept any surviving retaliatory force, further jeopardizing China’s retaliatory capability.

For the first time in history, the People’s Liberation Army (PLA) seems to be moving toward a survivable nuclear force capable of executing a second strike. Research suggests that Chinese nuclear expansions and modernization are oriented toward creation of a more mobile and redundant force that can survive U.S. counterforce capabilities, including conventional systems such as the Conventional Prompt Global Strike system, and its missiles being able to penetrate U.S. missile defense systems.10 Consequently, although China’s nuclear force size will expand, it does not appear likely to expand to the size of the U.S. nuclear arsenal in the near future.

There is understandable doubt about the claim of China doubling its nuclear arsenal, but it does not appear to be out of the question. China is fielding an increasing number of multiple independently targetable reentry vehicle weapons, such as the DF-5B deployed in 2015 and the recently deployed DF-5C and DF-41, that improve the ability of China’s intercontinental ballistic missile (ICBM) arsenal to penetrate the U.S. missile defense system.11 Defense Department estimates do not appear to include the DF-41, which is just starting to be deployed. Installing multiple warheads on these weapons will quickly expand the number of nuclear weapons in China’s arsenal. Further, PLARF brigades have been increasing at an unprecedented rate. The number of PLARF brigades reportedly increased from 29 to 40 between 2017 and 2020, and brigades continue to be added as new missile types are fielded.12

China’s shift to a nuclear triad will further increase the number of its nuclear warheads as these new systems are equipped. China is creating a more survivable nuclear submarine force, expanding the number of Type 094 ballistic missile submarines and developing the quieter Type 096 submarine with the JL-3 sea-launched ballistic missile as a complement. The PLA Air Force is also adopting a nuclear mission by developing a new air-launched ballistic missile that may be nuclear capable, as well as the nuclear-capable H-20 strategic bomber.13

[Chart omitted]

Significantly, not all of China’s nuclear weapons are intercontinental forces capable of striking targets located in the continental United States. China has invested in nuclear weapons that specifically threaten the immediate region. Its new air capabilities, along with recently deployed midrange and intermediate-range ballistic missiles such as the DF-21E and the DF-26, hold regional adversaries and U.S. overseas bases at risk. China also recently deployed a new hypersonic glide vehicle, the DF-17, that may be nuclear capable. Importantly, although China’s nuclear expansion may be oriented toward a strategy of assured retaliation, that does not prevent Beijing from orienting its expanding nuclear capabilities toward a more threatening posture in the future. As China’s capabilities expand, its operational doctrine may well follow suit.

Emboldened Conventional Operations

China’s nuclear forces can be considerably more concerning when not considered in isolation from other tools of war. Analysts and policymakers need to look at how nuclear weapons can affect the broader picture of warfare, including how they impact PLA conventional operations and the type of wars China envisions fighting.

China’s military strategy is focused on “winning informationized local wars,” effectively local, high tech wars in which the information domain will play a dominant role. Although the PLA’s reach is increasingly global, it has oriented itself toward local conflicts, with a particular emphasis on maritime conflicts, as the main war-fighting domain. This primarily concerns Taiwan but also the East and South China seas among others.14 In 2015, the PLA made a drastic change to its command structure, orienting itself into joint war-fighting theater commands, directly geared to fighting in these regions. The PLA seeks to deter the United States from intervening in these local wars or to defeat the United States locally if it does.

In these local wars, nuclear overmatch against the United States is hardly necessary. Instead, China is more concerned with preventing U.S. nuclear coercion and intervention and constraining the scope of any war that may erupt. PLA strategists appear to believe that the United States would not intervene in a conflict that did not directly threaten the United States if there was a risk that the conflict could escalate to the nuclear level.15 As Zhao Xijun, former deputy commander of the Second Artillery Force, has said, states “become very cautious” when contemplating military intervention against other nuclear-armed states.16

Evidence suggests that a secure second-strike force may even embolden the PLA in local conventional conflicts, allowing them to accept greater risks at lower levels of escalation. That especially holds true when considering that all sides in China’s multiple territorial claims perceive themselves as defending the status quo.17 Research has revealed the PLA’s overconfidence in its ability to control conventional escalation. Unlike in the case of nuclear weapons, Chinese documents emphasize “seizing the initiative” early in conventional conflicts. They envision using tools such as cyberwarfare and conventional missiles early, hard, and fast, even preemptively.18 Although the focus of these writings is not nuclear weapons use, conventional operations could be emboldened by perceptions of nuclear stability.

Entanglement Risks

Another complication is that firebreaks between conventional and nuclear forces are increasingly blurred in modern warfare, and substantial risks exist when conventional strategies affect nuclear forces. One notable example involves discussions on space weapons. PLA assessments have highlighted the increasing importance of this domain, and the asymmetric weakness represented by U.S. overreliance on space in conflict. Critiques of Chinese military writings point toward the offense-dominant nature of such operations and the need to control the space domain early in conflict. They further assert that attacks against U.S. satellites would carry relatively low escalation risks and could even deescalate a conflict.19

U.S. satellite systems, however, are dual use, enabling a wide range of conventional and nuclear operations. Attacks against U.S. satellites would not only affect the country’s conventional capabilities, they would jeopardize the heart of the U.S. nuclear command, control, and communications and early-warning capabilities.20 Further, although Chinese military analysts highlight the advantages of engaging in satellite attacks during conventional conflicts, the same actions would likely be taken prior to a nuclear conflict in order to degrade the effectiveness of U.S. missile defenses and ensure the effectiveness of a nuclear strike. As a result, Washington would view any Chinese attack on its satellites as profoundly destabilizing, potentially inciting a U.S. nuclear response.

Similar entanglement risks exist with Chinese forces. PLARF bases all appear to host conventional and nuclear missile brigades. These are geographically separated from each other, but most of the weapons are on mobile platforms, creating overlapping risks when deployed. Conventional and nuclear forces seem to rely on the same supply and logistics infrastructure. Although command and control infrastructure are ostensibly separate, the extent of this separation is not fully understood, and overlap seems likely to exist.21 Additionally, China’s nuclear submarine force appears to share the same onshore communications systems with Chinese conventional submarines.22

Furthermore, an increasing number of mid-range to intermediate-range weapons systems are dual use. Although the DF-21 maintains distinct conventional and nuclear variants that are typically not co-located, they are likely indistinguishable when deployed. In the case of the DF-26, conventional and nuclear warheads are likely co-located. Reports have highlighted DF-26 brigades, equipped with conventional and nuclear weapons, that hold drills in which units launch a conventional attack and then reload with a nuclear warhead to prepare for nuclear counterattacks.23

In conflict, attacks against China’s shore-based communications systems that are directed at China’s conventional submarine force would cut off its nuclear-armed submarine force as well. Campaigns against China’s vast conventional missile force would almost certainly degrade China’s nuclear force too. The fixed bases supporting PLARF brigades would be likely targets as the dual nature of these bases means conventional and nuclear forces share the same base headquarters, resulting in severed communications and logistics networks for PLA nuclear forces. Even if China’s nuclear and conventional command and control networks were sufficiently separate, it would be challenging to distinguish between them. Conventional and nuclear midrange to intermediate-range weapons would likely be indistinguishable in conflict.

How would China respond to attacks against these dual-use systems and the degradation of its nuclear force? It is somewhat comforting that China’s ICBM force is relatively distinguishable from its dual-use weapons, and the majority of the force is located deeper within the Chinese mainland. What is not obvious is how strikes against regional-range nuclear forces would be perceived by Beijing in the middle of armed conflict. If China’s nuclear forces were degraded in any way, authorities could conclude that they no longer have a survivable deterrent. In the heat of a conflict, it is difficult to assess how Chinese decision-makers would react to this.

Further, a degraded Chinese nuclear force, in the middle of a crisis, could provide a tempting counterforce target for the United States. In such a case, there would be a challenge of perceptions, with neither the United States nor China truly knowing the other’s intentions. In conflict, with the ability to destroy China’s nuclear force or at least limit damage to itself should China opt for nuclear use, would the United States decide that a counterforce strike is worth the risk? The United States would understand that if it failed to strike, China could opt to use its remaining nuclear forces and inflict substantial damage. Similarly, knowing the United States faced such a dilemma and that it could face a disabling counterforce strike, China would be faced with strong use-it-or-lose-it pressures. All of these circumstances would be exacerbated by the fog of war, a degraded information environment, and the speed required to make decisions.

Some Western analysts have speculated that China’s conventional and nuclear weapons capabilities have been intentionally entangled to heighten the risks facing adversaries and to deter conflict. There is little evidence that this was a motivator. Instead, the PLA likely sought to take advantage of economies of scale. It is far cheaper and more logical for China to use the same designs for conventional and nuclear variants to its weapons, allowing for savings on manpower, production, maintenance, and research costs. Even so, this is hardly comforting and may leave the PLA less aware of risks resulting from a comingled system. States that entangle forces intentionally are likely better prepared for the risks involved. When such entanglement arises from nonstrategic reasons, as seems likely in China’s case, states are less aware of the escalatory risks, which may exacerbate escalatory pressures in a conflict.24

War Control and Inadvertent Escalation

There is little evidence that technological entanglement is a direct, strategic choice, but there are some limited indications that China could use nuclear signaling to constrain the extent of conventional conflicts and contribute to escalation control.25 Nuclear signaling includes such actions as test launches, release of the locations of targets, an increase in readiness levels, missile deployments, or other actions to demonstrate resolve. The goal would not be necessarily to use nuclear weapons. Instead, the signaling would aim to raise fears that a conflict could credibly escalate to the nuclear level, thus “causing the enemy to dread that the possible consequences of its actions will be that its losses will exceed its gains, thereby causing the enemy to change its plans for risky activities and achieving the goal of restricting the war to a certain scope.”26 In this way, China could capitalize on the uncertainty of a potential nuclear conflict to deter intervention and constrain escalation in conventional conflicts in the Pacific region. Such risks are compounded by China’s use of purposeful ambiguity as an integral component of its approach to nuclear deterrence.27

One major problem is that such signaling by the Chinese may be indistinguishable from preparations for a nuclear attack. Yet, writings by experts on deterrence and signaling operations fail to acknowledge that these provocative actions could be misinterpreted by an adversary. In general, Chinese experts seem to believe that nuclear escalation is unlikely to be effectively controlled, but are overconfident that conventional conflict can be controlled without escalating to the nuclear level.28 Lack of awareness about escalation risks could very well make the PLA more aggressive in local conflicts.

Finally, the concept of an “existential threat” may be different in China than many perceive it to be. The PLA is not China’s professional military so much as it is the armed wing of the Chinese Communist Party, a point drilled into PLA members and emphasized in the era of Chinese President Xi Jinping, who is also general secretary of the party.29 In that sense, destruction of the party may be synonymous with destruction of the state. Such conflation of ideas could come into play in the face of a humiliating conventional defeat by China over Taiwan or another dispute that China considers central to its sovereignty. If there were a perceived risk, irrational or not, that such losses could fracture the legitimacy of the Communist Party, drastic actions could become more likely. If Beijing perceived that nuclear weapons use would ensure victory in a conflict, it might escalate to using nuclear weapons in a last-ditch effort.

Conclusion

For all the concern from U.S. policymakers about China’s nuclear expansion, relatively little attention has gone into adequately examining the country’s military and nuclear strategies. There is a tendency among many U.S. policymakers to blindly equate the challenge of China with the strategies faced by the United States and the Soviet Union during the Cold War or to mirror image their own strategic thinking onto Chinese strategists. That is insufficient and dangerous.

