# 1AC

## 1AC — Shipping (KU HW, Shirley)

### 1AC — Mega Ships

#### Advantage 1 is Mega Ships —

#### The international shipping industry is immune from antitrust suits which creates carrier alliances

O’Shea 17, an attorney who works on transportation and infrastructure issues, (Sean, October 3, 2017, Congress Must Stop Foreign Ocean Carriers From Harming U.S. Economy, https://morningconsult.com/opinions/congress-must-stop-foreign-ocean-carriers-from-harming-u-s-economy/)

Currently, U.S. ports and shippers are exposed to foreign ocean carrier cartels that band together to protect their financial interests while squashing port profits and stifling competition. Over the past several years, these ocean carriers have largely consolidated into three alliances that represent such a large share of the market that they can threaten to steer substantial amounts of cargo away from U.S. ports that balk at fees the alliance offers. Under normal circumstances, the whole scheme likely would run afoul of the Sherman Anti-Trust Act, which Congress adopted at the end of the 19th century in response to oil, steel and sugar trusts that attempted this same kind of market manipulation. But in the Shipping Act of 1916, Congress created an exemption from antitrust laws for alliances approved by the Federal Maritime Commission. When Congress revisited the law in 1984, it added a provision that allows a carrier alliance to go into effect automatically, providing antitrust immunity to its member lines, unless the FMC obtains a court injunction within 45 days. Even then, the only acceptable grounds for issuing an injunction are when a proposed alliance will impair shippers. The court cannot consider the potential harm to ports, dock workers or other waterfront service providers. The law further says that only the FMC, and not the Department of Justice, may file such lawsuits, and private parties are expressly barred from intervening in any case the FMC does bring. This special treatment in the current law gives foreign containership lines a virtual antitrust immunity when dealing with U.S. marine terminals, stevedores, tug and towing companies, and other equipment and service providers. This has created an environment in which U.S. laws favor the interests of big foreign vessel operators at the expense of American port terminal companies, shippers and workers. Today, exactly zero U.S. ship owners participate in the three ocean carrier alliances recognized by the FMC. This means our laws now do more to shield foreign carriers from being sued for antitrust violations than it does to promote the domestic shipping industry.

#### Those alliances are causing an adoption of megaships

Merk et al 18, Associate Professor at the Urban School of the Institute for Political Science (Sciences Po) in Paris and leader of port and shipping work at the International Transport Forum (ITF) of the Organisation for Economic Co-operation and Development (OECD). (Olaf, with Lucie Kirstein and Filip Salamitov, 2018, The Impact of Alliances in Container Shipping, <https://www.itf-oecd.org/sites/default/files/docs/impact-alliances-container-shipping.pdf>.)

Economies of scale: mega-ships and overcapacity Alliances have made it possible for smaller players to get access to big ships that they would otherwise not have had. Shipping alliances have greatly encouraged the deployment of large container ships and large-vessel deployment can be identified after the formation of the first strategic alliances in container shipping (Slack et al., 2002; Fusillo, 2004). The link between vessel size and the attractiveness of alliances is clear from research on the propensity to cooperate: carriers with the highest average vessel size had the lowest propensity to cooperate – and the largest carriers where less inclined to cooperate than medium-sized ones (Parola et al., 2014). At the same time, the benefit a carrier experiences by collaborating increases with the network size and the fleet capacity of the partnering carriers (Houghtalen et al., 2011). Another indication that global alliances facilitate the development of ever larger ships: alliance services generally deploy the largest-capacity ships, since the emergence of alliances: e.g. the services of the Grand, New World and United Alliances in the early 2000s were provided by ships that were larger than the average size of the fleets of individual carriers (Slack et al., 2002). The practice that the largest ships are deployed in alliance services continues until today. There are mega-ship orders that seem to have been coordinated within the same alliance. The determining characteristic of liner shipping is its regularity: the majority of container services is offered on a weekly basis. In order to be able to offer a weekly frequency, a carrier needs a set of ships, e.g. around 10-11 ships for a weekly Asia-Europe service, taking into account the time needed for a ship to make the roundtrip. The cost of eleven ultra large container ships could easily reach USD1.5 billion, which might be difficult to finance for smaller carriers. For this reason, carriers in the same alliance have coordinated their mega-ship orders, so that they could pool similar-sized vessels for an alliance service. This seems to have been the case for carriers in the G6 Alliance (Box 4).Intra-alliance competition might also contribute to orders of new mega-ships. The idea behind this is that the carrier with the largest fleet and the largest ships will be the dominant carrier in an alliance. As the latest generation of alliances all consist of at least two carriers of similar size, this constellation is more prone to intra-alliance competition than earlier generations of alliances, in which there was mostly one dominant carrier partnering with several clearly smaller carriers. The announced mega-ship order of CMA CGM in Autumn 2017 seems to be a direct consequence of this intra-alliance competition, in particular the expansion of alliance partner Cosco that made it of similar size to CMA CGM. Mega-ships have driven overcapacity in the sector. Ships with a capacity over 17 000 TEUs represented around a third of the new-build container capacity during 2015-2018 (Figure 2).Considering sustained overcapacity in container shipping since 2009, the mega-ship orders have increased the oversupply of container ship capacity, despite substantial dismantling of older ships that has moderated overcapacity somewhat over the last years. Overcapacity – and a net growth rate of ship capacity that exceeds the growth rates of global containerised trade - is one of the main causes of the lack of profitability of container shipping. The demand of global containerised trade was negatively affected by the global financial and economic crisis that started in 2008. However, the ship overcapacity cannot be considered to be a result of the crisis, but rather the lack of restraint in ship orders since 2009, which resulted in a growing divergence between demand and supply. Global alliances have exacerbated the problem of excess investment and overcapacity (Higashida, 2015), which is one of the main causes of the lack of profitability of container shipping. It has been frequently observed that there is a prisoner’s dilemma related to capacity investment in container shipping, where the strategic behaviour by each individual company (to expand capacity)can lead to mutually destructive effects and overcapacity in the shipping supply (Kou and Luo, 2016).Container shipping – like shipping in general – is highly cyclical (Stopford, 2008). The increasing dominance of alliances in the aftermath of the global economic crisis that started in 2008 has disrupted this cyclicality: instead of the decline of ship capacity it resulted in capacity growth that was completely disconnected from demand for containerised transport capacity (Figure 3). Alliances made it possible for smaller carriers to follow market leaders in their ordering of mega-ships. Without alliances, this would not have occurred and container shipping capacity would likely have been closer to equilibrium with demand.

