# 1NC vs Harker MK

### 1NC – Off

#### Interpretation: topical affs must fiat an action through the World Trade Organization

#### Member nations of the WTO make policies as a whole

WTO ND [(World Trade Organization) “What is the WTO?” https://www.wto.org/english/thewto\_e/whatis\_e/whatis\_e.htm] BC

The WTO is run by its member governments. All major decisions are made by the membership as a whole, either by ministers (who usually meet at least once every two years) or by their ambassadors or delegates (who meet regularly in Geneva).

In this respect, the WTO is different from some other international organizations such as the World Bank and International Monetary Fund. In the WTO, power is not delegated to a board of directors or the organization’s head.

When WTO rules impose disciplines on countries’ policies, that is the outcome of negotiations among WTO members. The rules are enforced by the members themselves under agreed procedures that they negotiated, including the possibility of trade sanctions. But those sanctions are imposed by member countries, and authorized by the membership as a whole. This is quite different from other agencies whose bureaucracies can, for example, influence a country’s policy by threatening to withhold credit.

Reaching decisions by consensus among some 150 members can be difficult. Its main advantage is that decisions made this way are more acceptable to all members. And despite the difficulty, some remarkable agreements have been reached. Nevertheless, proposals for the creation of a smaller executive body — perhaps like a board of directors each representing different groups of countries — are heard periodically. But for now, the WTO is a member-driven, consensus-based organization.

#### Collective nouns are singular – this means “member nations” refers to a singular entity

MLA 3/8 [“Should I use a singular or plural verb with a collective noun?” MLA Style Center, 3/8/2021] JL

Collective nouns, like *team*, *family, class*, *group*, and *host*, take a singular verb when the entity acts together and a plural verb when the individuals composing the entity act individually. The following examples demonstrate this principle:

The team is painting a mural. (The team collectively paints the mural, so the verb is singular*.*)

#### Violation – they don’t – EU member states are distinct from WTO member nations

#### Prefer

#### Precision – even if all EU member states are in the WTO that doesn’t mean all WTO member nations are in the EU – prefer our interp – we have evidence from the WTO that explains what coordinated action looks like and

#### Limits and ground – explodes the topic to include affs about any country reducing IP – only our interp ensures link magnitude by ensuring it is an international reduction for IPP for medicine which is key to generics like the innovation DA which requires reducing IP across the board, WTO bad, negotiations and politics DAs, circumvention – stretches pre-tournament neg prep too thin and precluding rigorous testing – theory and medicine spec affs solve PICs

#### TVA – spec a medicine

#### Topic ed – WTO patent waivers are the topic – their aff is just domestic policy passed in [[state]] – proven by their second advantage – none of their internal links are about medical trade secrets which proves their interpretation is a cheap way of getting a relations impact about any two countries – justifies the US-Mexico or China-Japan aff. Outweighs – prep is determined by the lit and we only have 2 months to debate the topic

#### Paradigm issues:

#### Drop the debater – their abusive advocacy skewed the debate from the start

#### Competing interps – reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation

#### Fairness is a voter ­– necessary to determine the better debater

#### Education is a voter – why schools fund debate

### 1NC – Off

#### Interpretation: intellectual property protections is a generic bare plural. The aff may not defend that member nations of the World Trade Organization reduce a subset of intellectual property protections for medicines.

Nebel 19 Jake Nebel [Jake Nebel is an assistant professor of philosophy at the University of Southern California and executive director of Victory Briefs.] , 8-12-2019, "Genericity on the Standardized Tests Resolution," Briefly, https://www.vbriefly.com/2019/08/12/genericity-on-the-standardized-tests-resolution/ SM

Both distinctions are important. Generic resolutions can’t be affirmed by specifying particular instances. But, since generics tolerate exceptions, plan-inclusive counterplans (PICs) do not negate generic resolutions. Bare plurals are typically used to express generic generalizations. But there are two important things to keep in mind. First, generic generalizations are also often expressed via other means (e.g., definite singulars, indefinite singulars, and bare singulars). Second, and more importantly for present purposes, bare plurals can also be used to express existential generalizations. For example, “Birds are singing outside my window” is true just in case there are some birds singing outside my window; it doesn’t require birds in general to be singing outside my window. So, what about “colleges and universities,” “standardized tests,” and “undergraduate admissions decisions”? Are they generic or existential bare plurals? On other topics I have taken great pains to point out that their bare plurals are generic—because, well, they are. On this topic, though, I think the answer is a bit more nuanced. Let’s see why. 1.1 “Colleges and Universities” “Colleges and universities” is a generic bare plural. I don’t think this claim should require any argument, when you think about it, but here are a few reasons. First, ask yourself, honestly, whether the following speech sounds good to you: “Eight colleges and universities—namely, those in the Ivy League—ought not consider standardized tests in undergraduate admissions decisions. Maybe other colleges and universities ought to consider them, but not the Ivies. Therefore, in the United States, colleges and universities ought not consider standardized tests in undergraduate admissions decisions.” That is obviously not a valid argument: the conclusion does not follow. Anyone who sincerely believes that it is valid argument is, to be charitable, deeply confused. But the inference above would be good if “colleges and universities” in the resolution were existential. By way of contrast: “Eight birds are singing outside my window. Maybe lots of birds aren’t singing outside my window, but eight birds are. Therefore, birds are singing outside my window.” Since the bare plural “birds” in the conclusion gets an existential reading, the conclusion follows from the premise that eight birds are singing outside my window: “eight” entails “some.” If the resolution were existential with respect to “colleges and universities,” then the Ivy League argument above would be a valid inference. Since it’s not a valid inference, “colleges and universities” must be a generic bare plural. Second, “colleges and universities” fails the upward-entailment test for existential uses of bare plurals. Consider the sentence, “Lima beans are on my plate.” This sentence expresses an existential statement that is true just in case there are some lima beans on my plate. One test of this is that it entails the more general sentence, “Beans are on my plate.” Now consider the sentence, “Colleges and universities ought not consider the SAT.” (To isolate “colleges and universities,” I’ve eliminated the other bare plurals in the resolution; it cannot plausibly be generic in the isolated case but existential in the resolution.) This sentence does not entail the more general statement that educational institutions ought not consider the SAT. This shows that “colleges and universities” is generic, because it fails the upward-entailment test for existential bare plurals. Third, “colleges and universities” fails the adverb of quantification test for existential bare plurals. Consider the sentence, “Dogs are barking outside my window.” This sentence expresses an existential statement that is true just in case there are some dogs barking outside my window. One test of this appeals to the drastic change of meaning caused by inserting any adverb of quantification (e.g., always, sometimes, generally, often, seldom, never, ever). You cannot add any such adverb into the sentence without drastically changing its meaning. To apply this test to the resolution, let’s again isolate the bare plural subject: “Colleges and universities ought not consider the SAT.” Adding generally (“Colleges and universities generally ought not consider the SAT”) or ever (“Colleges and universities ought not ever consider the SAT”) result in comparatively minor changes of meaning. (Note that this test doesn’t require there to be no change of meaning and doesn’t have to work for every adverb of quantification.) This strongly suggests what we already know: that “colleges and universities” is generic rather than existential in the resolution. Fourth, it is extremely unlikely that the topic committee would have written the resolution with the existential interpretation of “colleges and universities” in mind. If they intended the existential interpretation, they would have added explicit existential quantifiers like “some.” No such addition would be necessary or expected for the generic interpretation since generics lack explicit quantifiers by default. The topic committee’s likely intentions are not decisive, but they strongly suggest that the generic interpretation is correct, since it’s prima facie unlikely that a committee charged with writing a sentence to be debated would be so badly mistaken about what their sentence means (which they would be if they intended the existential interpretation). The committee, moreover, does not write resolutions for the 0.1 percent of debaters who debate on the national circuit; they write resolutions, at least in large part, to be debated by the vast majority of students on the vast majority of circuits, who would take the resolution to be (pretty obviously, I’d imagine) generic with respect to “colleges and universities,” given its face-value meaning and standard expectations about what LD resolutions tend to mean.

#### It applies to IP protections:

#### Upward entailment test – spec fails the upward entailment test because saying that nations ought to reduce one type of IPP does not entail that those nations ought to reduce all kinds of IPP

#### Adverb test – adding “usually” to the res doesn’t substantially change its meaning because a reduction is universal and permanent

#### Vote neg:

#### Semantics outweigh:

#### T is a constitutive rule of the activity and a basic aff burden – they agreed to debate the topic when they came here

#### Jurisdiction – you can’t vote aff if they haven’t affirmed the resolution

#### Only stasis point we know before the round so it controls the internal link to engagement – there’s no way to use ground if debaters aren’t prepared to defend it

#### Limits – there are countless affs accounting for every kind of intellectual property protections, like tertiary patents, provisional patents, and design patents – unlimited topics incentivize obscure affs that negs won’t have prep on – limits are key to reciprocal prep burden – potential abuse doesn’t justify foregoing the topic and 1AR theory checks PICs

#### Ground – spec guts core generics like innovation that rely on reducing all kinds of IP for all medicines because individual types of IP don’t substantially affect the pharmaceutical industry – also means there is no universal DA to spec affs

#### TVA solves – read as an advantage to whole rez

#### Paradigm issues: cx from above

### 1NC – off

#### WTO is near consensus on fisheries subsidies – success will require continued focus, flexibility, and cooperation among members

WTO 7/15 [(World Trade Organization) “WTO members edge closer to fisheries subsidies agreement,” News and Events, 7/15/2021] JL

During an all-day meeting with 104 ministers and heads of delegation, WTO members pledged to conclude the negotiations soon and certainly before the WTO's Ministerial Conference in early December, and to empower their Geneva-based delegations to do so. Members also confirmed that the negotiating text currently before them can be used as the basis for the talks to strike the final deal.

“I feel new hope this evening. Because ministers and heads of delegation today demonstrated a strong commitment to moving forward and doing the hard work needed to get these negotiations to the finish line. I applaud you for this. In 20 years of negotiations, this is the closest we have ever come towards reaching an outcome — a high-quality outcome that would contribute to building a sustainable blue economy,” said Director-General Ngozi Okonjo-Iweala.

“One fundamental conclusion that I draw from your interventions today is that members are ready to use the text as the basis for future negotiations. A second takeaway from today was that there is universal agreement about the importance of the food and livelihood security of artisanal fishers in developing and least developed countries. The prospect for a deal in the autumn ahead of our Ministerial Conference has clearly improved.”

The UN Food and Agriculture Organization estimates that one-third of global fish stocks are overfished and most of the rest is fully exploited. This is up from 10% in 1970 and 27% in 2000. Depleted stocks threaten the food security of low-income coastal communities, and the livelihoods of poor and vulnerable fishers who must go further and further from shore only to bring back smaller and smaller hauls.

Each year, governments hand out around $35 billion in fisheries subsidies, two-thirds of which go to commercial fishers. These subsidies keep at sea vessels which would otherwise be economically unviable. World leaders in 2015 made a fisheries subsidies agreement by 2020 part of the Sustainable Development Goals and trade ministers reaffirmed this pledge in 2017.

The negotiations on fisheries subsidies disciplines have been ongoing for nearly 20 years. Although there has been recent progress thanks to the intensive work that led to the development of the negotiating text on which members are working, the lack of political impetus in the talks to close the remaining gaps inspired Director-General Okonjo-Iweala to call this meeting of ministers.

Among the thorniest issues to resolve has been how to extend special and differential treatment to developing and least developed country WTO members while preserving the overall objective of enhanced sustainability of the oceans. Ministers said that the livelihoods and food security of poor and vulnerable artisanal fishers in developing and least developed countries were of great importance, as was preserving the sustainability objective of the negotiations.

Amb. Santiago Wills of Colombia, who chairs the Rules Negotiating Group overseeing the fisheries subsidies negotiations, said he had received some valuable inputs from the discussions. He now has greater clarity on the path forward and the next steps that would be required to harvest an agreement. He will be consulting with the Director-General and WTO members about charting the path forward for the next stage of the talks.

“I am very heartened by the responses and messages that we have heard today. What we sought from ministers today was political guidance to help close these negotiations soon. And we did hear that guidance. We have been given the ingredients to reach a successful conclusion; a commitment to finish well ahead of our Ministerial Conference a text that can be the platform for this final stage of the negotiations and fully empowered heads of delegations in Geneva. This represents a real success,” said Amb. Wills.