China’s thinking on escalation and war-fighting often differs substantially from that of the Americans and Soviets. The authoritative literature on these subjects within the Chinese system does not represent errant thoughts of lone strategists. It represents doctrinally informed guidance that culminates the work of dozens of China’s top strategists, originating from China’s most authoritative institutions with ties directly to China’s decision-making bodies, and is used to educate and inform PLA officers. Although written for an internal audience, several of the most important of these texts, such as “Science of Military Strategy” and “Science of Campaigns,” have been translated into English by U.S. scholars and need to be mined thoroughly by U.S. planners for insights.30

There is also a need for greater engagement and crisis management measures between U.S. and Chinese officials. Varying levels of formal and informal dialogues between Chinese and U.S. officials directly or between delegations of recently retired officials help alleviate misperceptions and enhance understanding of escalation triggers and redlines. Although there have been some talks at the unofficial level in recent years, Beijing remains reluctant to pursue official talks on nuclear weapons. Given the substantial misperceptions in the relationship, regular engagements are critical. Similarly, crisis management mechanisms would be to the advantage of both sides in communicating intentions and alleviating misperceptions during a crisis. Thus far, the pursuit of new initiatives has met limited success, and Beijing tends to eschew the methods that are in place. Although arms control agreements appear to be unfeasible between the United States and China for the time being, official talks and better crisis management measures would be a strong first step.

Finally, the United States needs to look at deterrence and escalation more holistically. The primary risks of nuclear escalation stemming from the U.S.-Chinese relationship do not come from nuclear weapons alone. Warfare is increasingly complicated; a greater appreciation of how conventional and nuclear strategies intersect is needed. In the Indo-Pacific theater, conventional forces may play a greater role in deterrence than many in the nuclear community acknowledge. U.S. Admiral Phil Davison, commander of the U.S. Indo-Pacific Command, recently observed that “the greatest danger the United States and our allies face in the region is the erosion of conventional deterrence vis-à-vis the People’s Republic of China.” Increasingly, this erosion affects conventional and nuclear strategies. Organizational separation within the U.S. military establishment may leave conventional and nuclear planners ill-informed of escalation risks stemming from areas outside their purview. Better integration of conventional and nuclear communities, a more holistic understanding of the risks and challenges, and a bolstering of regional conventional forces could play a significant role in managing and deterring conflict that could otherwise escalate to the nuclear level.

#### A concerted cycle of innovation in the technology sector sustains the US edge over China---failure causes conflict through cyberspace AND within numerous hotspots. BUT it’s not solely about the strength of the military ---the health of overall growth sustains vital US posture.

Karina Verónica Val Sánchez & Nezir Akyesilmen 21, Selcuk University-Konya, "Competition for High Politics in Cyberspace: Technological Conflicts Between China and the USA," Polish Political Science Yearbook, Vol. 50, Issue 1, 2021, pg. 46-63.

For many decades, the United States used its superiority in science and technology to ensure its hegemony, but today these powers also want to exploit it and bring about a shift in the balance of power. In this respect, Drezner (2001, p. 4) argues that “countries acquire hegemonic status because they are the first to develop a cluster of technologies in leading sectors” innovations impact the domestic economy and then impact internationally. When the hegemonic power slows down its innovation rate, it enters a period of struggle with the fast follower powers until a new ‘technological hegemons’ is found. In addition, the dominant power fears that “the other superpower might achieve a significant technological breakthrough and seek to exploit it” (Gilpin, 1988, p. 162). Taken together, these contributions suggest that the hegemonic power needs to maintain an advantage and superiority technologically against the powers that challenge its dominant position; otherwise, its position may be jeopardized (Deutch, 2018).

Lim and Kennedy’s work focuses particularly on analyzing the interaction between great powers, mainly on how technology and innovation create a rivalry between the dominant state and the rising power (Kennedy & Lim, 2018, pp. 553-572). Economic superiority is one of several elements that drive the rise of ascending power. Yet, in the long run, economic development is maintained through technological innovation, which “generate spillover effects to the rest of the lead economy and then to the global economy” (Drezner, 2001). The innovation imperative is when the rising power tries to acquire or create new technology to ensure its rise. In the process, it develops strategies and policies to acquire and develop technologies, but especially increases spending on research and development (Kennedy & Lim, 2018).

As a rising power, China needs to create new products and get new technology (Reuveny & Thompson, 2001). There are three ways in which technology is acquired: making, taking, and transacting. Taking involves non-transactional means. Making is the result of supporting local producers in creating new ones. Transacting is a commercial exchange of technology (Kennedy & Lim, 2018, pp. 556-557). In this sense, it is necessary to mention that China has no complex about the idea of copying inventions, products, or technologies in order to benefit from technological advances quickly (Lee, 2018, pp. 29-55). The United States has also highlighted the successful and constant attempts by Chinese hackers to access the American network in search of possible technological secrets (Segal, 2016, pp. 119-122). Some have even commented that Chinese military equipment is very similar to that of the United States (Segal, 2016, p. 120).

China and the United States are the world’s largest investors in research and development (R&D). However, the American model of innovation is subordinated to federal support, so it is alarming that in recent years federal support for R&D has declined and especially at a time of global competition where it is estimated that by 2030 China will be the country that invests the most in R&D (McRaven, 2019, 5) surpassing the US An insightful report by the Council on Foreign Relations (CFR) recommends that the US government should increase funding from 0.7% to 1.1% of gross domestic product (GDP) annually (McRaven, 2019: 6) so that the US does not lose its technological advantage and has a greater involvement as the private sector is currently at the forefront (Glosserman, 2020).

The actions of the ascending power unleash two types of effects concerning the dominant power: which firstly experiences a threat to its national security (security externalities) and subsequently to its position in the international system (order externalities) (Kennedy & Lim, 2018, pp. 553-555). As mentioned in the first part, the US NDS states that China is a threat to the current order of the international system (order externalities) (Mattis, 2018, p. 2). Also, China’s ambitions to access emerging technologies with military applications are also perceived as a threat to US national security (security externalities). China wants to catch up with the United States in military technology and eventually overcome it (Mori, 2018, p. 2). Both the United States and China compete to dominate militarily exclusive breakthrough technology because it could shape next-generation military capabilities (Mori, 2018, p. 22).

The growing techno-rivalry has motivated both powers to adopt a techno-nationalist approach to maximize their national power. As China’s supreme leader, Xi Jinping is convinced that the technological backwardness experienced in the past as a nation is rooted not in the lack of knowledge but the lack of its application for social and economic development (Xi, 2014). That is why he has focused on removing institutional barriers “to unleash to the greatest extent the huge potential of science and technology as the primary productive force” (Xi, 2014). Xi also stated the urgency of seizing the moment to take advantage of technology “I have repeatedly said that the great rejuvenation of the Chinese nation can in no way be realized easily. In fact, the stronger we become, the greater resistance and pressure we will encounter. That is why we say that timing and resolution are vital, as historical opportunities are often ephemeral. Now we have an important historic opportunity to promote scientific and technological innovation. We must not miss it, but seize it tightly” (Xi, 2014).

Xi Jinping is sure that a nation with technological inferiority is catastrophic for the total fulfillment of the Chinese dream (Paul, 2020). That is why he is working on initiatives that will lead the nation towards the fulfillment of that dream and to realize the Two Centenary Goals (Xi, 2014), namely ‘Belt and Road Initiative’ and ‘Made in China 2025’.

A) ‘Belt and Road Initiative’ (BRI)

It was 2,100 years ago, during the Han Dynasty when the silk road began. However, it was not until 2013 that Jinping presented a modern route: Silk Road Economic Belt and the 21st Century Maritime Silk Road. A first glance suggests that it is a route connecting China to the rest of the world (more than 60 countries), but in fact, it is a broader proposal that involves many variables aligned to achieve long-term interest (Yunling, 2015). According to Jinping, One Belt and One Road (OBOR) “represent paths towards mutual benefit which will bring about closer economic integration among the countries involved, promote the development of their infrastructure and institutional innovation, create new economic and employment growth areas, and enhance their capacity to achieve endogenous growth and to protect themselves against risks.” (Xi, 2014, p. 339).

B) Made in China 2025 (MIC2025)

Since its proposal in 2015, MIC2025 represents China’s industrial policies for the next decade. The central axis is China’s transformation into a global technology power (Chen et al., 2020). Hence, it is necessary to integrate advanced manufacturing techniques into the manufacturing industry. This sector is one of the largest in the world and faces serious problems of technology and innovation; therefore, there are many backward industries. MIC2025 seeks to mitigate these deficiencies through a megaproject approach (Lin, 2020). Also, MIC2025 sketches out a three-step strategy to upgrade the Chinese manufacturing industry towards an “industry 4.0” 1) innovation and efficient manufacturing processes to achieve industrialization by 2025. 2) China should be at the level of the manufacturing base of developed countries to compete with them by 20235. 3) China will be a manufacturing superpower. For the latter strategy, MIC2025 establishes clear principles, goals, instruments, and specific industries (Cheung et al., 2016). For instance, it has five sub-plans aimed at facilitating government participation: Manufacturing innovation center construction plan, Intelligent manufacturing plan, Core industrial capability strengthening plan, Green manufacturing plan, High-end equipment innovation plan. Also, it stresses ten priorities industrial areas among them agricultural equipment, aerospace, biomedical, railway, marine engineering and ships, new energies, new materials, power generation equipment, and of course automated machine tools and robotics and the new generation of information and communication technology (ICT), which will focus on three main technological areas: microchips and related hardware, information and communication devices, and industrial processing systems and software. These last two industrial priorities are particularly relevant to technological competition.

Can the United States deter Beijing’s techno-nationalist ambitions? It depends on the seriousness of the Chinese challenge (Bey, 2018, p. 33). China is strongly responding to an innovation imperative as a rising power, putting forward strategies and plans to be able to obtain, make and take technologies (Kennedy & Lim, 2018). MIC2025 is the route the Chinese government has set out to achieve “self-sufficiency” and become a “manufacturing superpower” (Laskai, 2018b). As expected, this plan has been highly criticized by the US government. If China continues its technological push as it has so far, US superiority will likely extend for another decade until it is finally surpassed (Rasser, 2020).

Nature of the Conflict: Low or High Politics?

The Donald Trump administration has published two documents highlighting the international scenario that the United States is facing and the necessary actions to be taken. The first document is the 2017 National Defense Strategy (NDS) and 2018 National Security Strategy (NSS). In these documents is possible to identify a particularity that articulates both strategies: the return of great power competition (Trump, 2017, p. 27). The United States is involved in a great-power competition with China and Russia, and today it is the biggest national security threat they have to face (Mattis, 2018, p. 1), displacing the threat of terrorism into the background. Strategic competition is the best way to avoid large-scale conflicts (Blankenship & Denison, 2019, pp. 43-44), and to face this competition, it is necessary to maintain political, economic, military, and technological advantages (Trump, 2017, p. 3), because “every domain is contested—air, land, sea, space, and cyberspace” (Grieco, 2018, p. 3). Swaine (2018, p. 55) argues that the Chinese authorities very badly received these documents because the US “ignore Beijing’s supposedly cooperative, win-win approach and peaceful intentions” (Swaine, 2018, p. 55).

The NDS (2017) and the NSS (2018) are major shifts in US foreign policy. Distinguishing it diametrically from the foreign policy that the Obama administration had towards Russia, but especially towards China “shifting from an engagement-based approach toward a competition-based one” (Mori, 2019, p. 77). This change in approach is mainly motivated by the prolonged and failed US strategy towards China (Friedberg, 2018, pp. 15-17).