#### The size of those megaships are about to explode, drastically shaking up the entire industry

Fickling 21, Reporter for The Print. (David, March 30, 2021, Get ready for future, giant next-gen cargo vessels will make ‘Ever Given’ look like bath toy, <https://theprint.in/opinion/get-ready-for-future-giant-next-gen-cargo-vessels-will-make-ever-given-look-like-bath-toy/630839/>)

If you think the ultimate reason the Suez Canal got blocked last week is because container ships are getting too big, get ready for the future. The next few generations of cargo vessels are going to make the Ever Given look like a bath toy. Big enough to carry 20,124 twenty-foot equivalent units, or TEUs — the standard measure for cargo, representing a single shipping container — the Ever Given was one of the world’s largest such vessels when it was launched in 2018. The first container ship to break the 20,000 TEU mark had been at sea for less than a year. One famed 1999 study, written at a time when the largest boats carried less than 8,000 TEUs, argued it would prove impossible to build craft bigger than 18,000 TEUs. The Ever Given, finally floating on its way again, is now distinctly in the second class of mega freighters. There are nearly 100 ships carrying more than 20,000 TEUs on the seas or under construction, and the bigger vessels being assembled in Chinese and South Korean shipyards are mostly around the 24,000 TEU mark. A quarter of the capacity moved by the world’s largest container line, AP Moller-Maersk A/S, is on boats above the 17,500 TEU mark. That’s unlikely to be the end of it. Chinese shipyard Hudong-Zhonghua Shipbuilding Group Co. has already registered designs for a 25,000 TEU vessel, and it has become relatively commonplace to predict that 30,000 TEU monsters will be plowing the oceans before the decade is out. Such enormous hulls may cause problems that will put the Ever Given’s mishap into the shade. At Rotterdam, the largest ships already have to arrive at high tide to ensure there’s enough clearance for them to get through the channel, according to a 2019 study by Nam Kyu Park of South Korea’s Tongmyong University. Larger vessels will soon be unable to berth at Shanghai, Busan and Hong Kong even at high tide, unless channels are dredged out further, Park wrote. There are similar problems with infrastructure on dry land. Modern ports are astonishingly efficient at unloading, and can turn around a fully laden 20,000 TEU vessel in a couple of days. But the time spent waiting for a berth can cut deep into the wafer-thin economics of a container line. Longer quays may have to be built to accommodate the larger ships, as well as cranes that can reach across wider decks, larger loading yards for tens of thousands of containers, and faster rail and road terminals to take cargo to its next destination. Current vessels are already at the limits of what can fit along major shipping lanes. The Ever Given is too bulky to squeeze through the Panama Canal, where boats must be lifted over its mountainous spine with massive lock gates. At 24 meters (79 feet) deep, the Suez Canal has more capacity — but it’s roughly as deep as the Straits of Malacca and Singapore, so dredging it further to accommodate bigger ships won’t help much. The binding constraint on East-West trade at this point isn’t engineering, but geology. Extending 15.7 meters below the water line, the Ever Given shouldn’t, on paper, have trouble making it through any of those channels, which typically require 3.5 meters of clearance from the bottom. Next-generation ships with a 20-meter draught, on the other hand, would be at constant risk of grounding. How have container ships managed to defy expectations that their size would hit fundamental limits? A large part of it is because the economies of scale are so compelling. Bigger vessels use more fuel, but relative to the number of boxes stacked on their decks they’re far more efficient. They can also turn around a larger number of containers at a time and serve a wider array of feeder ports, ensuring they can defray their massive capital costs quicker. There’s little sign that this is about to change. New International Maritime Organization regulations against the burning of sulfur-intensive fuel oil introduced last year mean current ships are using costlier diesel, putting more pressure on naval architects to come up with yet more efficient designs. Beyond that, the IMO now has plans to reduce carbon dioxide emissions by 40% in 2030 compared with 2008, and by 70% by 2050. Even with a switch to cheaper, less polluting liquefied natural gas as the main fuel, that’s going to mean further drastic improvements in efficiency, not to mention propulsion technologies that don’t exist yet. To date, the best way to chip away at fuel consumption and emissions is by increasing size. It’s hard to know how the industry is going to cope with this. Perhaps Suez, Malacca and Singapore can be dredged to accommodate even bigger vessels. Perhaps shipyards will find ways to squeeze a few more inches out of existing channels. If not, alternative routes around the Cape of Good Hope and through the deeper Straits of Sunda and Lombok between Indonesia’s islands may prove the only viable way to accommodate such massive boats. Should that happen, those economies of scale will have to be drastically larger to make up for the longer sailing time. We’ve seen container ships leap from 10,000 TEUs to 24,000 TEUs. Don’t be shocked to see 50,000 TEU vessels plying the sea in your lifetime.