The Director-General said that delegations needed to prepare for an intensive period of line by line negotiations.

“As we enter this new phase of text-based discussions, the responsibility to conclude these negotiations is truly in the hands of members. To get from here to an agreement, it will be your job to find the necessary trade-offs and flexibilities. A successful outcome by MC12 is ultimately your responsibility,” she said. “The world is watching. The fisheries subsidies negotiations are a test both of the WTO's credibility as a multilateral negotiating forum and of the trading system's ability to respond to problems of the global commons.  If we wait another 20 years, there may be no marine fisheries left to subsidise — or artisanal fishing communities to support.”

#### IP disputes fragment WTO unity and trade off with subsidies negotiation

Patnaik 3/12 [(Priti, journalist in Geneva, Switzerland, master’s in Development Studies from The Graduate Institute in Geneva and a master’s in Business and Economic Reporting from New York University) “Could Vaccine Nationalism Spur Disputes At The WTO?” Geneva Health Files, 3/12/2021] JL

To protect domestic manufacturers and constituencies, countries may resort to filing disputes, if only to send a signal to other members, experts believe. To be sure, this is not only about vaccines. Going forward, export restrictions on raw materials can have implications for therapeutics as well. So the threat of a dispute may be a tool to deal with competition for scarce medical products during the pandemic, experts say.

Although trade restrictive measures are short-sighted and not a preferred policy option, governments see them as powerful instruments to meet political goals, to send a message to domestic stakeholders, sources said.

“My hunch is that all countries are sort of sitting on both sides of the fence. On the one hand, governments would like to maintain the discretion and the ability to impose export restrictions if they need to or if they think they need to. Whether that is medical products or personal protective equipment. On the other hand, everybody dislikes it when other countries impose export restrictions. So I think there is enough of an incentive for countries to sit down and negotiate,” one legal expert noted.

Sources also pointed to political declarations last year where WTO members came together and said that they would not impose restrictive trade measures. “In order to be constructive, countries decided that they were going to signal to members that will not introduce exports restrictive measures even though it may be expedient to do so,” one trade expert said. The way out, some feel, is to find solution to placing limits on export restrictions.

It is not just trade restrictive measures that could result in trade disputes. The heated political discussions on the TRIPS waiver at WTO is also aggravating the potential for disputes, according to experts involved in litigations in international trade in Geneva. Therefore these ostensibly independent processes, can catalyse disputes.

“The waiver discussion is very heated and it is aggravating the discussion on the EU's export restrictions. If the waiver succeeds, then the opposing members cannot do anything about it. So they will be looking at other ways to beat up on behavior they do not like on the COVID-19 front,” one trade law expert said.  Do not rule out disputes against supporters of the TRIPS waiver proposal, in case the waiver is adopted, the source added.

In their statement at the WTO General Council meeting last week, the EU said, “In order to ensure that vaccines and their ingredients are not directed to export destinations in unjustified volumes, the European Union had no choice but to introduce a transparency mechanism on Covid-19 vaccine export transactions.” The EU has said that the measures are WTO-consistent.

It added “Since the entry into force of the scheme on the 1 February, we have received 150 requests for export authorisation. All of them have been accepted. I repeat, all of them.” This week, the European Commission extended transparency and authorisation mechanism for exports of COVID-19 vaccines.

The EU is also a part of the Ottawa Group proposal on Trade and Health that also spells out commitments towards export restrictions. (See also *E.U. Exports Millions of Covid Vaccine Doses Despite Supply Crunch at Home*)

“Members bring disputes all the time, even when they know that it's going to take a long time to get a result and often they bring a dispute as leverage for negotiations. Filing a dispute does not mean they are looking for a solution. It does not mean the dispute will be litigated all the way to the end,” a trade lawyer said.

It could also result in a negotiated arrangement, like it was in 2001 in the U.S.-Brazil case. “Why did the U.S. bring a case against Brazil? It gave them leverage in negotiations, and to satisfy domestic stakeholders,” the lawyer added.

The impasse at the Appellate Body may not be a deterrent for countries to dissuade countries from bringing a dispute, some believe.

“The Appellate Body not being functional is not a problem. Countries have recourse to Article 25 under the Dispute Settlement Understanding (DSU) that provides for ‘expeditious arbitration as a alternate means to dispute settlement’,” a source involved in the WTO litigation process said. (The EU, for example, is a signatory to the Multi-party interim appeal arbitration arrangement, MPIA.)

While disputes may take up precious energy and resources of members already stretched in fighting to address the pandemic, it may likely be a strategy to address trade protectionism. Not all agree.

“I think the law is not really an answer here, I hate to say that because I'm a lawyer. But I really don't think the law is an answer because the law is so generically drafted right that and it's politically so sensitive. Which WTO panel will tell a member that restricting vaccines is not legitimate? It will ultimately harm the legitimacy of the trading system,” the person added.

#### Overfishing causes SCS war – WTO agreement solves

Cohen and Floyd 1/27 [(Sam, J.D. student at Harvard Law School, BA in history from Yale University, surface warfare officer in the U.S. Navy, and Steve, joint J.D./LL.M. in national security law at Georgetown University Law Center, lieutenant commander in U.S. Naval Intelligence) “Water Wars Special: How IUU Fishing Increases the Risk of Conflict, Lawfare, 1/27/2021] JL

The Food and Agriculture Organization of the United Nations has classified one-third of the world’s marine fisheries as overfished. The impact of unsustainable fishing is especially acute in the South China Sea, where coastal fisheries have lost 70 to 95 percent of their stocks since the mid-20th century and catch rates have declined by 70 percent throughout the past two decades. Furthermore, the sea’s coral reefs, which nurture critical feeding grounds for fish stocks, decline by 16 percent every 10 years. As traditional fishing grounds prove less fruitful, fishermen venture farther from shore and operate in contested areas. Indeed, when China faced dwindling coastal stocks in the 1990s, Beijing embarked on a massive shipbuilding effort; and President Xi Jinping continues to exhort Chinese fishermen to “build bigger ships and venture even farther into the oceans and catch bigger fish.” Such efforts incentivize IUU activity, heighten competition for increasingly scarce resources and feed an escalating cycle that accelerates stock depletion.

In the South China Sea, with its kaleidoscope of disputed claims, China’s excess capacity and IUU fishing practices exacerbate a particularly volatile environment. Depleted fishing stocks force fishermen to operate further from shore and increase the chance of violent encounters. Filipino authorities have intercepted Chinese boats illegally fishing off Palawan, and Philippine President Rodrigo Duterte claimed that Chinese fishermen intentionally rammed a Filipino fishing boat and left its crew stranded in the sea in 2019. Three years earlier, the Chinese Coast Guard rammed an Indonesian patrol boat attempting to interdict Chinese fishermen. As the Vietnamese government actively encourages fishermen to contest China’s expansive maritime claims, the Chinese Coast Guard expelled nearly 1,200 fishing boats from the northern half of the South China Sea last summer. During one such encounter, a Chinese Coast Guard vessel repeatedly rammed a Vietnamese fishing boat and sent its 17-person crew overboard. It’s true that fishing subsidies did not create the region’s historic animosities. But the activities these subsidies support add fuel to an already smoldering fire.

Dwindling stocks of fish, unsustainable practices and IUU fishing constitute a global crisis and increase the risk of maritime conflict. But this risk can be mitigated through international cooperation: A World Trade Organization (WTO) agreement on fishing subsidies would address a fundamental cause of these fishing-related problems and create a binding legal framework through which members could seek relief.

#### SCS conflict draws in the US and goes nuclear – extinction

Carter 20 (John Carter has been an economics and finance journalist for more than 40 years. Prior to joining the South China Morning Post, he worked for Market News International for more than 33 years, first as Washington Bureau Chief, then as European Managing Editor in Frankfurt, Germany and finally as Asian Managing Editor working out of Beijing, Global Impact newsletter: escalating conflict in the South China Sea, https://www.scmp.com/economy/article/3102323/global-impact-newsletter-escalating-conflict-south-china-sea)

If you want to start a world war, a good way to do it is to mix the escalating conflict between two of the world’s greatest military powers with the grievances of a half-dozen smaller countries over territorial claims. That’s the current situation in the South China Sea, the massive body of water that stretches more than 4,000km (2,485 miles) from mainland China in the north to Indonesia in the south – about the same distance between London and Chicago. China has claimed the vast majority of the South China Sea as its exclusive territory, including areas claimed by six other governments – Brunei, Indonesia, Malaysia, the Philippines, Taiwan, and Vietnam – that consider them part of their own exclusive economic zones. A map of the conflicting claims can be seen in this graphic presentation, while the history of China’s territorial disputes, including in the South China Sea, is explained in this video. China considers the South China Sea one of its “core” interests, of equal importance as Taiwan, Tibet and Xinjiang, meaning it is ready to go to war to defend it. It has marked the territory by a “nine dash line” on its maps, and even on its passports, angering its neighbours. China needs the oil and mineral wealth hidden beneath the South China Sea to supply its rapid economic recovery, as well as the fishing catch needed to feed the country’s 1.4 billion stomachs. An international tribunal ruled in 2016 that China did not have the right to claim the South China Sea as its sovereign territory, a ruling that China has pointedly rejected. To secure this vast sea area, China has turned uninhabited atolls and half-submerged rock formations into forward military bases, as personally directed by President Xi Jinping. Regular Chinese sea patrols monitor the area, driving away fishing boats from other nations from what it considers its exclusive fishing area. The intrusion of China into what other Asian nations consider their sovereign territory has caused tensions in the region to ratchet up, with the 10 members of the Association of Southeast Asian Nations (Asean) increasingly pushing back, at times with violent confrontations. The US has flatly rejected Chinese claims to the South China Sea, and has dramatically stepped up its military presence in the area. Each side has warned the other of the dangers of further escalation, with the US sanctioning Chinese firms that helped build China’s island outposts. Rarely a week goes by without a US warship sailing near Chinese held outputs as part a “freedom of navigation” exercise, shadowed by Chinese vessels the entire way. Confrontations have brought warships from both nations within a few metres of each other, a dangerous situation that could easily get out of hand. Tensions have ratched up recently, with the Chinese and US navies holding exercises in the region at the same time. In a provocation move, the Chinese test fired several of its “aircraft carrier killer” missiles in a clear warning to the US to back off its “interference” in the South China Sea. And some Asean nations are starting to push back against Chinese “intrusions” into their territorial waters, threatening to draw the US deeper into local disputes, though the group as a whole is trying to avoid picking sides in the US-China confrontation. The latest incident occurred this week, with Indonesia’s foreign ministry lodging an official protest after a Chinese coastguard ship spent two days sailing through Indonesia territorial waters. Chinese military commands have been ordered not to shoot first in any confrontation with the US military, but with heavily armed warships and planes constantly patrolling the area, even a small error in judgment could lead to a shooting war. And with the US presidential election less than two months away, there is no sign that tensions between two of the world’s largest militaries will de-escalate any time soon.

## Case

### Inherency

#### **EU Whistleblower Directive makes exceptions to the Trade Secrets Directive for whistleblowers, prevents litigation, and puts the burden of proof on employers**

Abazi 10/27 [(Vigjilenca, Assistant Professor of European Law at Maastricht University, Social Media Editor of the Journal of European Integration, Previous Associate Managing Editor for European Constitutional Law Review, Conducted her PhD project entitled ‘Secrecy and Oversight in the European Union: The Law and Practice of Classified Information’ at University of Amsterdam, LLM degree in International and European Law at University of Amsterdam, LLB degree at Faculty of Law, University Ss. Cyril and Methodius of Skopje) “The European Union Whistleblower Directive: A ‘Game Changer’ for Whistleblowing Protection?” Industrial Law Journal, Volume 49, Issue 4, December 2020, 10/27/2020] MCM

In October 2019, the European Union adopted the Directive on the protection of persons who report breaches of Union law, commonly referred to as protection of whistleblowers (EU Whistleblower Directive).1 For over a decade, the European Parliament had repeatedly called for a European Union (EU) law on protection of whistleblowers.2 Yet, the other EU legislative institutions, the European Commission and the Council, were unwilling to act on these calls. The European Commission was not convinced that it had the legal basis to propose a law.3 The Council had minimal political interest to open debates on whistleblowing, as many Member States (MSs) lack national laws with adequate protections and whistleblowing is often a misunderstood issue in public debates.4 Even the term ‘whistleblowing’ does not exist in some national languages.5 Nevertheless, the Commission could not stand idle after a series of revelations by whistleblowers, most notably the ‘LuxLeaks’ scandal, which exposed tax schemes in Luxembourg and involved over 340 companies worldwide. These scandals led to additional public pressure on the then-President of the European Commission, Mr Juncker, to take more seriously calls for a whistleblowing law. After an expansive public consultation process,6 the Commission proposed the EU Whistleblower Directive in April 2018.