These documents serve as policy guidance for specific US national security and defense priorities. In both documents, Beijing represents a competitor and a threat to US prosperity and security. In this sense, following a competition-based approach, it is possible to identify three shifts towards China under the Trump administration:

First, the US government has begun to operate in a very coordinated way to address the unfair acts of Beijing, namely forced technology transfer, intellectual property theft, cyberespionage, cyber-theft, market access, and the large trade imbalance in China’s favor (Lau, 2020, pp. 32-34). For instance, the United States, through the Committee on Foreign Investment in the United States (CFIUS), has prevented investment in American technology companies by the Chinese venture capital firm. The power granted to this Committee by the Foreign Investment Risk Review Modernization Act (FIRRMA) is that it is even allowed to directly block potential purchases and investigate foreign entities. One of the most notorious cases is the blockade that the CFIUS made to prevent the purchase of US Lattice Semiconductor, which produces chips for the development of artificial intelligence technology (Hoadley & Lucas, 2018, p. 11). According to the White House, the purchase was blocked because its sale carries a national security risk due to Beijing’s support for the operation (Johnson, 2019a, p. 10).

Second, the United States Congress has also done its part by actively participating in the approval of several legislation limiting China. The approval of the 2019 National Defense Authorization Act (NDAA2019) allowed the increase in the Department of Defense budget. The defense spending budget increases to meet the expenses involved in modernizing the US military and maintaining military preeminence and forward-based presence. The Department of Defense has shown special attention to the need to incorporate new technologies – “big data”, artificial intelligence, quantum technology, 5G, and robotics to ensure the US military’s technological advantage and compete with China.

Third, the issues addressed by the present administration are more varied and more politically sensitive, denouncing human rights violations within China, supporting the movement “Occupy Central” in Hong Kong (Jisi & Ran, 2019, p. 3), and expressing intentions for greater political participation in areas under political tension such as Taiwan and Tibet (Sutter, 2017, pp. 70-71).

As discussed above, relations between China and the US have shifted towards a more competitive relationship. At least two broad types of competitions appear to be taking place between the United States and China. First, the dispute is mainly about being first in emerging technologies with military use. The country that achieves the most militarily relevant innovations will be the one that obtains the largest benefits (Barnes & Chin, 2018). It is estimated that the new generation of technologies will ensure military superiority, information superiority, and economic superiority (Allen & Chan, 2017). Artificial intelligence has raised several alarms in matters of national security because on the battlefield, it provides speed and lethality. It also opens vulnerabilities to strategic nuclear stability (Fitzpatrick, 2019). Both countries have prioritized the development of AI technology. China has gone one step further, projecting that by 2030 to dominate the field of AI.

The Sino-American rivalry is not only commercial but also encompasses different dimensions. It should only be noted that after the tariff measures taken by the US in 2019, immediately after the attacks on Chinese technology companies began. The Trump administration prohibited US agencies from acquiring Huawei and ZTE equipment, and imposed greater restrictions on technology exports, put up stiff resistance to the adoption of Huawei’s 5G technology at the same time that discouraged allies from allowing this technology into their countries. Allies, such as Australia, New Zealand, and Japan, followed the American instructions. In 2012, US House Permanent Select Committee on Intelligence report indicated Huawei as a company that represents a risk to the security of citizens because of dubious handling of information on devices and suspicions of a backdoor that allows them to collect information, functioning as a means of cyberespionage (Heinl, 2017, p. 140) and also a threat in the military sphere due to the company’s relationship with the People’s Liberation Army of China (PLA) (NO, 2017, p. 3). However, the accusations stated by the US have been rejected by Huawei company, and to add evidence to their statement, Huawei has allowed the equipment they produce to be examined by experts from Government Communications Headquarters (GCHQ) in search of malicious software or backdoors and so far they have not found anything wrong (Inkster, 2019, p. 109).

The international market positioning of Chinese companies is becoming more and more noticeable. Now more than ever before, China is competing more closely in the creation of advanced technologies, so one of the US priorities is to discourage the pace at which Beijing advances in technology development (Inkster, 2019, p. 109) for national security and commercial reasons (Lau, 2020, p. 22). The trade war is only one manifestation of the real competition in technology (Chen et al., 2019, p. 5; Lau, 2020, p. 19). The US attempts to counter China’s efforts to become technological leadership and maintain its position as a dominant power by driving the world into a cold war over technology.

Second, a geopolitical rivalry for dominance in third states occurs on at least three dimensions: “maritime competition, competition for infrastructure funding, and competition for the digital network” (Mori, 2019, p. 81). To counter the “Made in China 2025” plan and China’s “Belt and Road Initiative”, the United States has pushed the “Free and Open Indo- Pacific Strategy” (FOIP) (Jisi & Ran, 2019, p. 3). The strategy includes Australia, France, India, Indonesia, Japan, and the United States. The central idea is to transform the Indo-Pacific region into broader regional cooperation by thinking of the region as one maritime zone. Economic, military, maritime, and foreign policy aspects are discussed to achieve it (Scott, 2019). The United States has shared interests with Japan and Taiwan. Japan, which is at the juncture of deciding whether to counter or support China’s rapid growth (Hosoya, 2019), and of course Taiwan, whose close relationship with the United States has raised concerns in mainland China (Auslin, 2018). However, both countries are experiencing a growing maritime pressure of The People’s Republic of China (PRC) as a threat to their security (Scott, 2019, p. 49), and FOIP would help them decrease the tension with China by having the United States as an allied. The projects developed by China in recent years are interpreted as an indication that China is seeking greater global projection with geostrategic repercussions, for instance, the digital Silk Road (Vila Seoane, 2020), the Maritime Silk Road Initiative (MSRI), and the Silk Road Economic Belt (SREB) are projects with geopolitical impact (Blanchard & Flint, 2017). Jisi (2014) is of the opposite opinion. It considers a “march westwards” strategy, that is to say, the creation of multilateral relations with countries located in the west by China can benefit the relationship with the United States because it functions as a “rebalancing” that would avoid a confrontation at sea or on Chinese territory. In this sense, the mentioned proposals should not be interpreted as China’s expanding global influence (Jisi, 2020) but rather as a “rebalancing” for more balanced Sino-US relations.

The US has a special interest in maintaining regional access to Asia to counteract China’s influence. Its main strategy is to form strong alliances, such as the partnership with India (Parameswaran, 2018). However, the Trump administration has not been efficient in making allies; on the contrary, it repels them by initiating trade wars with partners and adversaries (Blankenship & Denison, 2019, pp. 51-52). In addition to the projects China is carrying out in the region and which, given their scope, extend beyond the region, it is gaining influence through economic and political involvement with different organizations such as the Association of Southeast Asian Nations (ASEAN) (Noguchi, 2011, p. 76). It also aspires to become a maritime power to “ensure access to energy resources, foreign trade, and direct investment, but also to guarantee its protection against possible external threats” (Noguchi, 2011, p. 66). The reaction of other nations to the Chinese nation with a greater global presence can impact their domestic development and their participation in the international sphere. However, the international community’s correct interpretation of China’s aspirations and values as it seeks its place in the international order will be important in shaping its relationship with the Western powers in the long run (Jisi, 2011).

There are at least three motives why Washington chose to follow a competition-based approach to China now and not before. First, the growing perception within the United States that a relationship based on engagement in the common interest has left them with few benefits, and conversely, China has taken advantage of this situation. As an example, the constant infringement of property rights and espionage for economic purposes. Second, the American business community has expressed its discontent with the unfair competition they face within China and on US soil from Chinese competition. Third, the US sees the potential in China to interfere in domestic politics and influence societal opinion, including using devices to extract data from citizens (Mori, 2019, pp. 79-80).

The following sections outline how technological competition is developing in three ways: cyberspace, military technology, and artificial intelligence.

Cyberspace: A Battlefield for the US and China Rivalry

Cyberspace has become a contested domain, a critical battleground for the United States and China. In the last decade, the increase of cyber interactions in this domain provides us with enough information to analyze the motivation for competition between these two powerful states. As a matter of fact, both countries have ambitions for wide-ranging and rapid military modernization implementing new technologies and cyber capabilities. China has consistently focused on modernizing its military forces and developing military capabilities. Firstly, to maintain its regional dominance in the South China Sea, a region in constant dispute, and secondly to be able to cope with the US military power. Also, China competes for military dominance motivated by a desire for survival that goes beyond sovereignty and territorial integrity but is expressed in terms of keeping their resources and interests intact, so military competition is necessary for their survival.

Military superiority is one of the elements that have kept the United States as a hegemonic power. Therefore, China’s actions have not gone unnoticed within the US defense and security community, and it has started to see a potential military rival in China, largely because there are many doubts regarding its capabilities and intentions. The motivations of both powers are leading us towards a direct military competition. The American government is motivated to be the leader in developing new and more sophisticated military technologies to maintain defensive military superiority but, above all, offensive to deter rivals while maintaining its global influence. For the United States, survival is one of the vital motivations to compete because within an anarchic international system, there are attempts to challenge its hegemonic role.

The PRC has begun to compete against the United States for military superiority, mostly through cyber capabilities for warfare in cyberspace (Domingo, 2016, pp. 157-158). China cannot compete with the US in conventional military force; the Lowy Institute Asia index 2018 shows the big difference in military capability among these great power; the United States score 94.6 out of 100, China 69.9, and in third place, Russia 61.4 (The Lowy Institute, 2018, pp. 5-11). China has a special interest in competing with the States in cyberspace because it takes advantage of the United States in this domain, dependence on the Internet to operate its critical national infrastructure, modest cyber defense, and weaknesses of US cyber-based systems. China is using the United States’ cyber-dependency to its advantage.

Cyber dependence is a notion employed by Valeriano and Maness (2015), which measures the dependence of a state on the Internet to carry out its daily activities and the functioning of its infrastructure. Among the most cyber-dependent states in the world is Estonia in the first place, the United States, Germany in the same degree, and a little less China (Valeriano & Maness, 2015, pp. 25-26). The more cyber dependent a state is more cyber threat faces. Furthermore, cyber dependence associated with the “network readiness” notion, disclose why it is more important to control what happens in cyberspace for some state than for others. In this case, the US and China’s network readiness are among the highest in the globe. This argument is well explained by Eriksson and Giacomello (2009, p. 209):

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After a century of humiliation, China is beginning to revise the US-led international system, so Western interpretations of cyberspace and internet governance are being put on trial (Bey, 2018, p. 32). China is negotiating with the West international cyber rules that benefit its domestic policies (Bey, 2018, pp. 34-35) to ensure its national security, which depends largely on controlling the flow of information in cyberspace and Internet filtering. Jiang (2010) notes that Washington underestimates Beijing’s capabilities to regulate the Internet. Consequently, there are an Internet Governance Wars (Franklin, 2009), between a single, connected internet promoted by the US. and a bordered internet endorsed by China, whose proposal is incompatible with the actual Internet governance regime; Internet Corporation for Assigned Names and Numbers (ICANN), the Working Group on Internet Governance (WGIG) and World Summits on the Information Society (WSIS) organizations dominated by public and private actors from the United States (Eriksson & Giacomello, 2009). American and Chinese ideas about the rules that should govern cyberspace are linked to the political positions they hold (Bey, 2018, p. 31). China is more emphatic in emphasizing the idea of cyberspace as a part of its territory over which it has sovereignty and does not allow it to function without its direct administration (NO, 2017, p. 4) and less allows the interference of external forces that impose rules on how the Internet should function within its border, cyberspace is inviolate and indivisible (Heinl, 2017, p. 136).