#### That forces massive, unwanted port expansions that ensures constant environmental destruction around the world

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According to (Baik, 2017), mega ships can impact the port infrastructure in many ways. As a brief example: The berth of a port determines what vessels can dock, larger vessels require larger berths and quays to support the length, weight, and height of the vessels. Large vessels also require larger gantry cranes to support the loading and unloading of cargo in large volumes. The cranes are required to be large and therefore are heavy with longer reach but this then requires the piers to be reinforced and expanded in order to support the weight and size. Yap & Loh (2019) informs that all these changes are caused by the size and length of a vessel which goes to show the vast amount of investment that is needed to make the port accessible to mega ships. “The bigger the ship is, the larger the risk is”, larger vessels also add a lot of risk regarding port congestion and can have heavy impacts on the environment if an accident were to occur in the port (Baik, 2017). According to Park & Suh (2019), if in the future a mega container ship with a volume capacity of 30,000 TEU is in operation then ports need to dredge and increase the water depth by more than 20 m and that will have to be the new standard for ports and container terminals.

#### Those port expansions destroy global biodiversity and entire ecosystems — ports are the lynchpin

Chua 21, Charmaine Chua is Assistant Professor of Global Studies at the University of California, Santa Barbara. (Charmaine, The Ever Given and the Monstrosity of Maritime Capitalism, Boston Review, <https://bostonreview.net/class-inequality-politics/charmaine-chua-ever-given-and-monstrosity-maritime-capitalism>)

From Megaships to Megaports These monstrous ships are perhaps most perverse in the way they meet their victims on shore. As more and more megaships lumber through the world’s oceans, more infrastructure is required to cope with mounting cargo on land. When companies such as Evergreen make new megaship orders, they rarely consult with port authorities, rail carriers, or other actors along the supply chain. Terminals originally built to discharge cargo from an earlier era of ship sizes (5,000 TEUs and under) now struggle to handle cargo with capacities five times as large. Shippers used to select ports on the basis of their strategic geographical location (as was the case in the establishment of the port of Aden, Malta, and other colonial entrêpots at key points in imperial trade routes). But ports today increasingly act as substitutes for each other, pawns in a game of commerce that is global in scale. All ports fear being replaced by the quicker, more efficient passage, so they invest heavily in upgrading their fixed infrastructure. Building a megaport is a mammoth task, both financially and spatially. Construction requires empty, flat land and expensive outlays of public finance. Channels must be dredged to make way for a deepwater harbor—not only once, but endlessly, to counter the tides and currents. Cranes must be raised or replaced by larger ones altogether. Dockyards must expand to support the higher volumes of containers. In the hinterland, highways and railroad corridors must support the concentration of cargo entering the city. These infrastructural modifications, made repeatedly as megaships have continued to grow, require the massive dispossession and manipulation of environments and ecologies. As Khalili details, there is something “extravagantly modernist” about shaping the ecologies and geologies of land and sea to suit the circuits of market exchange. The god-like desire to manipulate space, to extract and excavate without regard to geological impediments, reflect what Alfred Sohn-Rethel calls the “absolute historical timelessness and universality” of exchange, according to which “the entire empirical reality . . . by which one moment and locality of time and space is distinguishable from one another is wiped out.” Khalili recalls visiting the port of Khor Fakkan and talking to a British terminal manager. Pointing to a hill in the distance, he said plaintively that he could “move that mountain” if he needed. For him, Khalili reflects, “shaping the land, reclaiming it or flattening it, or whittling away at it, was no matter.” The ecological effects of such human hubris have been devastating. When the Suez Canal joined the Red Sea to the Mediterranean in 1869, marine species migrated along the waterway, allowing invasive species from venomous jellyfish to rabbitfish to make their way north, causing untold damage to biodiverse eco-systems. So significant were these effects that they have been termed “Lessepsian” after the developer of the canal, Ferdinand de Lesseps. As massive infrastructural developments chase giant ships, they destroy entire ecosystems, and ports and canals have come to epitomize the intensification and expansion of capital’s supply lines, cutting gashes across the earth to chase supply chain profits.

#### Biodiversity loss causes extinction

Joe McCarthy 18, a Staff Writer at Global Citizen, Nov 8 2018, "Humans Could Face Extinction if We Don't Protect Biodiversity: UN", Global Citizen, <https://www.globalcitizen.org/en/content/biodiversity-loss-human-extinction/>

As the sixth mass extinction event accelerates around the world, engulfing thousands of animal and plant species, humans risk facing a similar fate unless drastic interventions are made, according to Cristiana Pașca Palmer, the United Nations biodiversity chief, who recently spoke with the Guardian.

Palmer said that within the next two years, countries have to develop an ambitious plan to conserve land, protect animals, and stop practices that are harming wildlife. This effort is equally as urgent as the Paris climate agreement’s goal of mitigating climate change, she said.

“The loss of biodiversity is a silent killer,” she told the Guardian. “It’s different from climate change, where people feel the impact in everyday life. With biodiversity, it is not so clear but by the time you feel what is happening, it may be too late.”

Next month, countries will meet in Sharm el Sheikh, Egypt, to begin mapping out what such a plan would like. Palmer hopes that a final version will be formalized in Beijing in 2020.

If a binding global treaty fails to materialize, then humanity faces an uncertain future, she said. Past efforts to stop the loss of biodiversity have not proved successful, according to the Guardian.

In recent years, evidence of this staggering loss has begun accumulating.

Wild animal populations have declined by 60% since 1970, more than 26,000 plants and animals are close to extinction, nearly two-thirds of the world’s wetlands and half of all rainforests have been destroyed, more than 87% of the world’s ocean area is dying, and the planet needs an estimated 5 million years to recover from the biodiversity loss it has already sustained.