The Directive was presented by Vera Jouranová, the Commissioner for Justice, Consumers and Gender Equality as a ‘game changer’.7 The Commissioner did not (entirely) overstate the importance of the new rules. They indeed draw from best practice in many respects, including in that they contain a broad definition of who can be a whistleblower, cover a wide range of policy areas, and extend to both the public and private sectors.8 All forms of retaliation against whistleblowers are prohibited and, in the case of an alleged retaliation, the burden of proof falls on the employer. Yet whether the Directive will attain the expected high standards of protection depends, inter alia, on the transposition of the rules into national law, the enforcement of the Directive’s protections and the embeddedness of the rules in organisational culture. On all of these challenges, trade unions can assist national legislators to ensure the Directive’s full potential.

This note analyses the Directive. It situates this instrument within existing (EU) rules. It explains the comprehensive character of the protections extended by the Directive and the model of reporting channels it adopts. The note draws attention to aspects of the Directive that could be problematic for the implementation and effectiveness of whistleblower protection. It concludes that the EU Whistleblower Directive is an important legal development but that it is only in the early stages towards meaningful protection, rather than a ‘game changer’ for whistleblowers in the EU.

2. The EU Whistleblower Directive in Context of Existing (EU) Law

The EU Whistleblower Directive fills an important legislative gap. Its adoption was the result of a few decades of incremental change in Europe towards advancing the protection of whistleblowers.9 Advocacy by civil society was a significant factor in raising public awareness and public pressure for legal changes to take place. At the European level, the most important legal developments came from the Council of Europe (CoE) and the European Court of Human Rights (ECtHR). The CoE adopted a number of Resolutions and reports calling on its MSs to protect whistleblowers10 and the ECtHR decided in favour of whistleblowers in several decisions on the basis of protection for freedom of expression.11 All EU MSs are members of the CoE and parties to the European Convention on Human Rights. Hence, for MSs that did not have any legislation on whistleblower protection, or if existing laws did not apply to a particular whistleblower, the affected whistleblowers could seek vindication from the ECtHR on the basis of their right to freedom of expression. The EU Whistleblower Directive generally follows the case law of the ECtHR,12 although the latter extends protection to political whistleblowing, which the Directive explicitly excludes.13 Political whistleblowing, which is a subset of whistleblowing, refers to the disclosure of information protected by an official secrets regime.14 The EU Whistleblower Directive does not extend protection to information protected under national security regimes or classified information.15 The EU could not legislate on these matters as national security is a national competence.16 Excluding this category of information is a significant shortfall, but one that could be remedied by national legislators if MSs opt to include classified information in national transposition of the Directive.

The EU Whistleblower Directive provides for minimum harmonisation standards that should be adopted at the national level. In this respect, MSs may choose to adopt provisions that strengthen the regime, but cannot adopt rules that do not meet the EU standards. Prior to the EU Whistleblower Directive, only exceptionally was whistleblowing protection foreseen at the national level for employees in all fields of work. Most national laws offered a patchwork of protection: some MSs protected only public employees, others foresaw protection in the private sector, and many covered disclosure only of specific wrongdoings.17 An important justification for the EU to legislate on whistleblower protection was precisely to avoid this kind of fragmentation and to create harmonised protection across the EU. The two-year transposition period for implementing the Directive is necessary for MSs to adjust their national laws and adequately transpose the EU law into national rules. MSs are not on level ground in this regard as some have more experience with whistleblower protection while others are only beginning to establish rules. Adjustments to national rules are necessary not only in the light of other national laws, but also to take into account other EU rules, as explained below.

Some rules on reporting and disclosure of wrongdoings existed in EU law before the adoption of the Whistleblower Directive.18 The Directive is now a lex generalis on whistleblower protection and it leaves room for other more specialised regimes to apply where such rules exist in the EU, such as money-laundering or competition regimes.19 Other EU rules refer to reporting in the public interest but do not as such give positive protections to whistleblowers. In particular, the Trade Secrets Directive, adopted in 2016, lists disclosure in the general interest as an exception to the protection of trade secrets.20 This exception is intended to prevent the prosecution of individuals in cases in which the ‘acquisition, use or disclosure of the trade secret’ is carried out for purposes of whistleblowing. Yet it remains vague as to the specific protections that would be granted to whistleblowers.21 The Whistleblower Directive makes clear that whistleblowers cannot be prosecuted if the reported information includes trade secrets and provides definitions and procedures, as explained below.22

The application of the Whistleblower Directive, finally, should be in line with EU data protection and privacy regulations. This aspect of the Directive is currently most heatedly debated in Germany, a country in which there are strong privacy concerns and no prior national law on protecting whistleblowers. Recently, the German Labour Court held that an employee may exercise her right of access to data in accordance with EU data protection rules, and the employer cannot simply rely on the confidentiality procedure of whistleblower protection to negate such access.23 While there is generally no conflict between laws on whistleblowing and privacy, implementing the Directive will require that companies and public institutions take additional measures to prevent infringement of personal data protection during the reporting process and during the investigation of the whistleblowers’ reports. Furthermore, as explained below, the Whistleblower Directive foresees protection for whistleblowers who report on breaches of data protection and privacy laws.

#### The Directive provides stronger protections than the plan and protects whistleblowers directly

Complylog 3/28 [“All About The EU Whistleblowing Directive (Summary + Key Points)” Complylog.com, 3/28/2021] MCM

The directive requires the 27 EU member states to create laws to prevent retaliation against reporting persons. It cites examples of potential retaliatory acts, as listed above, which cover those that occur within the workplace as well as acts against their reputation, those that prevent them working in the future and those that affect the whistleblower’s psychological or medical health. In order to fulfil this, the new rules require states to ensure:

There is no punishment for breaching confidentiality documents in making the report.

The organisation cannot pursue the reporting person for legal redress, for copyright breach, breach of data protection, defamation or similar if the whistleblower believed at the time that reporting or disclosing material was necessary to prevent wrongdoing.

Disclosing trade secrets is lawful, as long as the whistleblower meets the requirements for cover by the directive.

The whistleblower cannot be held liable for acquiring or accessing the material that forms the basis of the report. This is unless they committed a criminal act in order to find the material in the first place.

The onus of proof is reversed if there is some detriment to the reporting person. Authorities should assume it came as a result of retaliation for the report unless the organisation can prove otherwise.

Compensation for Retaliation

Any whistleblower who is the victim of retaliation for their report should be able to access legal remedies from the affected organisation, including compensation. The directive states that the redress “should be determined by the kind of retaliation suffered, and the damage caused in such cases should be compensated in full in accordance with national law.”.

In terms of compensation, organisations should cover actual losses as well as future losses, caused by demotion, cancelled contracts and similar. They should also pay for costs involving changing jobs, for legal costs incurred by the retaliation, medical treatment, and for “pain and suffering”.

Although there are differences between the legal systems of the member states, the directive obliges them to make sure any compensation and reparations are “real and effective”.

Penalties

The directive details that there should be penalties for both affected organisations or individuals who attempt to hinder whistleblowers and those who knowingly make false reports.

|  |  |
| --- | --- |
| Entity | Penalty |
| Affected Organisation or Individuals | There should be “effective, proportionate and dissuasive penalties” against organisations or people that attempt to hinder a report, carry out retaliation, bring “vexatious” proceedings against whistleblowers or who breach the confidentiality of the reporting person. |
| Reporting Person | Member states should ensure “effective, proportionate and dissuasive penalties” against people who are proven to have knowingly reported false information. They should also be liable for any damages caused by the report. |

### Advantage 2

#### Econ decline doesn’t cause war – it encourages decreased defense spending, threat deflation, threat prioritization, international coop, and better leaders.

Clary ’15 (Christopher; 4/25/15; Ph.D. in political science from the Massachusetts Institute of Technology, M.A. in National Security Affairs, Postdoctoral fellow, Watson Institute for International Studies, Brown University; MIT Political Science Department Research Paper, “Economic Stress and International Cooperation: Evidence from International Rivalries,” https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2597712)

Do economic downturns generate pressure for diversionary conflict? Or might downturns **encourage austerity and economizing behavior** in foreign policy? This paper provides new evidence that economic stress is associated with conciliatory policies between strategic rivals. For states that view each other as military threats, the biggest step possible toward bilateral cooperation is to terminate the rivalry by taking political steps to manage the competition. Drawing on **data** from 109 **distinct rival** dyads **since 1950**, 67 of which terminated, the evidence suggests rivalries were approximately twice as likely to terminate during economic downturns than they were during periods of economic normalcy. This is true controlling for all of the main alternative explanations for peaceful relations between foes (democratic status, nuclear weapons possession, capability imbalance, common enemies, and international systemic changes), as well as many other possible confounding variables. This research questions existing theories claiming that economic downturns are associated with diversionary war, and instead argues that in certain circumstances peace may **result from economic troubles**. I define a rivalry as the perception by national elites of two states that the other state possesses conflicting interests and presents a military threat of sufficient severity that future military conflict is likely. Rivalry termination is the transition from a state of rivalry to one where conflicts of interest are not viewed as being so severe as to provoke interstate conflict and/or where a mutual recognition of the imbalance in military capabilities makes conflict-causing bargaining failures unlikely. In other words, rivalries terminate when the elites assess that the risks of military conflict between rivals has been reduced dramatically. This definition draws on a growing quantitative literature most closely associated with the research programs of William Thompson, J. Joseph Hewitt, and James P. Klein, Gary Goertz, and Paul F. Diehl.1 My definition conforms to that of William Thompson. In work with Karen Rasler, they define rivalries as situations in which “[b]oth actors view each other as a significant politicalmilitary threat and, therefore, an enemy.”2 In other work, Thompson writing with Michael Colaresi, explains further: The presumption is that decisionmakers explicitly identify who they think are their foreign enemies. They orient their military preparations and foreign policies toward meeting their threats. They assure their constituents that they will not let their adversaries take advantage. Usually, these activities are done in public. Hence, we should be able to follow the explicit cues in decisionmaker utterances and writings, as well as in the descriptive political histories written about the foreign policies of specific countries.3 Drawing from available records and histories, Thompson and David Dreyer have generated a universe of strategic rivalries from 1494 to 2010 that serves as the basis for this project’s empirical analysis.4 This project measures rivalry termination as occurring on the last year that Thompson and Dreyer record the existence of a rivalry. Economic crises lead to conciliatory behavior through five primary channels. (1) Economic crises lead to austerity pressures, which in turn incent leaders to search for ways to cut defense expenditures. (2) Economic crises also encourage strategic reassessment, so that leaders can argue to their peers and their publics that defense spending can be arrested without endangering the state. This can lead to threat deflation, where elites attempt to **downplay** **the seriousness** of the threat posed by a former rival. (3) If a state faces multiple threats, economic crises provoke elites to **consider** threat prioritization, a process that is postponed during periods of economic normalcy. (4) Economic crises increase the political and economic benefit from international **economic** cooperation. Leaders **seek foreign aid**, **enhanced trade**, and **increased investment** from abroad during periods of economic trouble. This search is made easier if tensions are reduced with historic rivals. (5) Finally, during crises, elites are more prone to select leaders who are perceived as **capable of** resolving **economic** difficulties, permitting the emergence of leaders who hold heterodox foreign policy views. Collectively, these mechanisms make it **much more likely** that a leader will prefer conciliatory policies compared to during periods of economic normalcy. This section reviews this **causal logic** in greater detail, while also providing **historical examples** that these mechanisms recur in practice. Economic Crisis Leads to **Austerity** Economic crises generate pressure for austerity. Government revenues are a function of national economic production, so that when production diminishes through recession, revenues available for expenditure also diminish. Planning almost **invariably assumes growth** rather than contraction, so the deviation in available revenues compared to the planned expenditure can be sizable. When growth slowdowns are prolonged, the cumulative departure from planning targets can grow even further, even if no single quarter meets the technical definition of recession. Pressures for austerity are **felt** most **acutely** in governments that face difficulty borrowing to finance deficit expenditures. This is **especially the case** when this borrowing relies on international sources of credit. Even for states that can borrow, however, intellectual attachment to balanced budgets as a means to restore confidence—a belief in what is sometimes called “expansionary austerity”—generates incentives to curtail expenditure. These incentives to cut occur precisely when populations are experiencing economic hardship, making reductions especially painful that target poverty alleviation, welfare programs, or economic subsidies. As a result, mass and elite constituents strongly resist such cuts. Welfare programs and other forms of public spending may be especially susceptible to a policy “ratchet effect,” where people are **very reluctant** to forego benefits once they have become accustomed to their availability.6 As Paul Pierson has argued, “The politics [of welfare state] retrenchment is typically treacherous, because it imposes **tangible losses** on concentrated groups of voters in return for diffuse and uncertain gains.”7

#### EU collapse is inevitable:

#### Economic crisis

Nasir 8/3 [(Muhammad Ali, Associate Professor in Economics and Finance at the University of Huddersfield, former Senior Lecturer in Economics at Leeds Business School, PhD in Economics) “Four reasons why EU is staring down the barrel of a second lost decade,” The Conversation, 8/3/2021] JL

When COVID broke out, the eurozone growth rate remained well below its long-term trajectory. It was behind the US and UK, both of whom were hit harder by the global financial crisis, and even worse compared to the leading emerging economies. Neither was this a one-off. Looking at the past five recessions, the eurozone nations have been successively slower to recover from each one.