For the US, cyberspace represents a critical battleground because it allows competitors to operate continuously against them in search of strategic advantage and gain influence or control by breaking down networks and systems (Nakasone, 2019, pp. 13-14). The first initiative presented by the US government to counter the security challenges introduced by cyberspace is The Presidential Decision Directive 63 (PDD-63). It was developed in 1998 to protect the United States from the growing threats from cyberspace that can endanger national security. PDD-63 had a largely defensive emphasis, establishing the need to integrate computer network defense and computer network attack capabilities to maintain military dominance and address any threats from nations or non-state actors against American interests. More recently, in 2009, the United States Cyber Command was established. It is a joint command for offensive and defensive military operations in cyberspace (Sunday, 2016, p. 162).

Espionage in Cyberspace: An Old Conflict with a New Face

While state-sponsored cyber-attacks are accepted as a natural form of coexistence in cyberspace, industrial espionage and cyber-theft of intellectual property are being pointed out as the no-go line (Bey, 2018, p. 35) among great powers. China has been in an espionage dispute with the United States for over a decade (Akyesilmen, 2018, pp. 233-236). Valeriano and Maness (2015, p. 47) define cyberespionage as “the use of dangerous and offensive intelligence measures to steal, corrupt, or erase information in the Cyber-sphere of interactions”. China is expertise exploiting gaps in America’s cyberspace defenses; this tactic avoids direct confrontation in another realm of cyberspace. Espionage works as a low-level demonstration of a cyber capability. China has launched several cyber espionage campaigns against the US government and the private sector (Goodman, 2010). Unit 61398 and 61486 are two of the principal espionage groups which frequently targeting US political and military intelligence. Cyberespionage can be used long or short-term depending on the purpose. In the short-term, “consistent with covert actions, either gains access or merely sends an ambiguous signal of resolve altering short-term strategic calculus” (Valeriano et al., 2018). In the long-term, espionage seeks to manipulate the balance of information to accomplish a position of political, military, or economic advantage (Valeriano et al., 2018). China is most likely to engage in an espionage attack, both short and long-term. The US is most likely to engage in degradation operations. From 2000 to 2016, the US-Chinese dyad experience overall 48 Cyber conflicts, China 43 times initiated the incident and five by the US. The aim of China within these 48 interactions, 34, was short- and long-term espionage (Brandon & Maness, 2000-2016).

At present, for the US, the highest cost comes from intellectual property theft (IP theft) (Nye, 2017). According to Read (2014), the suitable concept for intellectual property theft performed online is economic cyberespionage, define as “the practice of infiltrating these networks to acquire a trade, technological or economic information to benefit a foreign country or foreign agent”. Because the benefits far exceed the costs, China has no incentive to restrict its behavior (Nye, 2011). For example, in 2013, Chinese hackers exfiltrate data related to the C-17, a military transport aircraft, the C-17 research, and development cost $3.4 billion. Unquestionably, economic cyberespionage is cost-effective (Segal, 2016).

Read (2014) notes that after the 2010 Google’s disclosure that China successfully infiltrated its network, the US government modified its position to the economic cyber-espionage threat. The attack on Google and at least 20 other companies is known as Operation Aurora and started in 2009. Until Operation Aurora, US politicians did not take proactive decisions to obstruct the economic cyber-espionage campaign. After Operation Aurora, the Obama administration showed significant attention to intellectual property management and economic cyberespionage. In the Sino-American relationship, these became dominant issues. In September 2015, President Obama threatened with economic sanctions against Chinese firms over state-sponsored cyber-attacks on American companies. The same year the two nations reached a bilateral agreement to halt cyberattacks used for economic espionage, which led to a decrease in this type of interaction. However, by 2018 China had started to enter the US networks again. In 2018, the United States launched The China Initiative to stop the theft of intellectual property by China and make it clear that these types of practices are not tolerated anymore (Healey, 2019). Nevertheless, to date, this remains an issue on which both nations have not reached a final agreement and remains a tense aspect of the bilateral relationship (Healey, 2019, pp. 143-144).

Intellectual Property (IP) theft can be of three types: patent theft, copyright theft, and trade secret theft. According to cyber studies literature, one of the main perpetrators of intellectual property theft is China. Trade secret theft, defense technologies, computer software, and source code are protected by US trade secret laws and are especially vulnerable to theft through hacking, international investment, or switching of companies from senior managers who take with them the knowledge to reproduce such technology (Healey, 2019, pp. 140-143). There are also American technology startups for which the Chinese market is too attractive, and the only way they are guaranteed market access is by offering to transfer technology to the Chinese government. Although American intellectual property laws protect the technology operated by these companies, American trade secrets are exposed through this legal mechanism imposed by the Chinese authorities on foreign companies. In this way, they manage to get hold of foreign technology (Healey, 2019, pp. 143-144). China’s interest in accessing and developing new technologies through cyber-espionage threatens US economic competitiveness and has long-term costs to US innovation capacity (McRaven, 2019, p. 5) and defense capability.

China’s use of cyber-attacks for industrial espionage is linked to its industrial policy. Together with several projects, cyberspace is aimed at making the country capable of producing high technology and designing its products and goods. AI technologies have received much attention from the Chinese government, and even though the United States leads this area, China is the fast-follower, allocating billions in investment and financing, since 2014 surpassed the United States in AI research and AI-related patent registration. Today is indisputable Chinese leadership in frontier technologies (McRaven, 2019, p. 40). Nevertheless, US national security points out that the illicit behavior of the Chinese government is the means by which the government has achieved some technological advance and if in the future they manage to innovate, it will be the result of IP cyber theft and illegal technology transfer (Deutch, 2018, pp. 44-45).

China has no valuable reason to stop stealing intellectual property; on the contrary, the economic, technological, and military benefits deriving from this practice are far greater. Neither economic sanctions nor bilateral treaties have been able to eliminate this type of attack. The US cyber command has stated that the constant attack to which they are subjected in cyberspace requires them to fight and defend forward because their adversaries are engaged in offensive, defensive, and espionage operations, and these threats must not go unpunished (Healey, 2019, pp. 1-5).

The US cyber forces operate with a joint cyber strategy that combines cyber deterrence and active defense strategies; which consists of a constant presence in the cyberspace of the US cyber forces to be able to analyze the behavior of the enemy and “warn targets of the details of coming (or ongoing) attacks, improving US defense” and in the use of “cyber capabilities for deterrence purposes” (Healey, 2019, pp. 5). It should also be mentioned that the US cyber mission force has the power to carry out offensive operations, in the first instance to support “operational plans and contingency operations”, and when the nation is the victim of a cyber-attack of significant proportions, it can carry out “action beyond blocking and after-action mitigation” (Kehler et al., 2017, p. 74). The 2015 White Paper on Military Strategy also made it clear that China’s actions in cyberspace also contemplate active defense understood as “strategic defense and operational and tactical offense” (Kania, 2015) cyber-attacks are a means of reaction against any action that poses a threat (NO, 2017, p. 6). The force deployed in cyberspace is a sign of the increasing militarization that is taking place in this domain (Deibert, 2011).

The Militarization of Cyber Domain: Who Leads It?

The narrative of IP theft as a national security issue allows the United States to make two strategic moves; first, it allows it to point to states directly as being responsible for the theft of IP, for example, on the occasions that the United States has pointed out this practice, it directly blames China, rather than a group of hackers like The Red Hackers. Second, the division between “domestic economic innovation and the production of classified information” (Halbert, 2016, p. 256) becomes ambiguous as a consequence, the narrative of IP theft as a threat to national security is being used to validate the dominant presence of the United States in cyberspace, enhanced surveillance and control over the Internet for national security reasons.

Halbert (2016) identifies that it was in the document issued in 2008 entitled Report to the 44th President of the United States on Cybersecurity where the relationship between intellectual property and national security began to be shaped, and subsequent to this document is that the narrative began to be repeated in the following official documents issued by US presidents about the cyberspace (Halbert, 2016). In the May 2011 report International Strategy for Cyberspace, it states that to protect economic and national interests from threats such as IP theft, diplomacy will be used first but will also seek to deter and stop potential actors from threatening US national and economic security in cyberspace (Halbert, 2016, pp. 257-258). Intellectual property as a national security issue has “achieved a level of political valence akin to the elusive threat posed by the war on terror” (Halbert, 2016, p. 261) and open the possibility of military escalation (Halbert, 2016, p. 264). The increasing militarization of cyberspace and defensive actions of the US and China raise doubts about whether cyberespionage will continue to be interpreted as an unfriendly act or will have the impact of being considered an act of war.

On the other hand, there is reason to be concerned about the “danger discourse” around intellectual property theft that is being used in the first place to mobilize the military budget towards a strong cyber strategy which requires an accumulation of cyber resources and personnel to address the growing threats from the cyber domain, including intellectual property theft from state and non-state actors. Second, it is being used to monitor internet traffic, including a more in-depth analysis of civilian data.

At the end of the Pax Britannica, the United States took the place of global leader, which it has maintained mainly because of its scientific development, which has guaranteed economic and military supremacy over the other powers around the globe (Paarlberg, 2004). However, its technological leadership seems to be under threat. In 2004, Adam Segal wrote the essay is America losing its edge? and stated, “it would be premature to declare a crisis in the United States’ scientific or technological competitiveness” (Segal, 2004). Sixteen years have passed since then, and the United States’ situation is not the same. With its economic power, China mobilizes large investments towards the technological sector and rivals the United States in scientific or technological competitiveness (McRaven, 2019). China’s intentions are not limited only to dominate labor-intensive manufacturing. The government is trying to develop China’s indigenous technological capabilities to achieve military superiority, while the United States uses the arms embargo and tightened transfers on high technology, trying to constrain China’s rise (Goldstein, 2015).

The technological development promoted by the Communist Party is recent compared to other industrialized countries. It started only 30 years ago. From 1950 to 1980, the government decided to open its market to foreign capital in exchange for technological transfer. In this period known as techno-nationalism, the manufacturing industry was primarily developed. In the 1990s, the government decided to make a strategic shift by emphasizing indigenous innovation because while neighboring countries like Korea and Japan produced high-end, high-tech products, China produced low-cost manufacturing products. By supporting enterprises through subsidies, free land, and low taxes, companies like Huawei could flourish. The government dramatically increased its participation in technological development and became the guide of a “national technological innovation” phase (Liu, 2016, pp. 4-5). It was also a strategy to counter the US embargo imposed in 1989. The embargo covers mainly US defense technology and military systems. Since 1990, the defense industry has been a priority for the Chinese Communist Party (Bräuner, 2013, pp. 557-558).

China has two purposes in enhancing its military power, in principle to weaken the US military advantages (Shifrinson, 2020, p. 197) in Asia-Pacific (Simón, 2020, pp. 5-6) following the philosophy of “win without fighting” and in the long run to catch up with the US and become a science and technology power (Kania, 2017, p. 5) to ensure military superiority in all domains. Friedberg (2018, p. 35) says that in Asia-Pacific, the US power projection system has been eroded by China’s anti-access/area denial (A2/AD). In addition, he states that China is developing a naval strategy to project power beyond its shores, reaching out to “the Indian Ocean, the Persian Gulf and off the coast of Africa” (Friedberg, 2018, p. 38). As far as China is concerned, complemented and supported by other political instruments, the military instruments of the United States have two purposes: first, to enable the integration of Beijing into the processes of cooperative security and actions compatible with American interests in general. Second, to provide security to Asian allies by demonstrating that the United States has the military capability to provide security in the area and to discourage China from using military force as a means of conflict resolution in disputed areas, whether islands or states such as Taiwan (Swaine, 2011, pp. 147-148).