“We are sleepwalking towards the edge of a cliff,” Mike Barrett, executive director of science and conservation at WWF, recently told the Guardian. “If there was a 60% decline in the human population, that would be equivalent to emptying North America, South America, Africa, Europe, China, and Oceania. That is the scale of what we have done.”

“This is far more than just being about losing the wonders of nature, desperately sad though that is,” he said. “This is actually now jeopardising the future of people. Nature is not a ‘nice to have’ — it is our life-support system.”

The benefits of biodiversity are hard to overstate. The food chain, climate systems, atmospheric conditions, natural resources, and much more depend on the delicately structured interactions of ecosystems around the world.

The truly wild places in the world, meanwhile, are crucial to generating, cleaning, and distributing water around the world, and could help to mitigate the looming water crisis. These landscapes and marine environments also clean the air and act as carbon sinks, stabilize the global environment, and protect countries from natural disasters.

#### Megaships independently cause port access disparities and expansions that triggers Southeast Asian conflict

Iyer 19, Fellow with the ORF Maritime Policy Initiative. She tracks ocean governance policies and international maritime trade sustainability for global development. (Gayathri, Mega-ships in the Indian Ocean: Evaluating the impact and exploring littoral cooperation, https://www.orfonline.org/research/mega-ships-in-the-indian-ocean-evaluating-the-impact-and-exploring-littoral-cooperation-53235/)

The emergence of mega-ships and mega-ports necessitates that governments respond to several traditional and non-traditional maritime security threats and vulnerabilities. Securing maritime supply chains against disruption presents an enormous challenge. The increased size of ships increases the safety, security and rescue concerns at ports proportionally as mega-ships generate larger and more concentrated flows of containers in docks, stores and the hinterland. Mega-ships also increase the concentration of risk in the transit choke points that can have severe global food and energy security implications.[41] While more cargo on ships implies less number of ships, the supply chain becomes less resilient due to the large volume of goods on decreasing number of vessels.[42] The potential threat to international commerce by naval mines makes mega-ships most vulnerable near geographical bottlenecks, especially on routes that carry large oil and food supply. Destabilising any one choke point could not only lead to massive losses of goods, it may have considerable economic and even life-safety repercussions around the globe. Experts have already identified the growing threat of naval mines in the Strait of Mandeb that ties the Red Sea to the Gulf of Aden.[43] The joint naval mine countermeasure and clearing exercise off the coast of Bahrain in 2012—which saw participation from 30 states from six continents—[44] drew attention to the need for greater clarity on the law governing the use of naval mines in times of both peace and war. The 1907 Hague VIII Convention, which is the only treaty that expressly governs naval mines in international law, is expressly limited to contact mines.[3] Since larger container vessels can ply only in limited sea-lanes of communications and dock only in a few mega-ports, they are aggravating the disparity among maritime trade regions and stakeholders. There are inequalities arising in some littorals because of being left out of the direct port calls and the changes in the traditional sea-lanes of communication. These rapid changes in sea-lanes of communication can catalyse conditions for the rise of non-state actors. They can disrupt maritime supply chains and threaten the global economy. Unplanned port expansion activities impact urban crime and human rights violation patterns. With the exception of India, the bulk of Asia’s population of 3.5 billion is coastal or near-coastal. Over 60 percent — 2.1 billion people — live within 400 kilometres of a coast. Such population clusters along coasts commonly results in serious conflicts over shared resources including water and land, unplanned urbanisation, and continued pollution of coastal waters.[45] The current coastal population growth is not being managed equitably, reflecting these concerns.[46] Port developments may also produce tensions based on historical development and socio-cultural composition. The social composition of most ports has been influenced by centuries of migration. Ports serve as entry and exit points for migration and act as employment hubs; as a result, port demographics change continually over time. This has given them distinct advantages in promoting social interaction, intellectual tolerance, and religious exchanges. At the same time, however, the complex distribution of communities that has developed as a result of successive phases of migration can lead to security threats in locations where human development is compromised. Mega-port development and expansion represents an unprecedented scale of intervention in an otherwise organically constituted settlement. This in turn can lead to the relocation of people, or trigger tribal, cultural, economic, and even religious conflict.[47] Since the Indian Ocean littoral has always been vulnerable to criminals and anti-national activities[48]—some internal and localised[49] and others of global significance[50]— state policies need to move towards balancing development of human capital with physical capital to create sustainable solutions. The expansions required to accommodate mega-ships are problematic for other reasons. They are mostly unplanned—with short-term gains in mind—aggravating existing issues of urban congestion and related crime. Karachi seaport in Pakistan is cited as a prime example of a well-located international trading port asset that grapples with unplanned port expansions, population overflow, complex urban demography, urban poverty, and violent crime.[51] It is a key geopolitical asset in South Asian international trades as the largest warm water deep-seaport in South Asia, and owing to its proximity to the Strait of Hormuz. Singapore, by contrast, has been able to leverage its human capital to create wider economic benefits for its people by planning its port expansion activities. Successfully planned port development has played a significant role in the country’s development and trade competitiveness.[[52]](https://www.orfonline.org/research/mega-ships-in-the-indian-ocean-evaluating-the-impact-and-exploring-littoral-cooperation-53235/" \l "_edn52),[[4]](https://www.orfonline.org/research/mega-ships-in-the-indian-ocean-evaluating-the-impact-and-exploring-littoral-cooperation-53235/" \l "_ftn4) As the example of Karachi shows (and inversely, Singapore implies), most of developing Asia lacks the political motivation, expertise, or money to introduce comprehensive coastal management plans at individual country level. It is thus important for these countries to select best practices and introduce joint policies for port expansion and development that examine ways of permitting economic growth while ensuring a better quality of life for all coastal dwellers. The highest rate of urban land conversion (increased urban extension) in the coastal zone, is taking place in China and Southwest Asia.[[53]](https://www.orfonline.org/research/mega-ships-in-the-indian-ocean-evaluating-the-impact-and-exploring-littoral-cooperation-53235/" \l "_edn53) Trade flows between the two regions through the Indian Ocean account for almost 30 percent of world trade. The trends of urban land and population expansion rates in these and Southeast Asian coastal zones is expected to continue or even increase into the future if countries are pushed into expanding ports rapidly to accommodate mega-ships. Since littorals support intricate maritime infrastructure including ports, harbours, oil and gas terminals, and rail/road systems, they can create favourable conditions for illegal activities. Their governance can be a major challenge for civil security agencies if they are socially dysfunctional due to economic or resource disparities. It is therefore important to consider policy frameworks that examine port expansion plans taking into account not only economic development but the planning required to address issues including increasing crime, human rights violations, ethnic conflicts, and the dislocation of people.