Since 2008, the ECB has tried numerous measures to improve growth. Like most major powers, it has done a lot of quantitative easing (QE), which involves creating money to buy sovereign bonds and other financial assets. It has sought to prop up its retail banks in various ways, while also pioneering negative interest rates and giving the markets more forward guidance about monetary policy.

Famously in 2012, then ECB president Mario Draghi said he would do “whatever it takes” to save the euro. This forward guidance kept the euro stable, but the same cannot be said of growth.

Policy errors are partly to blame for this. With the benefit of hindsight, the eurozone went into the global financial crisis with lending rates on the low side, so had less room to cut than other regions. It was also more reluctant than central banks like the Bank of England and US Federal Reserve to start QE, preferring to focus on curbing inflation and making the euro “*stabil wie die mark*” (stable like the German mark). The ECB did not unveil a QE programme until 2015.

Countries with the capacity to spend to stimulate their economies, such as Germany, France and the Netherlands, also did too little. Spain’s stimulus was poorly designed, while Italy was more interested in balancing its books at the time. Too soon after the crisis struck, austerity then became the priority for the whole eurozone.

A related problem has been public and private investment. In middle-income EU regions, investment rates fell by about 14% between 2002 and 2018. In thrifty Germany, public and private fixed investments declined as a percentage of GDP for decades, despite a huge surplus in public spending.

Before COVID hit, EU infrastructure investment was at a 15-year low, with the greatest declines in regions that were already lagging. Initiatives intended to help, such as the European Economic Recovery Plan of 2008 and the European Commission Investment Plan in 2014, were too little.

The overall result was that weakness: Germany and the eurozone as a whole were showing 0% growth at the time of the COVID outbreak, while Austria, France and Italy were all contracting slightly. In response, the ECB had cut its main interest rate by 0.1 percentage points to -0.5% in September 2019, and restarted monthly QE to the tune of €20 billion (£17 billion) from November 1 of that year – the date Christine Lagarde became ECB president.

The eurozone economy was therefore needing life support even before the pandemic – indeed, many of the ECB’s other unconventional support measures were in place throughout. Tellingly, the ECB’s only new measure during the pandemic has been a new form of cheaper refinancing for banks. It raises the prospect of the ECB running out of the ammunition needed to keep stimulating the eurozone’s sickly economy.

#### Poland and Hungary

Reuters 7/16 [“Poland's Tusk says conflicts with EU could eventually end the bloc,” Reuters, 7/16/2021] JL

WARSAW, July 16 (Reuters) - Poland and Hungary's conflicts with the European Union could start a process that results in the bloc falling apart, former European Council President Donald Tusk warned on Friday, amid a worsening standoff over democratic standards.

Brussels is at loggerheads with Warsaw and Budapest over issues such as the independence of the judiciary and press freedoms, a conflict which deepened this week as Poland's Constitutional Tribunal ruled the country should not comply with demands from the EU's top court, while the European Commission took legal action against both countries over LGBT rights.

"If more of these kinds of countries are found who insist on damaging... the European Union it may simply mean the end of this organisation," Tusk, who has returned to domestic politics as leader of Poland's main opposition party Civic Platform (PO), told private broadcaster TVN24.

#### Economic collapse is inevitable – runaway growth and debt crises

Goldstein 7/7 [(Steve, responsible for MarketWatch's coverage of financial markets in Europe, internally cites Patrick Artus, professor at the Paris School of Economics, member of the Economic Analysis Council, PhD from the Institute of Political Studies of Paris) “Here are four reasons the West is headed for a ‘very drastic crisis,’ according to a veteran economist,” Marketwatch, 7/7/2021] JL

Patrick Artus, a senior economics adviser at French bank Natixis and a professor at the Paris School of Economics, isn’t sharing in the joy. In a very blunt memo to clients, Artus says a crisis is “inevitable.”

The total outstanding debt of the U.S., the U.K., the eurozone and Japan relative to gross domestic product has come off the highest levels of the pandemic as economies have reopened but still is at elevated levels. “Borrower solvency cannot be ensured if debt-to-income ratios increase continuously,” he says.

The money supply also is at records. “The money supply cannot be increased continuously relative to income, as soon or later demand for money, which is linked to savings and income, can no longer increase,” said Artus, whose résumé includes stints at the Organization for Economic Cooperation and Development and the Banque de France.

Also zooming higher is wealth, with both stock and housing prices surging. “Rising relative asset prices cannot be extrapolated: If they become too high, the savings of asset buyers will no longer suffice to buy then, leading inevitably to a downward correction in prices,” he says. Finally, he notes a skewing of income distribution against wage earners: “If wage earnings do not receive productivity gains over a long period, demand for goods and services will become too weak to absorb production, which grows rapidly when earnings are invested.”

So how will this unwind? Artus says a correction in income distribution will lead to faster wage growth and higher inflation. That, in turn, will need to more restrictive monetary policy and higher inflation-adjusted interest rates. The more restrictive monetary policy will then stabilize asset prices and wealth, forcing deleveraging. And that deleveraging will lead to a recession due to the necessary fall in demand among households, companies and governments.

“The stabilization of these variables will lead to a very drastic crisis, due to faster growth in wages and inflation, a restrictive monetary policy, a fall in wealth and asset prices, and a recession caused by a fall in domestic demand,” he concludes.

#### Only degrowth solves– infinite growth relies on burning fossil fuels, depleting natural resources, mining REMS, and pollution – COVID means a transition is possible

Herbert and Mastini 20 [(Joe Herbert, a doctoral researcher in Human Geography at Newcastle University) (Riccardo Mastini, a doctoral researcher in Political Ecology in the Institute of Environmental Science and Technology at the Autonomous University of Barcelona) “Economic Growth Can't Go Back to Normal If We Are to Solve the Ecological Crisis” Common Dreams, 6/8/2020] BC

The COVID-19 pandemic has delivered a sharp and sudden shock to the global economy’s usual diet of ever-expanding economic growth. Measures to tackle the virus have seen industries grind to a halt, and high streets become ghost towns. Experts are predicting the worst global recession since the 1930s, and the UK’s Gross Domestic Product (GDP) is forecast to fall by 14% in 2020.

For the beneficiaries of our existing economic system, this hit to growth is a waking nightmare.

Growth is heralded as a rising tide that lifts all boats, creating larger incomes and more jobs, as well as funding essential public services like healthcare and education. Strong and uninterrupted growth is considered an unquestionable good that benefits all of society.

The problems with growth

But what drives economic growth? Our economy relies on burning fossil fuels and depleting natural resources to expand production and consumption, while polluting the environment with the waste. Most of us are forced to work for wages in order to survive, creating the goods and services which generate growth, while a minority siphon off the profits. In 2018, 82% of new wealth created went to the world’s richest 1%, while the poorest half of the global population got nothing.

Most scientists agree that an unprecedented economic transformation is now needed to limit global temperature rise to 1.5°C and avert climate breakdown. Meanwhile, the destruction of ecosystems to claim land and resources in service of more economic growth is contributing to the sixth mass extinction of life on Earth.

“Green growth” has been touted as a solution to these problems. But recent research suggests that growth cannot be decoupled from environmental pressures at a scale or speed sufficient to halt ecological breakdown.

Transitioning to renewable energy can reduce carbon emissions, but it increases pressures on rare Earth minerals and land to build wind and solar farms. Reducing emissions in one country often involves exporting dirty production processes to another. When goods are made more efficient, they become cheaper to produce, and their lower ecological impact is often offset by increased consumption. Think of someone switching to a fuel efficient car but driving more often. Put simply, attempts at “greening” growth often shift, rather than eliminate, environmental impact.

Governments have taken action to reduce the spread of COVID-19 at the expense of economic growth. But as the post-pandemic recession kicks in, rebooting growth will be the priority. This would set us right back on the path of ecological catastrophe.

Yet, polling suggests a public appetite to prioritise wellbeing over growth in the post-COVID economy. To achieve this while tackling ecological crisis would require turning the current short-term disruption to growth into a long-term managed downscaling of the economy. As researchers, we work with a concept which can guide this task: degrowth.

Well-being without growth

Degrowth calls for a fundamental restructuring of the economy to reduce its ecological impact and improve well-being by abolishing economic growth as a social objective.

The pandemic will shrink the global economy, but not in a targeted way that downscales carbon-intensive sectors. For this reason, a degrowth transition would look very different to a crisis-driven recession such as the present one. Still, there are useful lessons to be drawn from COVID-19. Firstly, when confronted with a major crisis, we must stop activities that threaten well-being, regardless of the impact on growth.

Once we have established the necessary boundaries to protect well-being – whether it’s closing non-essential industries to prevent the spread of a virus, or curtailing those which threaten to push global warming beyond 1.5°C – our task as a society is to build an economy which helps everyone live well within those limits. For instance, the appeal during the pandemic to “stay home” could afterwards become “stay grounded”, as we scale down the enormously carbon-intensive aviation industry while expanding green public transport.

Secondly, COVID-19 has also prompted society to reconsider how we value different forms of labour. The heroes of the pandemic are those undervalued by our current economic system, often working for low wages or in poor conditions. They are, among others, the cleaners, shop workers, farmers, nurses, rubbish collectors, teachers, postal workers and food couriers. Feminist economists describe this work - disproportionately done by women - as the “reproductive economy”, so called because it provides the essential services on which the rest of society depends for its day to day functioning.

Lots of vital reproductive work also occurs outside of the waged labour market, such as care of relatives in family homes. If all this unwaged labour were paid, it’s estimated that its global value would total $10.8 trillion per year. A care income could support all those doing unpaid work caring for other people and their local environments.

Reproductive work is central to sustaining well-being, but it also tends to have a lower ecological impact than much of the industrial economy. For these reasons, a degrowth transition could reduce ecological degradation by shrinking the sectors that pollute the most, like the fossil fuel industry and aviation, while expanding reproductive sectors such as health care, education and ecosystems restoration.

The COVID-19 pandemic has undeniably created an upsurge of political imagination. Now, as the restructuring of the post-pandemic economy begins, we must resist the return to infinite growth. The future of life on Earth depends upon it.