The ongoing military competition between the US and China is driven by two critical characteristics of the world technological scene. First, the commercial use and development of technologies such as artificial intelligence and quantum computing have increased. These technologies are both for military and civilian use making their proliferation and reflects greater diffusion than technologies exclusively for military use, resulting in state competitors and non-state actors being able to acquire them. Second, the first line of military competition is innovation because the development of high technology requires closing the gap between development and military implementation.

Washington and Beijing have responded to the changing innovation landscape. For its part, the United States has established Defense Innovation Unit Experimental (DIU) to get involved in the ecosystem of commercial, technological innovation. Chinese leaders have consolidated a civil-military fusion strategy that removes barriers between the private sector and the military-industrial base (Laskai, 2018a). China intends to transfer the success of the technology sector into military power. The civil-military fusion strategy allows it to involve the country’s high-tech civilian companies in defense projects.

In May 2016, the Innovation-Driven Development Strategy (IDDS) was officially declared by Beijing. The focus of this strategy is China as a champion of innovation. It provides an insightful and forward-looking projection of China over the next three decades.

1. Becoming an “innovative country” by 2020

2. Joining the leading edge of advanced innovation countries by 2030

3. Becoming a strong global innovation power by 2050

In this regard, Xi Jinping has declared: “To carry out the innovation-driven strategy, the basic thing for us is to enhance our independent innovation ability…” (Xi, 2014, p. 134) because “Under a situation of increasingly fierce international military competition, only the innovators win” (Zhong, 2017). China has developed three projects in which it has set the course for the next decades to increase its technological capabilities. Integrated Circuit (IC) 2014 Guidelines aim to reduce the dependence on US integrated circuit manufacturing by developing a local industry that produces chips and meets the consumer needs of Chinese industries. Perhaps one of the most well-known projects is Made in China 2025, an ambitious project that aims to transform the manufacturing industry through three transitions “From China’s speed to China’s quality; from China’s products to China’s brands; and from ‘made in China ‘created by China” (Liu, 2016, p. 2). Implementing this strategy requires industries to modernize their factories to apply smart technologies and solve the challenges they face, such as labor costs, pollution, and delays in production and export. Next-Generation Artificial Intelligence (AI) Development Plan aims to make China a world leader in AI by 2030.

In addition to the civil-fusion strategy, in the behavior of the Chinese government, one can identify the development of the “Going Out” strategy that encourages technology transfer from overseas (Mori, 2019, p. 82). China is investing billions in new American companies with cutting-edge products that could have military applications. China’s interest in US startups is focused on artificial intelligence and robotics. In this sense, the Trump Administration has made two important and necessary moves to define the future of the United States: reviewing carefully the process that allows Chinese investment in critical technologies and better controls on exports of sensitive technologies (Segal, 2019).

Artificial Intelligence Competition: A New Arms Race?

During the last decades, a technology that has burst onto the political scene is artificial intelligence (AI). Artificial intelligence can disrupt the international system (Demchak, 2019) and affecting the balance of power (Horowitz et al., 2018; Kania, 2017). Artificial intelligence can add sophistication, speed, precision, and lethality to military and strategic affairs (Payne, 2018). AI is a set of various computational techniques which operate in different dimensions, physically on objects: tanks, airplanes, robots can function without human intervention. In a non-tangible way, it operates in the processing and interpretation of information through image-recognition algorithms (Horowitz, 2018, p. 48). Also, AI is developed due to four analogous inputs “abundant data, hungry entrepreneurs, AI scientists, and AI-friendly policy environment” (Lee, 2018). These four inputs are found in large numbers in China.

We are entering into a phase where two great powers have an equal goal: to be the leader in all aspects of AI. Authors like Barnes and Chin (2018) estimate that this situation is triggering an escalating AI arms race because both nations want to be the first to find military applications of AI. Horowitz (2018) supports their point of view. He adds that there is a strong possibility that the use and development of autonomous lethal weapon systems will lead to an arms race. After all, military technology determines how wars will be fought and won (Sechser et al., 2019, p. 732).

The Pentagon has been closely following China’s movements, especially those involving military investment. Since 2014, the United States has initiated efforts to become a leader in AI to increase and maintain its economic and military power. Barnes and Chin note that William Roper, then the head of the Pentagon’s Strategic Capabilities, played a key role in getting the US government to take that direction and gain an advantage over China in the field of AI. However, in May 2017, a game between Ke Jie -the best player on earth of Go- against AlphaGo -one of the most advanced AIs in the world- triggered China to have its “Sputnik Moment”. AlphaGo’s victory from the Western viewpoint represented the victory of the machine over man. According to Lee for China, that game visualized in real-time by millions of Chinese affected the Chinese psyche and government policymakers, the West overwhelmingly showing its technological superiority and dominance in an era of artificial intelligence (Lee, 2018, pp. 11-29) which led the Chinese authorities to react.

Two months later of the Go game, China revealed to the world the New Generation AI Development Plan 2017, in it establishes its firm intentions to lead the world in AI by 2030, also sets out a three-dimensional agenda, namely “tackling key problems in research and development, pursuing a range of products and applications, and cultivating and expanding AI industry to 1 trillion RMB ($150 billion) by 2030” (Kania, 2017, p. 9). Since its release, China’s national AI Plan has promoted AI as a high-level priority for Beijing. Military-Civil Fusion AI has made China emerge as an AI powerhouse by working as one team with companies such as Baidu, Alibaba, Tencent, and iFlytec (Horowitz et al., 2018, pp. 12-14).

Harnessing AI Technology, the Chinese Communist Party (CCP) intends to strengthen its national and military power (Ahmed et al., 2018). According to Barnes and Chin (2018), to overtake the United States in the field of AI, China has adopted the American strategy to use it against them, firstly the creation of a Chinese version of the Defense Advanced Research Projects Agency (DARPA) called The Scientific Research Steering Committee, which will report directly to President Xi Jinping and secondly investing heavily in Zhongguancun where China’s Silicon Valley is located.

The first White House initiative in artificial intelligence was carried out in 2016 during the Obama administration’s National Artificial Intelligence Research and Development Strategic Plan. However, it was not until February 11, 2019, that the United States presented a whole-of-government strategy called AI Initiative. The fact that it took three years to present an AI strategy has been criticized, pointing to the slowness with which the White House has pushed cutting-edge technologies (McRaven, 2019, pp. 47-48). Key principles stated in Obama’s report were adopted more quickly in China than in the United States (Horowitz et al., 2018, p. 10). Dascalu (2018) compares the policies in AI presented by Obama and Trump concludes that: “the development of foreign AI policy will benefit the US as it will be a way to gain power through AI technologies and pursuing hegemony, as power will assure the survival of the US” (Dascalu, 2018, p. 35). In the last two years, the present administration has put considerable effort into prioritizing the development of artificial intelligence, a joint effort of both the White House and federal agencies to ensure that the US remains the world leader in AI. The most recent action by the White House was announced in February 2020. President’s FY21 budget commits to double AI R&D over two years and the recent adoption of AI ethics principles by the Department of Defense.

In general, both countries have prioritized AI because of the economic advantages that can be obtained from creating AI for specific uses by having the advantage of being the first IP registrars to ensure economic leadership. And secondly, the military advantage over the opponents by applying AI capabilities to their military (Horowitz et al., 2018, pp. 11-12), such as automation of decision making, command and control, and autonomous systems. For China, artificial intelligence matters because it is crucial to the future global military and economic power competition, and also, achieving leadership in AI technology is a step towards reducing dependence on international technology imports (Allen, 2019, pp. 3-4). It is crucial for the US to achieve an offset strategy -first nuclear weapons, second stealth, and precision strike- and AI is announced in the US as the third offset strategy (Payne, 2018, p. 7).

Halbert (2016, p. 262) suggests that “the data theft undertaken by the Chinese is specifically designed to improve their military and technological capacities”. However, having access to AI technology through cyber espionage or mimicry is not easy. Firstly, mimicking AI applications is expensive and complex. Governments that have developed this type of technology are forced to deal with the components in secrecy, which means that they are not found on the market mainly because they are classified. Also, the technical knowledge needed to develop, adapt, or modify algorithms and develop AI-based military capabilities requires advanced knowledge. Getting an AI application to work properly can take a long time. Secondly, the cybersecurity used by military technology to prevent hacking and spoofing is very high compared to the technology intended for civilian use, which adds an extra layer of security against copying attempts.

Is America Prepared for Winning the Competition Against China?

During the Cold War, the United States increased its power by engaging in internal and external balancing and overcoming the USSR. Since the end of the Cold War, the US has followed a strategy of primacy in different areas, domestic economic growth, technological innovation, and military might. However, nowadays, the US primacy seems to have ahead of the challenges that can take it to a level of competition similar to that of the Cold War. Blankenship and Denison (2019) question the capacity of the United States to successfully face this stage of the great-power competition against China because they perceive that the United States lacks internal and external balancing. Internal balancing is based on developing military and economic capabilities “and investing in technologies and other domestic areas that help convert the latent capabilities of the state into material strength” (Blankenship & Denison, 2019, p. 45). In contrast, external balancing represents the creation and strengthening of strategic alliances to face a common threat. As long as the United States does not change its strategy in critical areas such as human capital, a better relationship with the private sector, and R&D expenditures, the risk of losing the present competition to China is real.

### 2ac—AT: Growth Turn

#### We solve competition – breakups work

Van Loo ’20 [Rory; Associate Professor of Law @ Boston University; “In Defense of Breakups: Administering a "Radical" Remedy,” *Cornell Law Review* 105(7), p. 1955-2022; AS]

In summary, the most influential studies shaping pessimism about governmental administration of breakups relied on questionable methodologies and are outdated. The research is limited by the lack of sophisticated quantification of the effects of divestitures on consumer welfare, the failure to consider deterrence, and the absence of large breakups in the past few decades. More recent studies even provide grounds for cautious optimism that larger, government-ordered divestitures may yield high success rates. Some additional comfort comes from the absence of disaster despite an array of government interventions to separate large firms-including electric companies, railroads, banks, movie theaters, and television companies, among others.1 72 In addition, bankruptcy courts regularly order divestitures. The limitations in evidence despite diverse breakups demonstrate the speculative nature of claims about the government being too incompetent to administer breakups.

#### every economic metric indicates superior growth with antitrust enforcement.

Glick ’19 [Mark; Professor of Economics @ University of Utah; “How Chicago Economics Distorts “Consumer Welfare” in Antitrust,” *The Antitrust Bulletin*, p. 1-19; AS]

B. The CW Standard Is Correlated With Inferior Economic Performance

A recent paper by W&G also defends the CW standard. W&G state that adoption of the CW standard has led to stronger economic performance: “Indeed, there is now widespread agreement that this evolution toward welfare and away from noneconomic considerations has benefitted consumers and the economy more broadly.”74

While inviting, this claim is patently false. It is reasonable to date the rise of the CW standard with the election of Ronald Reagan and the Reagan appointees to the Department of Justice and the Federal Trade Commission. The period W&G calls the period of “multiple masters”75 is arguably the period after World War II until the late 1970s. A comparison of economic performance in these two periods yields unambiguous results. Economic performance was superior on almost every economic metric during the period of “multiple masters” in antitrust. For example, the average growth rate of GDP from 1980 to 2015 was 2.51%, but the growth rate of GDP from 1947 to 1973 was 3.88%. 76 The rate of growth of labor productivity from 1980 to 2015 was 1.18%, and that from 1947 to 1973 was 2.36%. 77 Wages grew faster in the earlier period, distribution of income was more equal, the unemployment rate was lower on average, and investment was stronger.78 W&G do not provide a single reference showing improved economic performance under the lax antitrust regime ushered in by the CW standard. Contrary to W&G’s conclusion, the empirical evidence suggests that restricted antitrust enforcement is associated with inferior economic performance.