**Instability escalates---Southeast Asia is a flashpoint.**

Ei Sun **Oh 16**, Senior Fellow, Singapore Institute of International Affairs / Principal Adviser, Pacific Research Center, Malaysia, 9-20-17, Say ‘No’ To Balkanization – The Manila Times, Manila Times, https://www.manilatimes.net/2017/09/20/opinion/analysis/say-no-balkanization/351621/351621/

There are those who bluntly question what is the point of having Asean (Association of South East Asian Nations) at all if it were not to take a proactive role in regional matters, especially those of strategic importance? The answer to this question is, alas, perhaps an existentialist one. For indeed what would Southeast Asia be if we do not at least have a regional organization in the form of Asean? Well, one possible outlook would be that we are Balkanized. And what does that mean? The Balkan Peninsula, which roughly comprises the former Yugoslavia and Albania, has been one of the world’s most ethnically and religiously diverse and thus tense regions. Within a small confine of rather rugged terrain, there live side by side Orthodox Serbs, Muslim Bosnians and Catholic Croats, to name but a few of the Balkan tribes. Their incessant bickering led to the assassination of the Austro-Hungarian heir to the throne and thus the onset of the First World War a century ago. Yugoslavians were ruled with an iron fist under the communist dictator Tito for nearly half a century after the Second World War and thus maintained a forced peace. But all hell broke loose in the 1990s, with the various former component republics of Yugoslavia at war with each other and often within themselves too, culminating in many different horrible tales of genocide, war crimes and crimes against humanity. The relative peace there now can at best be described as temporary. And at least in theory we the various nations in Southeast Asia have the comparable “ingredients” that could have led to the same, if not higher degree of havoc, as the Balkans. There are Muslims, Christians and Buddhists (and even some Hindus) among us, and we are each fiercely proud of our respective ethnic backgrounds. So, we could have each staked our claim to our pride and “greatness” and assumed a rival posture to our neighbors, instigating war at the first hint of insult. Even just as an individual commentator on regional affairs, I myself have not immune to attack but subject to that sort of war cry from a neighboring country due only to a well-meaning media comment of mine, albeit at a civil-society level. So, things could have gone the Balkan way from way back during the early days of our independence from our respective colonial yokes. And we were almost there. Right before and after Malaysia’s formation, for example, the so-called “Confrontation” was launched to oppose it, with skirmishes taking place for a few years. But wiser heads prevailed, and all our former leaders decided not to go down that mutually destructive path toward total annihilation. Instead, we decided to set aside or overlook our cultural and political differences, great that they may be, and form Asean to bring us closer together, but only to a degree of closeness that we are all comfortable with. And that degree of comfort is essential for Asean’s long-term survival as a regional platform for peace and hopefully also security, but peace with each other first and foremost. In the early days of Asean, when the Vietnam War was raging, there was a perceived “common enemy” in the likelihood of communist insurgency flipping many Southeast Asian countries red in a domino effect, so the founding members of Asean understandably came very close together in security concerns, although even then there was not an explicit military alliance forged. As the Vietnam War receded, Asean members felt that it was time to focus on their collective and respective economic development, and so the whole focus of Asean switched to that of promoting economic cooperation and coordination. Ambitious socioeconomic frameworks were envisioned and enacted, such as the various Asean free trade agreements with the major trading powers of the world, culminating in Asean’s own free-trade-plus framework, the Asean Economic Community which is supposed to promote the free flow of goods, services and many more across Asean members’ boundaries. We live in very turbulent and dangerous times, with nationalism and its attendant jingoistic sentiments on the rise across the globe, including in some of the most advanced countries. My own personal negative experience above, although only encountered online, has persuaded me that if left unchecked, such negative trends would only serve to destroy ourselves and our neighbors. Therefore, I think that while we should not presume Asean to force its member states to abandon their various nationalistic characteristics in favor of a common Southeast Asian one, as some accuse the European Union of accentuating the European nature of its various members in lieu of their various national ones, we should nevertheless wait for Asean to take the lead in promoting further, deeper and broader understanding of each other’s history, needs and even fears. There are no significantly entrenched misunderstandings among us, so there is nothing to paper over. But sometimes it is very important for all of us to listen to each other’s aspirations in a peaceful manner.