**Warming causes extinction**

**Ramanathan et al. 17** [Veerabhadran Ramanathan is Victor Alderson Professor of Applied Ocean Sciences and director of the Center for Atmospheric Sciences at the Scripps Institution of Oceanography, University of California, San Diego, Dr. William Collins is an internationally recognized expert in climate modeling and climate change science. He is the Director of the Climate and Ecosystem Sciences Division (CESD) for the Earth and Environmental Sciences Area (EESA) at the Lawrence Berkeley National Laboratory (LBNL), Prof. Dr Mark Lawrence, Ph.D. is scientific director at the Institute for Advanced Sustainability Studies (IASS) in Potsdam, Örjan Gustafsson is a Professor in the Department of Environmental Science and Analytic Chemistry at Stockholm University, Shichang Kang is Professor, Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences (CAS); CAS Center for Excellence in Tibetan Plateau Earth Sciences, and Molina, M.J., Zaelke, D., Borgford-Parnell, N., Xu, Y., Alex, K., Auffhammer, M., Bledsoe, P., Croes, B., Forman, F., Haines, A., Harnish, R., Jacobson, M.Z., Lawrence, M., Leloup, D., Lenton, T., Morehouse, T., Munk, W., Picolotti, R., Prather, K., Raga, G., Rignot, E., Shindell, D., Singh, A.K., Steiner, A., Thiemens, M., Titley, D.W., Tucker, M.E., Tripathi, S., & Victor, D., authors come from the following 9 countries - US, Switzerland, Sweden, UK, China, Germany, Australia, Mexico, India, “Well Under 2 Degrees Celsius: Fast Action Policies to Protect People and the Planet from Extreme Climate Change,” Report of the Committee to Prevent Extreme Climate Change, September 2017, http://www.igsd.org/wp-content/uploads/2017/09/Well-Under-2-Degrees-Celsius-Report-2017.pdf] TDI

**Climate change is becoming an existential threat with warming in excess of 2°C within the next three decades and 4°C to 6°C within the next several decades. Warming of such magnitudes will expose as many as 75% of the world’s population to deadly heat stress in addition to disrupting the climate and weather worldwide. Climate change is an urgent problem requiring urgent solutions**. This paper lays out urgent and **practical solutions that are ready for implementation now, will deliver benefits in the next few critical decades**, and places the world on a path to achieving the longterm targets of the Paris Agreement and near-term sustainable development goals. The approach consists of four building blocks and 3 levers to implement ten scalable solutions described in this report by a team of climate scientists, policy makers, social and behavioral scientists, political scientists, legal experts, diplomats, and military experts from around the world. These solutions will enable society to decarbonize the global energy system by 2050 through efficiency and renewables, drastically reduce short-lived climate pollutants, and stabilize the climate well below 2°C both in the near term (before 2050) and in the long term (post 2050). It will also reduce premature mortalities by tens of millions by 2050. As an insurance against policy lapses, mitigation delays and faster than projected climate changes, the solutions include an Atmospheric Carbon Extraction lever to remove CO2 from the air. The amount of CO2 that must be removed ranges from negligible, if the emissions of CO2 from the energy system and SLCPs start to decrease by 2020 and carbon neutrality is achieved by 2050, to a staggering one trillion tons if the carbon lever is not pulled and emissions of climate pollutants continue to increase until 2030.

There are numerous living laboratories including 53 cities, many universities around the world, the state of California, and the nation of Sweden, who have embarked on a carbon neutral pathway. These laboratories have already created 8 million jobs in the clean energy industry; they have also shown that **emissions of greenhouse gases and air pollutants can be decoupled from economic growth**. Another favorable sign is that **growth rates of worldwide carbon emissions have reduced from 2.9% per year during the first decade of this century to 1.3% from 2011 to 2014 and near zero growth rates during the last few years. The carbon emission curve is bending, but we have a long way to go and very little time for achieving carbon neutrality**. We need institutions and enterprises that can accelerate this bending by scaling-up the solutions that are being proven in the living laboratories. We have less than a decade to put these solutions in place around the world to preserve nature and our quality of life for generations to come. The time is now.

The Paris Agreement is an historic achievement. For the first time, effectively all nations have committed to limiting their greenhouse gas emissions and taking other actions to limit global temperature change. Specifically, 197 nations agreed to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels,” and achieve carbon neutrality in the second half of this century.

**The climate has already warmed by 1°C. The problem is running ahead of us, and under current trends we will likely reach 1.5°C in the next fifteen years and surpass the 2°C guardrail by mid-century with a 50% probability of reaching 4°C by end of century**. Warming in excess of 3°C is likely to be a global catastrophe for three major reasons:

• **Warming in the range of 3°C to 5°C is suggested as the threshold for several tipping points in the physical and geochemical systems; a warming of about 3°C has a probability of over 40% to cross over multiple tipping points, while a warming close to 5°C increases it to nearly 90%, compared with a baseline warming of less than 1.5°C, which has only just over a 10% probability of exceeding any tipping point.**

**• Health effects of such warming are emerging as a major if not dominant source of concern. Warming of 4°C or more will expose more than 70% of the population, i.e. about 7 billion by the end of the century, to deadly heat stress and expose about 2.4 billion to vector borne disease**

**s such as Dengue, Chikengunya, and Zika virus among others**. Ecologists and paleontologists have proposed that warming in excess of 3°C, accompanied by increased acidity of the oceans by the buildup of CO2 , can become a major causal factor for exposing more than 50% of all species to extinction. 20% of species are in danger of extinction now due to population, habitat destruction, and climate change.

The good news is that **there may still be time to avert such catastrophic changes**. The Paris Agreement and **supporting climate policies must be strengthened substantially within the next five years to bend the emissions curve down faster, stabilize climate, and prevent catastrophic warming**. To the extent those efforts fall short, societies and **ecosystems will be forced to contend with substantial needs for adaptation—a burden that will fall disproportionately on the poorest three billion who are least responsible for causing the climate change problem.**

Here we propose a policy roadmap with a realistic and reasonable chance of limiting global temperature to safe levels and preventing unmanageable climate change—an outline of specific science-based policy pathways that serve as the building blocks for a three-lever strategy that could limit warming to well under 2°C. The projections and the emission pathways proposed in this summary are based on a combination of published recommendations and new model simulations conducted by the authors of this study (see Figure 2). We have framed the plan in terms of four building blocks and three levers, which are implemented through 10 solutions. The first building block would be fully implementing the nationally determined mitigation pledges under the Paris Agreement of the UN Framework Convention on Climate Change (UNFCCC). In addition, several sister agreements that provide targeted and efficient mitigation must be strengthened. Sister agreements include the Kigali Amendment to the Montreal Protocol to phase down HFCs, efforts to address aviation emissions through the International Civil Aviation Organization (ICAO), maritime black carbon emissions through the International Maritime Organization (IMO), and the commitment by the eight countries of the Arctic Council to reduce black carbon emissions by up to 33%. There are many other complementary processes that have drawn attention to specific actions on climate change, such as the Group of 20 (G20), which has emphasized reform of fossil fuel subsidies, and the Climate and Clean Air Coalition (CCAC). HFC measures, for example, can avoid as much as 0.5°C of warming by 2100 through the mandatory global phasedown of HFC refrigerants within the next few decades, and substantially more through parallel efforts to improve energy efficiency of air conditioners and other cooling equipment potentially doubling this climate benefit.

For the second building block, numerous subnational and city scale climate action plans have to be scaled up. One prominent example is California’s Under 2 Coalition signed by over 177 jurisdictions from 37 countries in six continents covering a third of world economy. The goal of this Memorandum of Understanding is to catalyze efforts in many jurisdictions that are comparable with California’s target of 40% reductions in CO2 emissions by 2030 and 80% reductions by 2050—emission cuts that, if achieved globally, would be consistent with stopping warming at about 2°C above pre-industrial levels. Another prominent example is the climate action plans by over 52 cities and 65 businesses around the world aiming to cut emissions by 30% by 2030 and 80% to 100% by 2050. There are concerns that the carbon neutral goal will hinder economic progress; however, real world examples from California and Sweden since 2005 offer evidence that economic growth can be decoupled from carbon emissions and the data for CO2 emissions and GDP reveal that growth in fact prospers with a green economy.

The third building block consists of two levers that we need to pull as hard as we can: one for drastically reducing emissions of short-lived climate pollutants (SLCPs) beginning now and completing by 2030, and the other for decarbonizing the global energy system by 2050 through efficiency and renewables. Pulling both levers simultaneously can keep global temperature rise below 2°C through the end of the century. If we bend the CO2 emissions curve through decarbonization of the energy system such that global emissions peak in 2020 and decrease steadily thereafter until reaching zero in 2050, there is less than a 20% probability of exceeding 2°C. This call for bending the CO2 curve by 2020 is one key way in which this report’s proposal differs from the Paris Agreement and it is perhaps the most difficult task of all those envisioned here. Many cities and jurisdictions are already on this pathway, thus demonstrating its scalability. Achieving carbon neutrality and reducing emissions of SLCPs would also drastically reduce air pollution globally, including all major cities, thus saving millions of lives and over 100 million tons of crops lost to air pollution each year. In addition, these steps would provide clean energy access to the world’s poorest three billion who are still forced to resort to 18th century technologies to meet basic needs such as cooking. For the fourth and the final building block, we are adding a third lever, ACE (Atmospheric Carbon Extraction, also known as Carbon Dioxide Removal, or “CDR”). This lever is added as an insurance against surprises (due to policy lapses, mitigation delays, or non-linear climate changes) and would require development of scalable measures for removing the CO2 already in the atmosphere. The amount of CO2 that must be removed will range from negligible, if the emissions of CO2 from the energy system and SLCPs start to decrease by 2020 and carbon neutrality is achieved by 2050, to a staggering one trillion tons, if CO2 emissions continue to increase until 2030, and the carbon lever is not pulled until after 2030. This issue is raised because the NDCs (Nationally Determined Contributions) accompanying the Paris Agreement would allow CO2 emissions to increase until 2030. We call on economists and experts in political and administrative systems to assess the feasibility and cost-effectiveness of reducing carbon and SLCPs emissions beginning in 2020 compared with delaying it by ten years and then being forced to pull the third lever to extract one trillion tons of CO2

The fast mitigation plan of requiring emissions reductions to begin by 2020, which means that many countries need to cut now, is urgently needed to limit the warming to well under 2°C. Climate change is not a linear problem. Instead, we are facing non-linear climate tipping points that can lead to self-reinforcing and cascading climate change impacts. Tipping points and selfreinforcing feedbacks are wild cards that are more likely with increased temperatures, and many of the potential abrupt climate shifts could happen as warming goes from 1.5°C in 15 years to 2°C by 2050, with the potential to push us well beyond the Paris Agreement goals.

Where Do We Go from Here?

**A massive effort will be needed to stop warming at 2°C, and time is of the essence. With unchecked business-as-usual emissions, global warming has a 50% likelihood of exceeding 4ºC and a 5% probability of exceeding 6ºC in this century, raising existential questions for most, but especially the poorest three billion people. A 4ºC warming is likely to expose as many as 75% of the global population to deadly heat.** Dangerous to catastrophic impacts on the health of people including generations yet to be born, on the health of ecosystems, and on species extinction have emerged as major justifications for mitigating climate change well below 2ºC, although we must recognize that the uncertainties intrinsic in climate and social systems make it hard to pin down exactly the level of warming that will trigger possibly catastrophic impacts. To avoid these consequences, we must act now, and we must act fast and effectively. This report sets out a specific plan for reducing climate change in both the near- and long-term. With aggressive urgent actions, we can protect ourselves. Acting quickly to prevent catastrophic climate change by decarbonization will save millions of lives, trillions of dollars in economic costs, and massive suffering and dislocation to people around the world. This is a global security imperative, as it can avoid the migration and destabilization of entire societies and countries and reduce the likelihood of environmentally driven civil wars and other conflicts.

Staying well under 2°C will require a concerted global effort. We must address everything from our energy systems to our personal choices to reduce emissions to the greatest extent possible. We must redouble our efforts to invent, test, and perfect systems of governance so that the large measure of international cooperation needed to achieve these goals can be realized in practice. The health of people for generations to come and the health of ecosystems crucially depend on an energy revolution beginning now that will take us away from fossil fuels and toward the clean renewable energy sources of the future. It will be nearly impossible to obtain other critical social goals, including for example the UN agenda 2030 with the Sustainable Development Goals, if we do not make immediate and profound progress stabilizing climate, as we are outlining here.