#### concentration causes crisis – too big to fail.

Glick ’19 [Mark; Professor of Economics @ University of Utah; “How Chicago Economics Distorts “Consumer Welfare” in Antitrust,” *The Antitrust Bulletin*, p. 1-19; AS]

Michael Porter takes a position diametrically opposed to W&G, contending that concern for the macroeconomic performance requires a change in antitrust goals. He argues that competition could contribute much more than it does presently to improved macroeconomic economic performance.79 As a result, he has advocated that the CW standard be replaced with a productivity-based antitrust goal.80 The advantage of Porter’s goal over the CW goal is illustrated by the Department of Justice policy concerning bank mergers. Lax merger enforcement has arguably contributed to macroeconomic instability by producing large and interconnected banking and financial institutions 81 that are “too big to fail.”82 The deregulation of the banking sector beginning in 198083 initiated an avalanche of banking mergers. In 1986, there were 14,070 banks. By 2018, this number dropped to 4806.84 Most of this reduction was due to bank mergers.85 For the years 1980–1994 alone, there were more than 6000 bank mergers.86 The result has been the emergence of four megabanks each with assets exceeding a trillion dollars.87 We also know that large interconnected financial institutions can destabilize the macroeconomy, as occurred in 2008. This is a problem borne of the free market that competition policy could have helped ameliorate. Instead, antitrust enforcement agencies allowed the emergence of a small group of interconnected banking giants and have been unreflective about the consequences of their inaction.

All of the bank mergers referred to above were subject to review by the Antitrust Division of the Department of Justice, yet only a handful were challenged.88 This inaction resulted, at least in part, from the Department of Justice’s view that “too big to fail” is not a proper antitrust concern under the CW standard89—thus providing a poignant example of how the CW standard90 can prevent antitrust policy from applying common sense measures to protect the economy. Michael Porter’s vision might have made a difference. Wooden adherence to the CW standard failed us at a moment when other policy levers were not available or effective.91

## Dependency Trap

## Topicality

### 2ac—AT: Topicality

#### Counter interpretation: private sector means the aff has to apply to private sector companies.

#### Merriam Webster ND (Merriam Webster Dictionary, No Date, https://www.merriam-webster.com/dictionary/private%20sector)

**Definition of *private sector***

the part of an economy which is not controlled or owned by the government

## States CP

### 2ac—AT: States

#### State enforcement over-deters and generates uncertainty – stifles innovation and competition.

Grosso ’21 [Jacob; JD Candidate @ University of Richmond School of Law; “The Preemption of Collective State Antitrust Enforcement in Telecommunications,” *University of Richmond Law Review* 55(2), p. 615-656; AS]

Preemption would address the effects of the growth of federal regulators in the telecommunications market, particularly CFIUS, as well as the resulting changes to the regulatory landscape. If the states act as another national regulator in telecommunications, then innovation, competition, and the ability of federal enforcers to pursue policy goals will be stifled. To solve this problem, collective state antitrust action should be preempted by federal law in the telecommunications market. States likely remain better plaintiffs than consumers in many situations and therefore should litigate on behalf of their citizens. This litigation should be conducted individually, with federal regulatory enforcement generally left to federal regulators.

States should not be prevented from enforcing antitrust law; instead, states should focus exclusively on violations of their own state laws and on protecting their citizens as individual enforcers, not as a collective body. Federal agencies are the proper regulators of national industries such as telecommunications, while state enforcement prevents federal nonenforcement policies which may benefit social welfare overall.253 With respect to policy goals, CFIUS's interventions in recent years showcase the federal government's focus on national security concerns in the telecommunications market. Agendas balancing broader policy goals-such as national security-with competition are only possible under a more centralized enforcement system and by specialized agencies.254

Specialized agencies are therefore the best regulators of the telecommunications market. 25 5 The requirement that "[a]ntitrust analysis must always be attuned to the particular structure and circumstances of the industry at issue" leads to efficiencies from the use of specialized enforcers. 256 The inelasticity of the market and the significant barriers to entry require oversight by specialized expert regulators to maintain a competitive environment, and interference from other government regulators will only impede the ability of the federal regulators to direct this market. Nonenforcement policies, used when the agencies determine doing so is in the best interests of competition, cannot be enforced without a monopoly on enforcement. 257

Placing control in the hands of more centralized regulators reduces uncertainty for competitors due to the inherent inconsistencies in court proceedings and allows for better market functioning. 258 The inability to pursue nonenforcement agendas and reduce litigation will cause unnecessary false positives. False positives can discourage competition and innovation. 25 9 Too many false positives will cause competitors to restrict their behavior drastically to comply with enforcers at the cost of innovative business practices.26 0 Overenforcement and the resulting false positives reduce competition, inviting harm to both the consumer and the aggregate social welfare.26 1 Reduction in states' ability to conduct collective antitrust litigation will naturally decrease the overall amount of litigation, which provides several benefits to competition and to regulators. These benefits include reduced compliance costs, legal fees, and the redistribution of resources. 26 2 Reduced costs will benefit administrative costs, particularly those resulting from the coordination of state agencies. The result is a leaner, specialized enforcement system; increased market freedom due to clear regulations; and the opportunity for regulators to balance broader policy goals with antitrust.

#### States cannot apply global antitrust remedies – they’re key to preventing the dependency trap caused by dominant platform’s conduct in developing countries.

Funta ’18 [Rastislav; PhD, LLM, Associate Professor of European Union Law in Janko Jesenský Faculty of Law @ Danubius University; “Extraterritorial application of us-antitrust law on global cartels from comparative (EU LAW) perspective,” *The Lawyer Quarterly* 8(3); AS]

The first question seemed to be largely clarified. The text of the law is based on the socalled “effects test”, which is based on the decision of the Supreme Court in United States v. Aluminium Co. of America, 148 F.2d 416 (2d Cir. 1945) and subsequently confirmed by the Supreme Court in Hartford Fire Insurance Co. v. California, 509 U.S. 764, 113 S.Ct. 2891, 125 L.Ed.2d 612 (1993). The differences between the various Circuit Courts are focused on the second question: Is it the applicant’s claim in the concrete procedure which is the result of the domestic impact,17 or satisfies such a claim a potential18 or potential19 plaintiffs? The question referred to the Supreme Court has tended to be as whether the plaintiffs can assert claims under the Sherman Act to compensate for damages arising solely from transactions that took place outside the US market. The question focused on the applicability of the Sherman Act to foreign conduct. The Sherman Act is to be considered if such activities have an effect on the US market (effects test). Unlike European law, the US Sherman Act focuses more on foreclosure practices and attempts to market monopolization20 Described according to Senator John Sherman, Chairman of the US Senate Financial Committee, Sherman’s antitrust law of 1890, has to protect against commercial practices designed to restrict or eliminate competition in the market. Sherman’s law is divided into two sections.21 According to them, it is forbidden to monopolize trade, all mergers and collusion, which would restrict competition within trade. The Sherman Act was the first measure adopted by the US Congress to ban trusts (or monopolies of any kind). Although many US states have previously enacted similar laws, they were limited to domestic trade. On the other hand, Sherman’s law was based on Congress’s constitutional power to regulate interstate trade.

## Infrastructure DA

### 2ac—AT: Infrastructure

#### Infra/Budget fails- biden PC not enough to bridge the gap

Lowry 9-27-21

(Rich, https://www.bakersfield.com/opinion/rich-lowry-for-biden-failure-is-very-much-an-option/article\_2cc523e6-1d76-11ec-a542-9f15f6969107.html)

Joe Biden's domestic agenda at the moment is, like his presidency, in peril. It is caught between the Scylla of progressives insisting the bipartisan infrastructure bill can't pass the House before the reconciliation bill passes the Senate and the Charybdis of moderates insisting the bipartisan infrastructure bill must pass the House before anything else happens. It is, to switch metaphors, an old-fashioned Mexican standoff, with the intervention that will lead to all factions holstering their weapons not yet evident. Still, the conventional wisdom is that Democrats will get both bills in the end. They will stare into the abyss, recognize the partywide debacle that would ensue if they pass nothing, and agree, somehow or other, on the infrastructure bill and a reduced reconciliation bill. It's certainly true that, whatever the intervening drama, must-pass spending bills always pass. But the possibility of a complete meltdown shouldn't be underestimated. The reconciliation bill isn't too big to fail, but big enough potentially to fail spectacularly. It has the hallmarks of other signature presidential initiatives that, despite huge investments of presidential political capital, have gone down at the hands of a president's own party. In an unimaginable defeat at the time, Bill Clinton couldn't get his health care bill through Congress, despite a roughly 80-seat House majority and 56 or 57 senators. After his reelection in 2004, George W. Bush's Social Security reform fizzled in a GOP Congress. Out of the gate, Donald Trump suffered an embarrassing defeat on Obamacare repeal in 2017. So, no, victory isn't inevitable, no matter how much Biden needs his bills. It is a well-established axiom that delay, which especially characterized the Clinton health care debate, is a killer. Presidents don't tend to get more popular after an election, and if a delay pushes a fight into a midterm-election year, members of his own party are likelier to conclude they need to go their own way to protect their interests. This is why Sen. Joe Manchin's talk of putting off consideration of the reconciliation bill until 2022 is itself an existential threat to its prospects. It's always a warning sign when a specific, partywide electoral mandate hasn't been built for an agenda. Clinton didn't set out in any detail his ambitions on health care during the 1992 campaign. Bush hardly campaigned on Social Security reform. And Trump had no idea about what would replace Obamacare. Biden did lay out his agenda last year, but he never made it front and center in the campaign. Instead, he presented himself as the anti-Trump who would bring the country together. Obviously, the size of congressional majorities matters. Clinton and Bush couldn't work their will despite healthy numbers, whereas Trump had a very slender majority in the Senate, opening the way for John McCain's famous thumbs down. Biden technically doesn't even have a Senate majority. This gets to what sets him apart from all of his predecessors — the massive disconnect between the scale of the legislation he seeks and the narrow majorities that are supposed to pass it. There's a hunt for villains among progressive commentators as the Biden agenda encounters turbulence. But why wouldn't a president who has an approval rating in the mid-40s, a tie in the Senate and a single-digit majority in the House have difficulties passing the most sweepingly ambitious progressive agenda in decades? The Democratic factions are empowered to make their conflicting demands because the margins are so small. The bill is so huge — with everything stuffed in it to avoid the filibuster — also because the margins are so small. Given the real risks of failure, it would make sense for Democrats to pass the infrastructure bill and pocket that success, then move on to reconciliation, realizing one way or the other that it is going to be slimmed down. Yet that's not the Democrats' mood right now, even though history says that they should be afraid, very afraid.