#### They also massively inflate the risk of biological and nuclear terror attacks

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Mega-port hubs close to such small island sanctuaries or transnational crime centres can be susceptible to the potential threat of containers being used by terrorists as a delivery vehicle for chemical, biological, radiological, or nuclear weapons. The hub-and-spoke model[5] of transport chains adopted by mega-ports increases their vulnerability. This is due to the coordination required in security links across multiple industries, regulatory agencies, modes, operating systems, liability regimes, and legal frameworks to fill a single large vessel. Most ports use existing security frameworks to protect containers from terrorist activity. However, most international and bilateral security initiatives—as codified in the Safety of Life at Sea Convention[60] and the International Ship and Port Facility Security Code[61]—have been focused on the larger actors and the middle of the chain ports and maritime transport. There is a lack of international frameworks for security checks at inland transport or the outer edges of the chain. Since the hub-and-spoke model adopted by mega-ships is characterised by complex simultaneous movement of containers on the outer edge of a port over feeder channels and inner edges in the form of large swathes of trucks and rails, the security threat increases. Vulnerabilities in the container environment are highest in rail yards, road stops, and parking and shipping/loading terminal facilities. The hub-and-spoke model increases the necessity to speed up operations while tightening margins, aggravating the security risk. The loading or unloading of very large vessels becomes more complicated. Amidst the chaos that ensues, terrorists targeting the container transport chain can intercept a legitimate consignment by hijacking it or may develop a legitimate trading identity to use Trojan horses for dangerous consignments. Measures to mitigate such threats involve container scanning and container screening. Experts point out that while 100 percent container screening is possible, it is not practical with current technologies.[62] Security inspections are time- and space-consuming, and expensive. Since the mega-ship and mega-port models primarily aim to reduce costs, few ports may invest in enough space and resources to adequately conduct these activities unless an international governance mechanism makes it mandatory. There is a potential risk of non-state actors abusing loopholes in cyber security to target vessels and specific ports. Hackers can infiltrate cyber systems in a port to locate specific containers loaded with illegal drugs or completely shut port activities for some hours or days. No state is equipped to unilaterally handle the rising challenges in the digital security or physical security domain. Further, lack of unanimity in understanding the magnitude of the threat distorts physical security priorities of ships and ports. Navy-to-navy cooperation among nations also has to go beyond periodical exercises for effective control of regional terrorism and transnational activists. In the case of mega-ports and mega-ships, emphasis should be placed on terrorism or cyber-attacks not because governments have a clear and informed view of the threats, or their vulnerabilities, but rather because the rapid evolution in size of ships and unplanned port expansions preclude a clear view of any potential threat.

#### The threat is empirically proven

CORDIS 21, CORDIS is the Community Research and Development Information Service. It is the European Commission's primary public repository and portal to disseminate information on all EU-funded research projects. (June 3, 2021, CBRNE Detection in Containers, https://cordis.europa.eu/project/id/786945}

The threat of CBRNE (Chemical, Biological, Radiological, Nuclear and Explosives) components used by terrorists is major concerns for EU and worldwide security. Today there is a major security gap in the existing security flow that can be used by terrorists to hide and smuggle CBRNE materials inside containers and vehicles. The challenge of improving container and vehicles border crossing and critical infrastructure entrance security checks is of great importance in fighting terrorist threats, theft and smuggling. Improvised Nuclear Device (IND) could be detonated using nuclear weapon components, modified nuclear weapons, or a self-made device and Radiological Dispersal Device (RDD) could be designed to disperse radioactive materials through an explosion (or ‘dirty bomb’).It was also reported that since 1998, in the US alone, there have been more than 1,300 reported incidents of lost, stolen, or abandoned devices containing sealed radioactive sources, an average of about 250 per year. Chemical and Biological are in use by terrorists. Report of Wm. Robert Johnston summarizes the “historical attacks using chemical or biological weapons” with 23 attacks since 1994, while all the recent attacks were done mainly by terrorists and the Syrian militants. The attacks demonstrating the attempts and capability of terrorists to acquire chemical and biological materials (chlorine, mustard, sarin, etc) and to prepare chemical or biological bombs. COSMIC system plans to bridge the major security gap for fast inspection of large number of containers and vehicles in sea port and in crossing borders for CBRNE materials. COSMIC’s technology can be adapted also to air containers.

#### Extinction

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

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

### 1AC — Alliances

#### Advantage 2 is Alliances —

#### The shipping alliances are artificially restricting supply and jacking up prices — class action suits can solve but current law prohibits those suits

Savvides 21, Reporter for The Loadstar. (Nick, Jan 8, 2021, Box lines ignore contracts and 'collude' to force shippers onto inflated spot market, https://theloadstar.com/colluding-box-lines-are-exploiting-shippers-claims-bco-in-formal-complaint/)