1. The Building Blocks Approach The 2015 Paris Agreement, which went into effect November 2016, is a remarkable, historic achievement. For the frst time, essentially all nations have committed to limit their greenhouse gas emissions and take other actions to limit global temperature and adapt to unavoidable climate change. Nations agreed to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels” and “achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century” (UNFCCC, 2015). Nevertheless, the initial Paris Agreement has to be strengthened substantially within fve years if we are to prevent catastrophic warming; **current pledges place the world on track for up to 3.4°C by 2100 (UNEP, 2016b). Until now, no specifc policy roadmap exists that provides a realistic and reasonable chance of limiting global temperatures to safe levels and preventing unmanageable climate change**. This report is our attempt to provide such a plan— an outline of specifc solutions that serve as the building blocks for a comprehensive strategy for limiting the warming to well under 2°C and avoiding dangerous climate change (Figure 1). The frst building block is the full implementation of the nationally determined mitigation pledges under the Paris Agreement of the UN Framework Convention on Climate Change (UNFCCC) and strengthening global sister agreements, such as the Kigali Amendment to the Montreal Protocol to phase down HFCs, which can provide additional targeted, fast action mitigation at scale. For the second building block, numerous sub-national and city scale climate action plans have to be scaled up such as California’s Under 2 Coalition signed by 177 jurisdictions from 37 countries on six continents. The third building block is targeted measures to reduce emissions of shortlived climate pollutants (SLCPs), beginning now and fully implemented by 2030, along with major measures to fully decarbonize the global economy, causing the overall emissions growth rate to stop in 2020-2030 and reach carbon neutrality by 2050. Such a deep decarbonization would require an energy revolution similar to the Industrial Revolution that was based on fossil fuels. The fnal building block includes scalable and reversible carbon dioxide (CO2 ) removal measures, which can begin removing CO2 already emitted into the atmosphere. Such a plan is urgently needed. Climate change is not a linear problem. Instead, climate tipping points can lead to self-reinforcing, cascading climate change impacts (Lenton et al., 2008). Tipping points are more likely with increased temperatures, and many of the potential abrupt climate shifts could happen as warming goes from 1.5°C to 2°C, with the potential to push us well beyond the Paris Agreement goals (Drijfhout et al., 2015). In order to avoid dangerous climate change, we must address these concerns. **We must act now, and we must act fast. Reduction of SLCPs will result in fast, near-term reductions in warming, while present-day reductions of CO2 will result in long-term climate benefts**. This two-lever approach—aggressively cutting both SLCPs and CO2 –-will slow warming in the coming decades when it is most crucial to avoid impacts from climate change as well as maintain a safe climate many decades from now. To achieve the nearterm goals, we have outlined solutions to be implemented immediately. These solutions to bend down the rising emissions curve and thus bend the warming trajectory curve follow a 2015 assessment by the University of California under its Carbon Neutrality Initiative (Ramanathan et al., 2016). The solutions are clustered into categories of social transformation, governance improvement, market- and regulation-based solutions, technological innovation and transformation, and natural and ecosystem management. Additionally, we need to intensely investigate and pursue a third lever—ACE (Atmospheric Carbon Extraction). While many potential technologies exist, we do not know the extent to which they could be scaled up to remove the requisite amount of carbon from the atmosphere in order to achieve the Paris Agreement goals, and any delay in mitigation will demand increasing reliance on these technologies. Yet, there is still hope. Humanity can come together, as we have done in the past, to collaborate towards a common goal. We have no choice but to tackle the challenge of climate change. We only have the choice of when and how: **either now, through the ambitious plan outlined here, or later, through radical adaptation and societal transformations in response to an ever-deteriorating climate system that will unleash devastating impacts—some of which may be beyond our capacity to fully adapt to or reverse for thousands of years.**

2. Major Climate Disruptions: How Soon and How Fast? “Without adequate mitigation and adaptation, climate change poses unacceptable risks to global public health.” (WHO, 2016)

The planet has already witnessed nearly 1°C of warming, and another 0.6°C of additional warming is currently stored in the ocean to be released over the next two to four decades, if climate warming emissions are not radically reduced during that time (IPCC, 2013). The impacts of this warming on extreme weather, droughts, and foods are being felt by society worldwide to the extent that many think of this no longer as climate change but as climate disruption. Consider the business as usual scenario:

15 years from now: In 15 years, planetary warming will reach 1.5°C above pre-industrial global mean temperature (Ramanathan and Xu, 2010; Shindell et al., 2012). This exceeds the 0.5°C to 1°C of warming during the Eemian period, 115,000– 130,000 years ago, when sea-levels reached 6-9 meters (20-30 feet) higher than today (Hansen et al., 2016b). The impacts of this warming will affect us all yet will disproportionately affect the Earth’s poorest three billion people, who are primarily subsistence farmers that still rely on 18th century technologies and have the least capacity to adapt (IPCC, 2014a; Dasgupta et al., 2015). They thus may be forced to resort to mass migration into city slums and push across international borders (U.S. DOD, 2015). The existential fate of lowlying small islands and coastal communities will also need to be addressed, as they are primarily vulnerable to sea-level rise, diminishing freshwater resources, and more intense storms. In addition, many depend on fsheries for protein, and these are likely to be affected by ocean acidifcation and climate change. Climate injustice could start causing visible regional and international conficts. All of this will be exacerbated as the risk of passing tipping points increases (Lenton et al., 2008).

30 years from now: By mid-century, warming is expected to exceed 2°C, which would be unprecedented with respect to historical records of at least the last one million years (IPCC, 2014c). Such a warming through this century could result in sea-level rise of as much as 2 meters by 2100, with greater sea-level rise to follow. A group of tipping points are clustered between 1.5°C and 2°C (Figure 2) (Drijfhout et al., 2015). The melting of most mountain glaciers, including those in the Tibetan-Himalayas, combined with mega-droughts, heat waves, storms, and foods, would adversely affect nearly everyone on the planet.

80 years from now: In 80 years, warming is expected to exceed 4°C, increasing the likelihood of irreversible and catastrophic change (World Bank, 2013b). 4ºC warming is likely to expose as much as 75% of the global population to deadly heat (Mora et al., 2017). The 2°C and 4°C values quoted above and in other reports, however, are merely the central values with a 50% probability of occurrence (Ramanathan and Feng, 2008). There is a 5% probability the warming could be as high as 6°C due to uncertainties in the magnitude of amplifying feedbacks (see Section 4). This in turn could lead to major disruptions to natural and social systems, threatening food security, water security, and national security and fundamentally affecting the great majority of the projected 11.2 billion inhabitants of the planet in 2100 (UN DESA, 2015).

3. What Are the Wild Cards for Climate Disruption? Increasing the concentrations of greenhouse gases in the atmosphere increases radiative forcing (the difference between the amount of energy entering the atmosphere and leaving) and thus increases the global temperature (IPCC, 2013). However, climate wild cards exist that can alter the linear connection with warming and anthropogenic emissions by triggering abrupt changes in the climate (Lenton et al., 2008). Some of these wild cards have not been thoroughly captured by the models that policymakers rely on the most. These abrupt shifts are irreversible on a human time scale (<100 years) and will create a notable disruption to the climate system, condemning the world to warming beyond that which we have previously projected. These climate disruptions would divert resources from needed mitigation and upset mitigation strategies that we have already put in place.

1. Unmasking Aerosol Cooling: The frst such wild card is the unmasking of an estimated 0.7°C (with an uncertainty range of 0.3°C to 1.2°C) of the warming in addition to mitigating other aerosol effects such as disrupting rainfall patterns, by reducing emissions of aerosols such as sulfates and nitrates as part of air pollution regulations (Wigley, 1991; Ramanathan and Feng, 2008). Aerosol air pollution is a major health hazard with massive costs to public health and society, including contributing to about 7 million deaths (from household and ambient exposure) each year (WHO, 2014). While some aerosols, such as black carbon and brown carbon, strongly absorb sunlight and warm the climate, others refect sunlight back into space, which cools the climate (Ramanathan and Carmichael, 2008). The net impact of all manmade aerosols is negative, meaning that about 30% of the warming from greenhouse gases is being masked by co-emitted air pollution particles (Ramanathan and Carmichael, 2008). As we reduce greenhouse gas emissions and implement policies to eliminate air pollution, we are also reducing the concentration of aerosols in the air. Aerosols last in the atmosphere for about a week, so if we eliminate air pollution without reducing emissions of the greenhouse gases, the unmasking alone would lead to an estimated 0.7°C of warming within a matter of decades (Ramanathan and Feng, 2008). We must eliminate all aerosol emissions due to their health effects, but we must simultaneously mitigate emissions of CO2 , other greenhouse gases, and black carbon and co-pollutants to avoid an abrupt and very large jump in the near-term warming beyond 2°C (Brasseur and Roeckner, 2005).

2. Tipping Points**: It is likely that as we cross the 1.5°C to 2°C thresholds we will trigger so called “tipping points” for abrupt and nonlinear changes in the climate system with catastrophic consequences** for humanity and the environment (Lenton, 2008; Drijfhout et al., 2015). Once the tipping points are passed, the resulting impacts will range in timescales from: disruption of monsoon systems (transition in a year), loss of sea ice (approximately a decade for transition), dieback of major forests (nearly half a century for transition), reorganization of ocean circulation (approximately a century for transition), to loss of ice sheets and subsequent sea-level rise (transition over hundreds of years) (Lenton et al., 2008). Regardless of timescale, once underway many of these changes would be irreversible (Lontzek et al., 2015). There is also a likelihood of crossing over multiple tipping points simultaneously. Warming of close to 3°C would subject the system to a 46% probability of crossing multiple tipping points, while warming of close to 5°C would increase the risk to 87% (Cai et al., 2016). Recent modeling work shows a “cluster” of these tipping points could be triggered between 1.5°C and 2°C warming (Figure 2), including melting of land and sea ice and changes in highlatitude ocean circulation (deep convection) (Drijfhout et al., 2015). This is consistent with existing observations and understanding that the polar regions are particularly sensitive to global warming and have several potentially imminent tipping points. The Arctic is warming nearly twice as quickly as the global average, which makes the abrupt changes in the Arctic more likely at a lower level of global warming (IPCC, 2013). Similarly, the Himalayas are warming at roughly the same rate as the Arctic and are thus also more susceptible to incremental changes in temperature (UNEP-WMO, 2011). This gives further justifcation for limiting warming to no more than 1.5°C.

While all climate tipping points have the potential to rapidly destabilize climate, social, and economic systems, some are also **self-amplifying feedbacks that once set in motion increase warming in such a way that they perpetuate yet even more warming. Declining Arctic sea ice, thawing permafrost, and the poleward migration of cloud systems are all examples of self-amplifying feedback mechanisms, where initial warming feeds upon itself to cause still more warming acting as a force multiplier (Schuur et al., 2015).**

### Advantage 1

#### No extinction from disease

#### Resilience and countermeasures prevent spread – distinct from burnout

Adalja 16

Amesh Adalja is an infectious-disease physician at the University of Pittsburgh, The Atlantic, June 17, 2016, “Why Hasn't Disease Wiped out the Human Race?”, https://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/

But when people ask me if I’m worried about infectious diseases, they’re often not asking about the threat to human lives; they’re asking about the threat to human life. With each outbreak of a headline-grabbing emerging infectious disease comes a fear of extinction itself. The fear envisions a large proportion of humans succumbing to infection, leaving no survivors or so few that the species can’t be sustained.

I’m not afraid of this apocalyptic scenario, but I do understand the impulse. Worry about the end is a quintessentially human trait. Thankfully, so is our resilience.

For most of mankind’s history, infectious diseases were the existential threat to humanity—and for good reason. They were quite successful at killing people: The 6th century’s Plague of Justinian knocked out an estimated 17 percent of the world’s population; the 14th century Black Death decimated a third of Europe; the 1918 influenza pandemic killed 5 percent of the world; malaria is estimated to have killed half of all humans who have ever lived.

Any yet, of course, humanity continued to flourish. Our species’ recent explosion in lifespan is almost exclusively the result of the control of infectious diseases through sanitation, vaccination, and antimicrobial therapies. Only in the modern era, in which many infectious diseases have been tamed in the industrial world, do people have the luxury of death from cancer, heart disease, or stroke in the 8th decade of life. Childhoods are free from watching siblings and friends die from outbreaks of typhoid, scarlet fever, smallpox, measles, and the like.