#### No PC on Elections, immigration, minimum wage

Wootson 9-25-21

(Cleve R., https://www.washingtonpost.com/politics/harris-assigned-to-tackle-volatile-issues-quietly-builds-a-network/2021/09/25/5440d8ac-163c-11ec-9589-31ac3173c2e5\_story.html?outputType=amp)

Yet her actions are largely dictated by the president’s larger priorities. The White House has stressed that some of the left’s biggest goals — codifying voting rights, overhauling the immigration system, establishing a $15 national minimum wage, reforming the police, enshrining abortion rights — must be accomplished by Congress. But many activists complain that Biden and Harris have not spent much time or political capital pressuring Congress to do exactly that. Still, for many activists, long-term alliances are almost as valuable as short-term actions. An audience with Harris in many cases represents a seat at the table, and could make activists more open to working one day to bring about a Harris administration.

#### Afghanistan Thumps

Silverman 9-26-21

(Stan, https://www.bizjournals.com/philadelphia/news/2021/09/26/stan-silverman-leadership-lesson-trump-biden.html)

In the days after the fall of Afghanistan, the Biden administration was forced to work with the Taliban, a bitter enemy for 20 years, to ensure Americans could leave the country. The optics of this effort cost Biden significant political capital.

#### Plan popular.

Lande & Vaheesan ’20 [Robert; Professor of Law @ University of Baltimore School of Law and Sandeep; Legal Director @ Open Markets Institute, JD @ Duke; “Preventing the Curse of Bigness Through Conglomerate Merger Legislation,” *Ariz. St. LJ* 52; AS]

B. Growing Political and Public Concern About Corporate Power

Public recognition of, and concern about, corporate political power is growing. An increasing number of politicians and public figures are focused on the political and social—as well as economic—power of large businesses. This concern is not limited to one portion of the political spectrum. A diverse set of voices and organizations are calling for tackling monopoly and oligopoly power in American society.

Prominent liberal and progressive voices have demanded action to curb the economic and political power of large corporations. Many Democrats have made strengthening anti-merger and anti-monopoly law a key pillar of their agenda.80 As mentioned in the introduction, Senator Amy Klobuchar introduced an anti-merger bill that would establish a presumption of illegality involving mergers that combined more than $5 billion in assets.81 This bill would target corporate size directly, although it features a large exemption for pure conglomerate mergers.82

Senator Bernie Sanders weighed in against the AT&T/Time Warner merger and identified the further agglomeration of power as a principal evil of the combination. 83 He stated this consolidation “represents a gross concentration of power that runs counter to the public good.”84 And in early October 2018, Sanders introduced a bill that would break up the largest financial institutions in the United States and establish a cap on size going forward.85 Senator Sanders also promised to combat the excesses of large firms in the agricultural sector, stating that they are devastating to the small farmer and are a direct cause of mass unemployment, lower wages, massive wealth inequality, and a host of social problems. 86 In his October 2019 Corporate Accountability and Democracy plan, presidential candidate Sanders condemned the present system in which “a small group of ultrawealthy CEOs are making the decisions that increasingly determine our economic, environmental and political future.”87

Senator Elizabeth Warren has offered extensive critiques of corporate power, citing undue political influence as one of the evils of corporate bigness.88 In a keynote address at a conference hosted by the Open Markets Institute in December 2017, Senator Warren warned that “[c]oncentrated market power also translates into concentrated political power—the kind of power that can capture our government. And that’s exactly what’s happening, as President Trump and the Republicans in Congress bow to the power and influence of these industrial giants and financial titans.”89 Warren promised that if elected president, she would break up Amazon, Facebook, and Google.90 She published a detailed plan to break up big tech companies, including the creation of a threshold of $25 billion in annual revenue, above which companies would be subject to restrictions and regulations including mandatory divestitures of certain portions of the company. 91 Facebook allegedly removed Warren’s political ads posted on Facebook that called for breaking up Facebook.92

Warren also called for breaking up some of the biggest farming corporations “so that they not only do not have that kind of economic power, so that they’re wiping out competition, so they’re taking all the profits for themselves . . . but also so that they don’t have that kind of political power.”93

These figures are not outliers but are representative of a growing antimonopoly philosophy among Democrats, liberals, and progressives. Others have echoed the concerns expressed by Senators Klobuchar, Sanders, and Warren. (Former) Representative (and current Minnesota Attorney General) Keith Ellison and sitting Representative Ro Khanna established an Antitrust Caucus and called for antitrust enforcers to look beyond just consumer welfare. 94 Alexandria Ocasio-Cortez, the Democratic representative for New York’s 14th Congressional district, has repeatedly voiced concerns about the political might of large financial institutions.95 Senator Cory Booker has lamented the “incredible concentration of economic and political power in this country” 96 and introduced a bill that would establish a moratorium on corporate mergers in agriculture. 97 Former Colorado governor and former presidential candidate John Hickenlooper has called for a major revival in antimonopoly enforcement.98

Indeed, many Democrats have criticized the political power of banks since at least the 2007–08 financial crisis. In early 2009, just six months after the collapse of Lehman Brothers and the start of the worst financial crisis in eighty years, Senator Richard Durbin famously observed that “the banks— hard to believe in a time when we’re facing a banking crisis that many of the banks created—are still the most powerful lobby on Capitol Hill. And they frankly own the place.”99

Among academics and commentators, Joseph Stiglitz and Paul Krugman have repeatedly sounded the alarm about the pervasive market power problem. Stiglitz has opined that “America has a monopoly problem—and it’s huge” and cited the political power of large corporations as subverting democracy. 100 Krugman has similarly recognized the corrosive political power of large corporations. 101 Former Secretary of Labor, Harvard professor, and political commentator Robert Reich applauded Elizabeth Warren’s announced intention to break up big tech and predicted that breaking them up would allow for more privacy, decentralization of information, and more innovation. 102 Barry Lynn, director of the Open Markets Institute think tank, has sounded the alarm that tech giants like Google and Facebook are a threat to core democratic institutions.103 Zephyr Teachout, a progressive law professor, promised that if elected Attorney General of New York she would explore breaking up Google and Facebook using New York state antitrust laws.104

Conservatives in the United States are generally supportive of, and deferential toward, big business interests. Conservative thinkers have indeed played a major role in weakening the antitrust laws and allowing consolidation and monopolization across the economy.105 In the name of “free markets,” conservative politicians and commentators typically favor policies that support large corporations and place few restrictions on them.106

Nonetheless, more and more conservative voices are starting to raise concerns about corporate power. At present, many of the attacks reflect anger at certain companies, more than corporate power in general. Much of the conservative criticism appears driven by the perceived politics of their executives and employees more than a distrust of large corporations and their power in general. For example, Google is viewed as supportive of the Democratic Party and some liberal causes and it has drawn significant criticism from the right. 107 Whatever the underlying motivation though, skepticism of large corporations, or at least a subset of them, is a growing strand of thought on the right.

At least on the surface, the Trump administration reflects this rising antimonopoly tendency among conservatives. President Trump has repeatedly attacked certain powerful corporations.108 He has criticized the power of Amazon and its founder and chief executive officer, Jeff Bezos. 109 He has also condemned vertical integration in telecommunications—specifically calling out the completed merger between Comcast and NBC Universal and the now-completed merger between AT&T and Time Warner—for threatening to “destroy democracy.”110 His former chief strategist and right-wing icon, Steve Bannon, called for public utility regulation of tech platforms like Facebook and Google.111 Former Attorney General Jeff Sessions called for remedying the perceived liberal bias of these same tech platforms.112

Others on the right have sounded similar fears about corporate power. Senator Ted Cruz, who has been a major recipient of campaign contributions from large corporations,113 has endorsed using the antitrust laws against the power of tech platforms. 114 Senator (and former Representative) Marsha Blackburn has criticized platforms like Google and YouTube for failing to practice viewpoint neutrality and called them out for apparent bias against individuals and organizations expressing conservative opinions. 115 Representative Jim Jordan (R-OH) expressed similar concerns and insinuated that stronger governmental measures should be applied to curb the power of giant social media companies.116 Senator Josh Hawley (R-MO) previously served as Missouri’s attorney general and, during his tenure, opened an antitrust investigation into Google.117

Some conservative media outlets have in recent years been vocal critics of corporate power. Breitbart, the hard-right news outlet formerly run by Steve Bannon, has championed antitrust enforcement against large corporations.118 The American Conservative, a nativist right outlet that supports economic populism, has become a consistent critic of corporate power and supporter of renewed antitrust enforcement.119 Tucker Carlson, a commentator on Fox News, has endorsed public checks on Facebook and Google.120

Conservative talk radio icon Rush Limbaugh described what he saw as a pernicious aspect to corporate ownership of media.121 He stated that large, non-media corporations or their CEOs, for example Jeff Bezos purchasing The Washington Post, acquire media to shape policy and thereby increase their power. 122 Even anti-government conspiracy theorist Alex Jones has called on the Trump administration to break up big technology companies because the supposedly left-leaning Silicon Valley titans are using their massive power to stifle conservative viewpoints.123

With rising awareness of, and opposition to, corporate power, an antimerger law that directly targeted corporate size could attract significant popular and political support. Senator Klobuchar’s bill has already introduced size-based limits on consolidation into the political debate.124 Many liberals and progressives appear ready to embrace this idea.125 On the right, support for such a possibility is much less certain.126 Yet, a growing tide of criticism from conservative figures suggests at least one faction on the right may be open to preventing corporate growth through extremely large mergers and acquisitions.127

#### Winners win – legislative blitz key to success

Waldman 20

(Paul, <https://www.washingtonpost.com/opinions/2020/12/02/joe-biden-has-move-fast/>, 12-2)