MCS argues that “foreign-owned” shipping lines have: “Unjustly and unreasonably exploited customers, vastly increasing their profitability at the expense of shippers and the US public generally, which bears increased freight cost in the form of inflation.” According to the suit, beneficial cargo owners (BCOs) operating to and from the US ordinarily pay for the shipments of cargo through bilaterally negotiated contracts with shipping lines, while spot rates are reserved for smaller shippers or one-time cargo movements. However, MCS claims that, with the onset of the Covid-19 pandemic, shipping lines began to collude to manipulate the market. The shipper told the FMC: “Global ocean carriers began taking parallel and strikingly similar actions to prop up ocean carriage pricing and improve their profitability at the expense of shippers and the public.” These actions, it added, included blanking sailings, which had the effect of reducing capacity by creating an “artificial scarcity and boosting prices on the spot market” as demand increased. Moreover, MCS claims that even as demand returned, the carriers did not return to pre-pandemic methods of working, but rather “doubled down” on the “manipulation” of the market, artificially keeping prices high. A container load shipped from China to the US west coast in 2019 would have cost $2,700, but today that same container voyage would be priced in excess of $15,000, said MCS. The shipper alleges it has first-hand experience of carrier “misconduct”, with the lines refusing to discuss these issues when approached by MCS. The filing claims: “In a stark break from pre-pandemic practice, several ocean carriers refused to negotiate or provide service contracts to MCS, and those that did provide such service contracts, including the respondents named herein, refused to provide more than a fraction of the cargo capacity that MCS requested and needs, despite the fact that the respondents overall have continued to operate at or near pre-pandemic capacity.” According to MCS, Cosco offered just 1.6% of the capacity it was contractually obliged to make available, while MSC fared better, offering 35% of contracted cargo space. “By definition, the service contracts required respondents to “commit to a certain rate or rate schedule and a defined service level, such as assured space, transit time, port rotation, or similar service features,” says the complaint. And, in an alleged escalation of their failure to meet their contractual obligations, the shipping lines, including Cosco and MSC, then “forced” MCS to buy space on the vastly inflated spot market. The carriers were able to renege on their contracts, claims MCS, because the lines were able to organise themselves into alliances which control 90% of the transpacific trade, and it is this alliance structure which allowed carriers to act in unison, forcing shippers onto more expensive spot rates, rather than transporting cargo at much lower, contracted rates. According to MCS the shipping lines have “obliterated” the stable structure of the ocean freight transport industry. In a first reaction to the news that MCS had filed a formal complaint, Global Shippers’ Forum executive James Hookham said the organisation would be “watching the developments closely”, and the case would “test the mettle” of the FMC and the regulatory structure in the US. He went on to say that parties would consider whether the action revealed any gaps in proposed amendments to the Shipping Act. In addition, the fact that MCS would have to act alone in the bringing of this case would also come under scrutiny. According to Mr Hookham, current legislation prevents shippers from entering into a powerful class action agreement that would bring in other complainants.

#### That artificial price inflation creates fake container shortages

Maritime Gateway 9/7/21, (Sept 7, 2021, Exporters complain on shipping companies forming cartels, <https://www.maritimegateway.com/exporters-complain-on-shipping-companies-forming-cartels/>

A crisis is staring exporters in the face with high freight rates and few ships and containers. These two factors are expected to spoil the upcoming Christmas season. Alleging that shipping companies are forming cartels, various industry players have approached the government, seeking its intervention and the setting up of a large shipping company under its guidance to break the international monopoly. A major point the exporters are raising as proof of this is the performance of the top 10 shipping companies in the world in the past one year. For these top 10 companies (no Indian companies on the list), the average operating profit increased 12-fold, revenue 66 per cent, the margin 27 per cent, and net profit 19,754 per cent in 2021, against 2020. This was on account of a low base, rise in volumes, and increase in freight rates. This is likely to go up this financial year. In a meeting with the Ministry of Shipping last week, representatives of the spices exports sector had highlighted that at least six of the top 10 shipping lines posted a net profit of over 30-fold in the past one year. “The top shipping lines seem to have formed a cartel and are controlling freight rates as they know this shortage and crisis will continue until the first quarter of 2023. We want the government to form a big shipping company or scale up the Shipping Corporation of India, or maybe even join hands with private sector players like Essar and Great Eastern Shipping. This will ensure ship availability for India,” Hitesh Gutka, president of the Indian Spices and Foodstuff Exporters’ Association, told Business Standard.

#### That artificial inflation massively drives up food prices

BMPA 20, British Meat Processors Association, (May 13, 2020, Spiraling freight costs threaten global food prices, <https://britishmeatindustry.org/industry-news/spiraling-freight-costs-threaten-global-food-prices/>

Evidence of a doubling and in some cases nearly tripling of maritime freight costs over the last month from exporters across the food supply chain has raised a red flag for food prices. The British Meat Processors Association, along with other food industry bodies, have been receiving alarming reports showing costs of a refrigerated shipping container to China, in the worst cases, rocketing almost 200% from £1200 to £3500, often with a new £500 ‘fuel surcharge’ included. We’ve also heard of new $1000+ ‘congestion taxes’ now being levied at ports in China and the Philippines. While some increase may be understandable due to difficulty filling ships for return journeys, the current price hikes which have persisted from early March are starting to look like opportunistic exploitation by a small group of large global companies which control that market. As early as mid March, reports were coming in that the congestion in Chinese ports had eased, with terminal operations returning to more normal working conditions. Indeed Shanghai, the world’s largest container port by volume had expanded its capacity for handling and storage of refrigerated containers by 40%. Back in early March, Frank Madsen from Danish freight forwarder Blue Water Shipping was quoted as saying: ‘There’s both a space and equipment issue that we think could continue for four to eight weeks’, however, the return to more normal volumes of activity in China hasn’t yet been reflected in the spot freight cost. Instead, shipping companies are somehow managing to maintain prices at hugely inflated levels. While one might think this is just affecting big businesses, the reality is that these price hikes will end up being passed on to consumers who can least afford it, both here in the UK and in poorer countries like the Philippines.