* 1. **Intervening actors check**

**Zakaria 9—**Editor of Newsweek, BA from Yale, PhD in pol sci, Harvard. He serves on the board of Yale University, The Council on Foreign Relations, The Trilateral Commission, and Shakespeare and Company. Named "one of the 21 most important people of the 21st Century" (Fareed, “The Capitalist Manifesto: Greed Is Good,” 13 June 2009, http://www.newsweek.com/id/201935)

Note—Laurie Garrett=science and health writer, winner of the Pulitzer, Polk, and Peabody Prize

It certainly looks like another example of crying wolf. **After bracing ourselves for a global pandemic, we've suffered** something more like **the usual seasonal influenza**. Three weeks ago the World Health Organization declared a health emergency, warning countries to "prepare for a pandemic" and said that the only question was the extent of worldwide damage. **Senior officials prophesied that millions could be infected** by the disease. **But as of last week, the WHO had confirmed only 4,800 cases** of swine flu, with 61 people having died of it. Obviously, these low numbers are a pleasant surprise, but it does make one wonder, what did we get wrong? **Why did** the **predictions of a pandemic turn out to be so exaggerated**? Some people blame an overheated media, but it would have been difficult to ignore major international health organizations and governments when they were warning of catastrophe. I think **there is a** broader **mistake in the way we look at the world.** Once we see a problem, we can describe it in great detail, extrapolating all its possible consequences. But **we** can **rarely anticipate the human response to that crisis. Take** **swine flu. The virus** **had crucial characteristics** **that led researchers to worry that it could spread far and fast**. They described—and the media reported—what would happen if it went unchecked. **But it did not go unchecked**. **In fact, swine flu was met by an extremely vigorous response at its epicenter**, **Mexico. The Mexican government reacted quickly** and massively, quarantining the infected population, testing others, providing medication to those who needed it. **The noted expert on this subject,** Laurie **Garrett, says, "**We should all stand up and scream, **'Gracias, Mexico**!' because the Mexican people and the Mexican government have sacrificed on a level that I'm not sure as Americans we would be prepared to do in the exact same circumstances. They shut down their schools. They shut down businesses, restaurants, churches, sporting events. **They** basically paralyzed their own economy. They've suffered billions of dollars in financial losses still being tallied up, and thereby **really brought transmission to a halt." Every time one of these viruses is detected**, writers and **officials bring up the Spanish influenza** epidemic **of 1918** in which millions of people died. Indeed, during the last pandemic scare, in 2005, President George W. Bush claimed that he had been reading a history of the Spanish flu to help him understand how to respond. **But the world we live in today looks nothing like 1918. Public health-care systems are far better** and more widespread than anything that existed during the First World War. **Even Mexico, a developing country, has a first-rate public-health system**—far better than anything Britain or France had in the early 20th century.

#### Solves war

#### Disease pandemics decrease the likelihood of war

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

By many measures, 2020 is looking to be the worst year that humankind has faced in many decades. We’re in the midst of a pandemic that has already claimed more than 280,000 lives, sickened millions of people, and is certain to afflict millions more before it ends. The world economy is in free fall, with unemployment rising dramatically, trade and output plummeting, and no hopeful end in sight. A plague of locusts is back for a second time in Africa, and last week we learned about murderous killer wasps threatening the bee population in the United States. Americans have a head-in-the-sand president who prescribes potentially lethal nostrums and ignores the advice of his scientific advisors. Even if all those things magically disappeared tomorrow—and they won’t—we still face the looming long-term danger from climate change. Given all that, what could possibly make things worse? Here’s one possibility: war. It is therefore worth asking whether the combination of a pandemic and a major economic depression is making war more or less likely. What does history and theory tell us about that question? For starters, we know neither plague nor depression make war impossible. World War I ended just as the 1918-1919 influenza was beginning to devastate the world, but that pandemic didn’t stop the Russian Civil War, the Russo-Polish War, or several other serious conflicts. The Great Depression that began in 1929 didn’t prevent Japan from invading Manchuria in 1931, and it helped fuel the rise of fascism in the 1930s and made World War II more likely. So if you think major war simply can’t happen during COVID-19 and the accompanying global recession, think again. But war could still be much less likely. The Massachusetts Institute of Technology’s Barry Posen has already considered the likely impact of the current pandemic on the probability of war, and he believes COVID-19 is more likely to promote peace instead. He argues that the current pandemic is affecting all the major powers adversely, which means it isn’t creating tempting windows of opportunity for unaffected states while leaving others weaker and therefore vulnerable. Instead, it is making all governments more pessimistic about their short- to medium-term prospects. Because states often go to war out of sense of overconfidence (however misplaced it sometimes turns out to be), pandemic-induced pessimism should be conducive to peace. Moreover, by its very nature war requires states to assemble lots of people in close proximity—at training camps, military bases, mobilization areas, ships at sea, etc.—and that’s not something you want to do in the middle of a pandemic. For the moment at least, beleaguered governments of all types are focusing on convincing their citizens they are doing everything in their power to protect the public from the disease. Taken together, these considerations might explain why even an impulsive and headstrong warmaker like Saudi Arabia’s Mohammed bin Salman has gotten more interested in winding down his brutal and unsuccessful military campaign in Yemen. Posen adds that COVID-19 is also likely to reduce international trade in the short to medium term. Those who believe economic interdependence is a powerful barrier to war might be alarmed by this development, but he points out that trade issues have been a source of considerable friction in recent years—especially between the United States and China—and a degree of decoupling might reduce tensions somewhat and cause the odds of war to recede. For these reasons, the pandemic itself may be conducive to peace. But what about the relationship between broader economic conditions and the likelihood of war? Might a few leaders still convince themselves that provoking a crisis and going to war could still advance either long-term national interests or their own political fortunes? Are the other paths by which a deep and sustained economic downturn might make serious global conflict more likely? One familiar argument is the so-called diversionary (or “scapegoat”) theory of war. It suggests that leaders who are worried about their popularity at home will try to divert attention from their failures by provoking a crisis with a foreign power and maybe even using force against it. Drawing on this logic, some Americans now worry that President Donald Trump will decide to attack a country like Iran or Venezuela in the run-up to the presidential election and especially if he thinks he’s likely to lose. This outcome strikes me as unlikely, even if one ignores the logical and empirical flaws in the theory itself. War is always a gamble, and should things go badly—even a little bit—it would hammer the last nail in the coffin of Trump’s declining fortunes. Moreover, none of the countries Trump might consider going after pose an imminent threat to U.S. security, and even his staunchest supporters may wonder why he is wasting time and money going after Iran or Venezuela at a moment when thousands of Americans are dying preventable deaths at home. Even a successful military action won’t

put Americans back to work, create the sort of testing-and-tracing regime that competent governments around the world have been able to implement already, or hasten the development of a vaccine. The same logic is likely to guide the decisions of other world leaders too. Another familiar folk theory is “military Keynesianism.” War generates a lot of economic demand, and it can sometimes lift depressed economies out of the doldrums and back toward prosperity and full employment. The obvious case in point here is World War II, which did help the U.S economy finally escape the quicksand of the Great Depression. Those who are convinced that great powers go to war primarily to keep Big Business (or the arms industry) happy are naturally drawn to this sort of argument, and they might worry that governments looking at bleak economic forecasts will try to restart their economies through some sort of military adventure. I doubt it. It takes a really big war to generate a significant stimulus, and it is hard to imagine any country launching a large-scale war—with all its attendant risks—at a moment when debt levels are already soaring. More importantly, there are lots of easier and more direct ways to stimulate the economy—infrastructure spending, unemployment insurance, even “helicopter payments”—and launching a war has to be one of the least efficient methods available. The threat of war usually spooks investors too, which any politician with their eye on the stock market would be loath to do. Economic downturns can encourage war in some special circumstances, especially when a war would enable a country facing severe hardships to capture something of immediate and significant value. Saddam Hussein’s decision to seize Kuwait in 1990 fits this model perfectly: The Iraqi economy was in terrible shape after its long war with Iran; unemployment was threatening Saddam’s domestic position; Kuwait’s vast oil riches were a considerable prize; and seizing the lightly armed emirate was exceedingly easy to do. Iraq also owed Kuwait a lot of money, and a hostile takeover by Baghdad would wipe those debts off the books overnight. In this case, Iraq’s parlous economic condition clearly made war more likely. Yet I cannot think of any country in similar circumstances today. Now is hardly the time for Russia to try to grab more of Ukraine—if it even wanted to—or for China to make a play for Taiwan, because the costs of doing so would clearly outweigh the economic benefits. Even conquering an oil-rich country—the sort of greedy acquisitiveness that Trump occasionally hints at—doesn’t look attractive when there’s a vast glut on the market. I might be worried if some weak and defenseless country somehow came to possess the entire global stock of a successful coronavirus vaccine, but that scenario is not even remotely possible. If one takes a longer-term perspective, however, a sustained economic depression could make war more likely by strengthening fascist or xenophobic political movements, fueling protectionism and hypernationalism, and making it more difficult for countries to reach mutually acceptable bargains with each other. The history of the 1930s shows where such trends can lead, although the economic effects of the Depression are hardly the only reason world politics took such a deadly turn in the 1930s. Nationalism, xenophobia, and authoritarian rule were making a comeback well before COVID-19 struck, but the economic misery now occurring in every corner of the world could intensify these trends and leave us in a more war-prone condition when fear of the virus has diminished. On balance, however, I do not think that even the extraordinary economic conditions we are witnessing today are going to have much impact on the likelihood of war. Why? First of all, if depressions were a powerful cause of war, there would be a lot more of the latter. To take one example, the United States has suffered 40 or more recessions since the country was founded, yet it has fought perhaps 20 interstate wars, most of them unrelated to the state of the economy. To paraphrase the economist Paul Samuelson’s famous quip about the stock market, if recessions were a powerful cause of war, they would have predicted “nine out of the last five (or fewer).” Second, states do not start wars unless they believe they will win a quick and relatively cheap victory. As John Mearsheimer showed in his classic book Conventional Deterrence, national leaders avoid war when they are convinced it will be long, bloody, costly, and uncertain. To choose war, political leaders have to convince themselves they can either win a quick, cheap, and decisive victory or achieve some limited objective at low cost. Europe went to war in 1914 with each side believing it would win a rapid and easy victory, and Nazi Germany developed the strategy of blitzkrieg in order to subdue its foes as quickly and cheaply as possible. Iraq attacked Iran in 1980 because Saddam believed the Islamic Republic was in disarray and would be easy to defeat, and George W. Bush invaded Iraq in 2003 convinced the war would be short, successful, and pay for itself. The fact that each of these leaders miscalculated badly does not alter the main point: No matter what a country’s economic condition might be, its leaders will not go to war unless they think they can do so quickly, cheaply, and with a reasonable probability of success. Third, and most important, the primary motivation for most wars is the desire for security, not economic gain. For this reason, the odds of war increase when states believe the long-term balance of power may be shifting against them, when they are convinced that adversaries are unalterably hostile and cannot be accommodated, and when they are confident they can reverse the unfavorable trends and establish a secure position if they act now. The historian A.J.P. Taylor once observed that “every war between Great Powers [between 1848 and 1918] … started as a preventive war, not as a war of conquest,” and that remains true of most wars fought since then. The bottom line: Economic conditions (i.e., a depression) may affect the broader political environment in which decisions for war or peace are made, but they are only one factor among many and rarely the most significant. Even if the COVID-19 pandemic has large, lasting, and negative effects on the world economy—as seems quite likely—it is not likely to affect the probability of war very much, especially in the short term.

#### Ceasefires and peace talks – COVID proves that pandemics incentivize them to avoid disease spread which caps global escalation.

Deirdre Shesgreen 20. Foreign Affairs Reporter at USA Today. 4/28/2020. “'War and disease travel together': Why the pandemic push for a global cease-fire is gaining ground.” https://www.usatoday.com/story/news/world/2020/04/28/coronavirus-un-secretary-wants-global-cease-fire-amid-pandemic/5163972002/. DOA: 9/4/2020. SIR.