For every day of his presidency, Joe Biden will be restrained and bedeviled by Republican power. Republicans will probably retain control of the Senate, and even if they don’t, they will do everything they can to sabotage Biden’s agenda. They will obstruct and delay, whether it’s on legislation, appointments or anything else, to make sure Biden has as little as possible to show for his time in office. Unfortunately, Biden is naturally inclined to respond in just the way Republicans are counting on. He’s a compromiser, a dealmaker — a man who wants to believe that there are bipartisan solutions to be found. That’s not to say that Biden is naive about what he faces, just that he will always be vulnerable to some of the same mistakes that President Barack Obama made early in his tenure, mistakes that come from thinking Republicans just might be operating in good faith and with the proper persuasion they can be dealt with. But a realization of the full implications of our current polarization may just prove liberating for the new administration. There are at least some encouraging signs that Biden understands the situation; here’s a report from Politico on how his transition is thinking about personnel: Concerned about Republicans slow-walking confirmation hearings for Cabinet appointees and hollowed-out federal agencies, Biden and his aides are eager to place mid- to lower-level officials across the federal government, particularly in national security roles, to ensure his administration can begin to enact his agenda immediately, according to three people familiar with the situation. Slow-walking will absolutely be the Republican strategy, on both appointments and legislation. They won’t come out and say they’re going to stonewall every appointee and refuse to allow any legislation to pass; instead they’ll say that they just want to make sure Biden doesn’t stock his administration with radical leftists and propose far-out socialist laws. Send us the nominees and the bills, and we’ll consider them. It’ll just take some time. Weeks will then stretch into months, and the Biden agenda will languish. They’ve done it before — Obama himself describes how they endlessly dragged out negotiations on the Affordable Care Act by claiming they might support it — and they’ll do it again. That’s the Republican plan. The first step to getting around it is to understand that the public won’t blame gridlock on the ones who are causing it. They’ll just see a bunch of bickering in Washington with nothing getting done, and Biden will be the one who takes the blame. Once you realize that the public is neither aware of nor particularly concerned about process questions, you can stop worrying about whether Republicans will squawk at this appointment or that executive order — because they’ll squawk no matter what you do. If it’s a good idea and you think the results will be good, then just do it. As quickly and comprehensively as possible. As David Roberts of Vox observes: In 2009, Obama and his aides made the mistake of thinking that their major initiatives had to be rolled out one at a time in sequence, because he had a finite store of “political capital” that had to be spent carefully. But political capital is not something that exists apart from any particular issue; it isn’t a special sauce that has to be poured on a policy in order to make it palatable. And with the parties as polarized and unified as they are, political capital has become all but meaningless. There may have been a time when a popular president possessed so much capital that a senator from the opposition party would feel compelled to support him on part of that president’s agenda, but that time is long gone. There is no account Biden can draw on to turn Republican “no” votes into “yes.” So setting up a series of high-profile policy battles may be the opposite of what Biden should do. The unfortunate fact is that he may not have the opportunity to do much in the way of big legislation on health care or climate change or anything else, and if he has only executive power to work with, it makes it all the more urgent to move quickly. Which means getting staff in place immediately and then unleashing them. The Revolving Door Project argues that Biden should give as much authority as possible to the agencies to let them dismantle their particular corners of the Trump legacy on their own, because the task “simply will not happen if approached sequentially or micromanaged” by a White House staff with limited bandwidth. That means moving on every policy area all at once. There’s nothing to be gained by putting off any part of Biden’s agenda. Whatever he can do given the limits of his power, he should do as soon as possible, in a flood of policymaking. Even if Democrats win both Georgia races and control the Senate, Biden should acknowledge that he likely has two years until the 2022 midterm elections to pass whatever legislation he can. Not only will Democrats probably lose one or both houses in the inevitable backlash (as happens to most presidents in their first midterm), the only possible chance at forestalling that result is to get results, as many as possible, that he can show the voters. Republicans will complain that Biden is being partisan, uncompromising, taking a “my way or the highway” approach. It will be a strategy to convince everyone of the lie that Biden and Democrats might be able to find some way of winning them over, when in fact they’ll be implementing a strategy of total opposition. If Biden follows them on that fruitless quest, he’ll be running in circles while crucial time passes and nothing gets done. The only option for him is to decide not to care about Republican whining and do what he got elected to do with all haste. The alternative is failure.

#### Covid malaise sapping capital

PBS 10-1-21 https://www.pbs.org/newshour/politics/polarization-over-vaccine-mandate-rules-underscores-difficulty-for-u-s-to-slow-pandemic

And yet, a larger percentage of people aged 18 to 40 said that the protracted pandemic has taken a toll on their wellbeing, when compared to those 75 and older. Overall, a little more than a third of Americans say they are more stressed now than they were ahead of the pandemic, according to this latest poll. For Gen Z and millennials, the number was 37 percent, but ticked down slightly to 30 percent among the oldest Americans. People from rural areas, at 41 percent, were also more likely to say they feel more stressed now than those living in more densely populated areas, such as small cities and suburbs, both at 33 percent. Americans split on Biden approval That sense of unease, on top of the lackluster support for Biden’s latest pandemic response measures, likely won’t benefit his political capital, especially at the very moment when critical parts of his ambitious economic agenda are on the line. Americans are split over the job Biden is doing as president, with about half of Americans — 46 percent — saying they disapprove, including 91 percent of Republicans and 50 percent of independents. Another 45 percent say they approve, including 87 percent of Democrats. Overall, 17 percent of Americans said they strongly approve of his time in the White House, which is the lowest since he was inaugurated.

#### SQ negotiations prove PC fails on simple tasks let alone passage

CNN 9-26-21

(MANU RAJU, CNN HOST , SEUNG MIN KIM, CNN POLITICAL ANALYST https://transcripts.cnn.com/show/ip/date/2021-09-26/segment/01)

RAJU: President Biden enjoyed a growing economy and a slowing pandemic in the first few months of his presidency. But now, crisis abroad and at home are hurting the White House as it aims to change two pieces of legislation. Biden's approval has fallen to 45 percent, and he says the resurgence in the pandemic is to blame. (BEGIN VIDEO CLIP) BIDEN: Not just members of Congress, Democrats and Republicans frustrated by, you know, I thought this was going to be better. I thought everything was working out. We were moving along on COVID-19, and now, we have all these people who refuse to get a shot, and now look at the people dying. Large numbers of people dying. (END VIDEO CLIP) RAJU: Hey, look, everything is coming down to the next couple weeks for the agenda. Midterm campaign season soon after and who knows what happens after the midterms. Does he have the political capital to get moderates and progressives to fall in line? KIM: That's the hope of the White House and Democratic leaders. As poll numbers have dropped, we haven't seen Democrats distance themselves from the president as we often do when a person in the White House and their public approval drops. But this legislation, the infrastructure legislation and reconciliation legislation is a test of President Biden as deal maker and we saw that this week when he inserted himself in negotiations but the thing is coming out of the meetings, there wasn't that much forward movement. We saw that people -- RAJU: A lot of happy talk. KIM: Well, a lot of happy talk. People said it was good for everyone to kind of get on the same page, stop squabbling in that respect. One sources told us that President Biden gave the moderates, give me a number. Give me a number you can live with. Moderates refuse to do that because they're not willing to coalesce around a number. So, on that kind of simple ask, President Biden wasn't able to get that right away. So, it will be interesting to see how much more he exerts power into the negotiations and how effective he is down the road. RAJU: And listen to how he's trying to talk about what the numbers are of this $3.5 trillion plan.

#### Won’t pass- internal divisions exacerbated by white house involvement- PC doesn’t solve

Bade and Lizza 10-2-21

(RACHAEL BADE and RYAN LIZZA https://www.politico.com/newsletters/playbook/2021/10/02/the-strangest-thing-ive-ever-seen-494555)

“The fact that the president came to the Hill and whipped against his own bill is the strangest thing I’ve ever seen.” That late-night observation was just one of many we heard from frustrated lawmakers and senior aides stunned by what happened in the House on Friday. — What senior Dems thought was going to happen: President JOE BIDEN was coming to the Hill to support Speaker NANCY PELOSI’s efforts to rally the party behind his historic $1.2 trillion bipartisan infrastructure plan ahead of a Friday vote. — What ended up happening instead: Biden told them he wanted to hold off on BIF until there was a reconciliation deal — even if that means delaying the vote for several more days or even weeks. Biden’s move put Pelosi in a tough spot. She’d promised House moderates a vote on BIF this week, but the president himself blew up that timeframe — essentially forcing Pelosi to choose between breaking her promise and defying her president. BUT HERE’S WHERE THINGS GET REALLY INTERESTING: Some progressive Democrats suggested to their colleagues that the White House — at its most senior levels — gave them a green light to tank the BIF vote if Pelosi went ahead with it, we’re told from three congressional sources. This bizarre dynamic is popping up in a few stories this morning: — WaPo’s Greg Sargent reports that when Sens. KYRSTEN SINEMA (D-Ariz.) and JOE MANCHIN (D-W.Va.) walked away from negotiations late Thursday night without a deal on reconciliation, a “White House adviser” called up Congressional Progressive Caucus Chair PRAMILA JAYAPAL (D-Wash.) to tell her about the lack of an accord. And “the White House adviser exerted no pressure on Jayapal to get progressives to vote for” the core infrastructure bill that Pelosi had been planning to hold a vote on. (She ended up nixing the roll call because she didn’t have the votes.) Playbook can report that White House chief of staff RON KLAIN spoke personally with Jayapal, according to multiple sources — though the White House says this conversation happened earlier in the day on Thursday. Jayapal’s office refused to comment on her conversations with the White House. — The N.Y. Times also reports that Klain has emboldened progressive opposition in calls where he “has been blunt about the president’s belief that Democrats need to reach a framework agreement on broader social policy legislation before they can approve the infrastructure measure.” This line from the NYT is especially interesting and tracks with our own reporting from Hill sources: “One person familiar with Mr. Klain’s calls said they left liberal lawmakers with the impression that the White House was encouraging them to ‘hold firm’ against an infrastructure vote until a deal could be reached,” with Manchinema. The White House pushed back on suggestions that they muscled support against their own bill. A White House official said Klain told progressives to “hang tight” — not “hold firm” — for more details on logistics. “The suggestion that Ron Klain or anyone from the White House was arguing against members supporting or voting for the President’s agenda doesn’t even make sense and is categorically false,” press secretary JEN PSAKI said in a statement to Playbook last night. “At every point in the process our focus has been on keeping members and their teams updated on our efforts to unite the caucus on a path forward as we work toward a successful vote on both pieces of legislation.” So what is actually happening here? Progressives are pushing the idea that their threat to bring down BIF was sanctioned by the White House. The White House was — and still is — happy to use the intraparty tensions caused by the progressive strategy to help extract a deal from Sinema and Manchin, but Biden’s aides are very careful to say they never crossed the line and actively whipped against their own bill, which would have been a serious betrayal of Pelosi. WHY ALL OF THIS MATTERS: In public, the explanation from Biden and party leaders is that a delayed BIF vote gives them time to strike a deal with moderates. But in private, the divisions within the party are no longer merely ideological or procedural; there is a deeper distrust — even at the most senior levels — that will make striking a deal all the more difficult. To boil down what is happening into a simple “progressives vs. moderates” dynamic ignores larger escalating tensions — between Democratic leaders on the Hill and in the White House; between the Senate and the House; between rank-and-file Democrats and their president. Some senior Democrats feel like the White House strategy right now is self-defeating, and that if Biden didn’t want to vote on BIF absent a deal with Manchinema, he should have said so days ago. “[Democratic leaders are] trying to keep everyone together, but the White House has really, significantly contributed to some of the problems,” one senior House Democrat who backs both bills and isn’t in either the moderate or progressive camp told us.

#### Infrastructure failure devastates PC/thumps any timing links

Cochrane and Weisman 9-30-21

(Emily And Jonathan, https://www.nytimes.com/2021/09/30/us/politics/pelosi-infrastructure-congress.html)

President Biden’s trillion-dollar bipartisan infrastructure plan suffered a significant setback late Thursday night when House Democratic leaders, short of support amid a liberal revolt, put off a planned vote on a crucial piece of their domestic agenda. Democratic leaders and supporters of the bill insisted the postponement was only a temporary setback. The infrastructure vote was rescheduled for Friday, giving them more time to reach agreement on an expansive climate change and social safety net bill that would bring liberals along. Jen Psaki, the White House press secretary, said in a statement: “A great deal of progress has been made this week, and we are closer to an agreement than ever. But we are not there yet, and so, we will need some additional time to finish the work, starting tomorrow morning first thing.” But a deal among Democrats appeared far off. The late-night delay came after the House speaker, Nancy Pelosi, had spent the day insisting she would get the bill to the House floor on Thursday. The postponement was a humiliating blow to Mr. Biden and Democrats, who had spent days toiling to broker a deal between their party’s feuding factions and corral the votes needed to pass the infrastructure bill. Mr. Biden has staked his reputation as a deal-maker on the success of both the public works package and a far more ambitious social policy bill, whose fates are now uncertain in a Congress buffeted by partisan divides and internal Democratic strife. Given the distance between the Democrats’ left flank and a few centrists on that larger bill, it was not clear when or even whether either would have the votes — and whether Mr. Biden’s economic agenda could be revived.