When the head of the United Nations first called for a “global cease-fire” on March 23, it seemed like a quixotic quest that would fall on the deaf ears of warring guerrillas, militant terrorists and belligerent governments across the globe. But over the past month, fighters from Colombia to Ukraine have signaled a willingness to put down their weapons as the world confronts a deadly pandemic that could devastate civilian populations and armies alike. The 15-member U.N. Security Council may vote as early as this week on a resolution that demands an “immediate cessation of hostilities in all countries on its agenda” and calls for armed groups to engage in a 30-day cease-fire, according to a draft of the measure obtained by USA TODAY. Its fate is uncertain, and experts say it comes with many caveats and exceptions – including a loophole that could allow Russia to continue bombing civilians in Syria. Right now, world powers are still quibbling over several provisions. The Trump administration has objected to any language expressing support for the World Health Organization, among other provisions – disputes that could sink or stall the effort. President Donald Trump has blasted the WHO being biased toward China and accepting Beijing's statements about the coronavirus outbreak at face value. A State Department official declined to comment on the draft, citing ongoing negotiations. The official, who was not authorized to speak on the record, said the Trump administration supports the call for a global cease-fire but wants to ensure it will not hinder U.S. counterterrorism missions. If it passes, experts say its impact could be significant – albeit not sweeping – during an otherwise bleak moment of global crisis. “This is not a piece of paper that’s going to save the planet, and it’s not even going to stop some of the nasty wars that are burning out there,” said Richard Gowan, an expert on the United Nations and peacekeeping with the International Crisis Group, a nonpartisan organization that seeks to prevent conflict. “But it’s at least something which could help ease middle-sized and smaller conflicts in countries ranging from Colombia to Sudan, where we know that armed groups are actually interested in pausing violence and talking about peace during the COVID crisis.” It could also help staunch the flow of refugees in some war-ravaged countries – and thus slow the spread of COVID-19, said Barry Posen, an international professor of political science at the Massachusetts Institute of Technology. "War and disease travel together and are usually causative," Posen said. While a global cease-fire may sound lofty and idealistic, he said, it's also quite practical, particularly in places like Syria and Yemen, where health care is scarce and civilians are extremely vulnerable to disease. "The intrusion of COVID into that situation would make what's already a horror show into an even bigger horror show," he said. "If you can do a little something to suppress these wars at the moment, you would also be doing a little something to suppress the disease." And because these conflicts are also producing refugees, it could help limit the further spread of the illness if civilians are not forced to flee conflict zones. In this handout image released by the United Nations, U.N. Secretary-General Antonio Guterres holds a virtual press conference on April 3, 2020, at UN headquarters in New York. Guterres Friday renewed his call for a global cease-fire, urging all parties to conflict to lay down arms and allow war-torn nations to combat the coronavirus pandemic. "The worst is yet to come," Guterres said, referring to countries beset with fighting like Syria, Libya and Yemen. "The COVID-19 storm is now coming to all these theatres of conflict." The United Nation's secretary-general, , has used both lofty rhetoric and harsh reality in his pitch for the cease-fire. "There should be only one fight in our world today: our shared battle against COVID-19," he said in an April 3 news briefing on his effort. French President Emmanuel Macron has also championed the cease-fire proposal. So far, about 16 armed groups and more than 100 countries have endorsed the measure, according to an informal tally kept by U.N. officials. A few examples: In Colombia, a left-wing rebel group known as the ELN agreed to a cease-fire starting April and said it would consider reviving peace talks with the government. In Yemen, one side of that brutal war – the Saudi Arabia-led coalition – agreed to a unilateral cease-fire for at least a month, to help control the spread of coronavirus in a country already ravaged by starvation and other diseases. The Houthis, backed by Iran, have not yet signed on. In Syria, the Kurdish-led Syrian Democratic Forces agreed to a cease-fire, saying its fighters would defend themselves against attacks but not engage in offensive military action. “We hope that this humanitarian truce will help to open the door for dialogue and political solution and to put an end to the war in the world and Syria,” the SDF said in a statement.

#### Nuclear war causes extinction – famine and climate change

Starr 15 [(Steven, Director of the University of Missouri’s Clinical Laboratory Science Program and a senior scientist at the Physicians for Social Responsibility) “Nuclear War, Nuclear Winter, and Human Extinction,” Federation of American Scientists, 10/14/2015] DD  
While it is impossible to precisely predict all the human impacts that would result from a nuclear winter, it is relatively simple to predict those which would be most profound. That is, a nuclear winter would cause most humans and large animals to die from nuclear famine in a mass extinction event similar to the one that wiped out the dinosaurs.

Following the detonation (in conflict) of US and/or Russian launch-ready strategic nuclear weapons, nuclear firestorms would burn simultaneously over a total land surface area of many thousands or tens of thousands of square miles. These mass fires, many of which would rage over large cities and industrial areas, would release many tens of millions of tons of black carbon soot and smoke (up to 180 million tons, according to peer-reviewed studies), which would rise rapidly above cloud level and into the stratosphere. [For an explanation of the calculation of smoke emissions, see Atmospheric effects & societal consequences of regional scale nuclear conflicts.]

The scientists who completed the most recent peer-reviewed studies on nuclear winter discovered that the sunlight would heat the smoke, producing a self-lofting effect that would not only aid the rise of the smoke into the stratosphere (above cloud level, where it could not be rained out), but act to keep the smoke in the stratosphere for 10 years or more. The longevity of the smoke layer would act to greatly increase the severity of its effects upon the biosphere.

Once in the stratosphere, the smoke (predicted to be produced by a range of strategic nuclear wars) would rapidly engulf the Earth and form a dense stratospheric smoke layer. The smoke from a war fought with strategic nuclear weapons would quickly prevent up to 70% of sunlight from reaching the surface of the Northern Hemisphere and 35% of sunlight from reaching the surface of the Southern Hemisphere. Such an enormous loss of warming sunlight would produce Ice Age weather conditions on Earth in a matter of weeks. For a period of 1-3 years following the war, temperatures would fall below freezing every day in the central agricultural zones of North America and Eurasia. [For an explanation of nuclear winter, see Nuclear winter revisited with a modern climate model and current nuclear arsenals: Still catastrophic consequences.]

Nuclear winter would cause average global surface temperatures to become colder than they were at the height of the last Ice Age. Such extreme cold would eliminate growing seasons for many years, probably for a decade or longer. Can you imagine a winter that lasts for ten years?

The results of such a scenario are obvious. Temperatures would be much too cold to grow food, and they would remain this way long enough to cause most humans and animals to starve to death.

Global nuclear famine would ensue in a setting in which the infrastructure of the combatant nations has been totally destroyed, resulting in massive amounts of chemical and radioactive toxins being released into the biosphere. We don’t need a sophisticated study to tell us that no food and Ice Age temperatures for a decade would kill most people and animals on the planet.  Would the few remaining survivors be able to survive in a radioactive, toxic environment?

#### Solves warming

#### Disease outbreaks will be defeated with quarantines

**Szalai 7/26** [(Jennifer Szalai - author for the NYT) “The Extradordinary History (and likely busy future) of quarantine” The New York Times. 7-26-2021]

**Quarantine can be lifesaving**; it can also be dangerous, an exercise of extraordinary power in the name of disease control, a presumption of guilt instead of innocence.

In “Until Proven Safe,” a new book about quarantine’s past and future, Geoff Manaugh and Nicola Twilley do an impressively judicious job of explaining exactly why fears of quarantine are understandable and historically justified, while also showing how in coming years “we will almost certainly find ourselves more dependent on quarantine, not less.” Quarantine has to do with risk and uncertainty, and its logic is simple: “There might be something dangerous inside you — something contagious — on the verge of breaking free.”

**While medical advances have made some diseases more diagnosable** and less deadly, newfound knowledge can also accentuate the depths of our ignorance. The more we know, the more we know how much we don’t know — not to mention that **modern life, with escalating numbers of people and goods churning** their way **around the world**, has **increased the opportunities for contagion.**

Quarantine is distinct from isolation, even if the terms are often used interchangeably. Someone is isolated when they are known to be sick; **someone is quarantined when they might be but we cannot be sure**. Manaugh, an architecture and technology blogger, and Twilley, the co-host of a podcast about the science and history of food, bring an impressively wide range of interests to bear on a subject that involves not only infectious disease but also — in their ambitious yet seamless narration — politics, agriculture, surveillance and even outer space.

#### **Quarantines solve climate change – COVID was responsible for the largest drop in emissions ever**

**Alexander 20** [(Kurtis, a general assignment reporter for The San Francisco Chronicle, frequently writing about water, wildfire, climate and the American West. His recent work has focused on the impacts of drought, the widening rural-urban divide and state and federal environmental policy. Before joining the Chronicle, Alexander worked as a freelance writer and as a staff reporter for several media organizations, including The Fresno Bee and Bay Area News Group, writing about government, politics and the environment.) "Coronavirus has altered the global warming trajectory. But for how long?" San Francisco Chronicle, 5/20/20, https://www.sfchronicle.com/health/article/Greenhouse-gas-emissions-on-track-for-record-drop-15279312.php] TDI

The disruption caused by the coronavirus has been so profound that it’s altered the trajectory of global warming.

Not since World War II — and perhaps never before — have the emissions of heat-trapping gases dropped as much around the planet as they have during the COVID-19 outbreak.

The latest and most detailed study yet on the pandemic’s impact on climate pollution, published Tuesday and authored by the research group Global Carbon Project chaired by Stanford University’s Rob Jackson, finds that the Earth will see up to a 7% decrease in carbon dioxide this year. The dip is five times the decline in emissions in 2009, when the recession choked the world’s economy, and double what it was in 1992, after the fall of the Soviet Union.

The paper’s findings mirror other reports that have similarly found sharp drops in greenhouse gases recently. The emerging research also is in agreement that the lull will likely be short-lived and, at best, buy time before the most devastating effects of climate change take hold. The lockdown that has halted factories, energy plants and automobiles during the pandemic is already lifting, and without deliberate action, carbon-intense activities are bound to resume.

“That’s the danger here,” said Jackson, a professor of earth system science and senior fellow at Stanford Woods Institute for the Environment. “We’ve decreased emissions for the wrong reasons. Will they jump back up starting this fall, or could the virus allow us to rethink transportation and other parts of the economy?”

The answer to the question, say Jackson and others, may not be so straightforward. Greenhouse gases could rebound in some areas, and there could be lasting decreases in others.

Measuring heat-trapping gas emissions, for which carbon dioxide is a proxy, is not easy to do, especially in real time. The researchers at the Global Carbon Project analyzed daily economic activity in 69 countries from January through April and modeled the carbon pollution that likely resulted, then compared it to last year. The countries included have historically produced almost all of the world’s carbon dioxide.

The researchers found that China, the largest polluter, reduced emissions by nearly 24% on some days in mid-February. The United States, the second-largest polluter, cut emissions by nearly 32% for almost two weeks in mid-April. The European Union, including Great Britain, trimmed emissions by about 27% during the first week of April.

The dates of peak reductions varied in different parts of the globe because each locked down at a different time. The biggest cumulative drop in carbon dioxide was on April 7 and measured about 17%, according to the study.

While a variety of activity explains the declines, fewer people driving was the largest contributor worldwide. Less industrial pollution was also a big contributor.

Based on the observed drops in emissions, the researchers estimate that going forward, carbon dioxide will fall between 4% and 7% for the year worldwide, depending on how quickly countries end their lockdowns.

Jackson said the amount of the decline can be viewed as both considerable, given that it’s the largest ever seen, and humbling because it’s the minimum needed annually to put the planet on track to meet the Paris climate agreement — enough of a drop to prevent the global temperature from rising 2 degrees Celsius above preindustrial levels.

“We would need to do this every year,” he said.

The International Energy Agency recently projected an 8% dip in greenhouse gases for the year while the International Monetary Fund came up with an estimate closer to 6%. Both organizations said carbon pollution would likely rise again in 2021.

After the decline in emissions in 2009 of about 1.4%, the following year saw an increase of 5.1%.

The Global Carbon Project says there’s reason to think that at least some parts of the globe will try to prevent heat-trapping gases from bouncing back. Stimulus programs aimed at developing clean energy and new carbon-friendly ways of living adopted during the pandemic, such as working from home, could help limit emissions.

“Cities from Seattle to Milan are keeping roads closed to cars and letting them stay open to bikes and pedestrians even after the shelter-in-place,” Jackson said. “And maybe COVID-19 and stimulus funding will jump-start electric cars.”