#### That drives massive food shortages

Murray et al 21, reporters for Bloomberg. (Brendon, with Isis Almeida, Ann Koh and Michael Hirtzer, Feb 3, 2021, Container crunch upends global food trade while ships queue at U.S. ports, https://www.japantimes.co.jp/news/2021/02/03/world/food-shipping-global-economy-covid-19-u-s-china/)

Food is piling up in all the wrong places, thanks to carriers hauling empty shipping containers. Global competition for the ribbed steel containers means that Thailand can’t ship its rice, Canada is stuck with peas and India can’t offload its mountain of sugar. Shipping empty boxes back to China has become so profitable that even some American soybean shippers are having to fight for containers to supply hungry Asian buyers. Strikes in Argentina have also boosted Asian demand for U.S. agriculture products, adding to competition for boxes. “People aren’t getting their goods where they need them,” said Steve Kranig, director of logistics at IM-EX Global Inc., a freight forwarder that handles cargoes including rice, bananas and dumplings from Asia to the U.S. “One of my customers ships 8 to 10 containers of rice every week from Thailand to Los Angeles. But he can only ship 2 to 3 containers a week right now.” China has recovered faster from COVID-19, so has revved up its export economy and is paying huge premiums for containers — making it far more profitable to send them back empty than to refill them. There are also signs the soaring freight rates are boosting the cost of some foods. White sugar prices surged to a three-year high last month, and delays in food-grade soybean shipments from the U.S. could mean higher tofu and soy milk costs for consumers in Asia, said Eric Wenberg, executive director of the Specialty Soya and Grains Alliance. While it’s not entirely uncommon for containers to transit back empty after a voyage, carriers usually try to backfill them to profit from shipping rates in both directions. But the cost of carrying goods from China to the U.S. is almost 10 times higher than the opposite journey, prompting liners to favor empty boxes instead of loading them, Freightos data showed. ‘Shortage of everything’ At the port of Los Angeles, the U.S.’s biggest for container cargo, three in every four boxes going back to Asia are traveling empty compared with the normal 50% rate, said Executive Director Gene Seroka. In Vancouver, terminals have shortened the time to transport the stuffed boxes onto ships from three days to as little as seven hours, said Jordan Atkins, vice president of WTC Group. “It’s not possible to get the amount of volume we have here in Vancouver to return containers in those tight windows,” said Atkins. “Pulses in general are struggling getting on the ships,” he said, referring to crops like peas and lentils. Canada is the world’s second-largest producer of pulses. India, the world’s second-largest sugar producer, exported only 70,000 metric tons in January, less than a fifth of the volume shipped a year earlier, said Ravi Gupta, president of Shree Renuka Sugars Ltd., the nation’s top refiner. Vietnam, the largest producer of the robusta coffee beans used to make instant drinks and espresso, is also struggling to export. Shipments dropped more than 20% in November and December, said Le Tien Hung, chairman of Simexco Dak Lak, Vietnam’s No. 2 exporter. Around the world, some foodstuff buyers are waiting while others have halted purchases altogether, traders say. “It’s been like that since December,” said Kranig of IM-EX Global. “You’re going to get not only a shortage of food but a shortage of everything. I would not be surprised to hear some beneficial cargo owners’ freight rates for 2021-2022 shipping season double from previous years.” If that prediction bears out, once the bulk of North Americans and Europeans are vaccinated, some of those high freight rates could be passed on to them as they return to cafes, restaurants and office towers. The container crunch comes just as American shippers are trying to boost exports of everything from soybeans to grain meals to Asia. China is scooping up American crops to feed a hog herd that’s recovering from a deadly pig disease faster than most expected. The situation is so dire that some buyers are canceling contracts, opting for bulk shipping methods, the most common for feed products, or delaying purchases to avoid high freight costs.

#### Which becomes a global risk

Gold 21, is a Senior Reporter based in Washington. (Shabtai, June 10, 2021, Low-income countries hit hardest by spike in global food prices <https://www.devex.com/news/low-income-countries-hit-hardest-by-spike-in-global-food-prices-100119>)

Global food prices have been sharply rising as part of a broader increase in commodity prices, and the inflationary pressures could have serious consequences for the world’s poor, according to data from the World Bank and the United Nations. In the latest edition of its biannual “Global Economic Prospects” report, released Tuesday, the World Bank said low-income countries are likely to be hit hardest by higher food prices for the remainder of this year. “The [COVID-19] pandemic not only reversed gains in global poverty reduction for the first time in a generation but also deepened the challenges of food insecurity and rising food prices for many millions of people,” the report said. “This is particularly prevalent among the poorest countries and populations, where higher prices of food can devastate discretionary incomes.” By the end of the year, some 100 million people in emerging market and developing economies “will have fallen back into extreme poverty,” the report said, warning that income losses in three-quarters of fragile and conflict-affected low-income countries will not be fully recovered by next year. Global food prices in May spiked the most in over a decade, according to the Food and Agriculture Organization. The 40% year-on-year jump is causing alarm that inflation will have further devastating impacts on the world’s poorest, as staple food costs soar.

#### Which goes nuclear — stable prices are key to stabilizing the globe

Castellaw 17—Lieutenant General, former President of the non-profit Crockett Policy Institute (John, “Opinion: Food Security Strategy Is Essential to Our National Security,” https://www.agri-pulse.com/articles/9203-opinion-food-security-strategy-is-essential-to-our-national-security, dml)

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

An American Food Security Strategy is an imperative factor in reducing the multiple threats impacting our National wellbeing. Recent history has shown that reliable food supplies and stable prices produce more stable and secure countries. Conversely, food insecurity, particularly in poorer countries, can lead to instability, unrest, and violence.

Food insecurity drives mass migration around the world from the Middle East, to Africa, to Southeast Asia, destabilizing neighboring populations, generating conflicts, and threatening our own security by disrupting our economic, military, and diplomatic relationships. Food system shocks from extreme food-price volatility can be correlated with protests and riots. Food price related protests toppled governments in Haiti and Madagascar in 2007 and 2008. In 2010 and in 2011, food prices and grievances related to food policy were one of the major drivers of the Arab Spring uprisings. Repeatedly, history has taught us that a strong agricultural sector is an unquestionable requirement for inclusive and sustainable growth, broad-based development progress, and long-term stability.

The impact can be remarkable and far reaching. Rising income, in addition to reducing the opportunities for an upsurge in extremism, leads to changes in diet, producing demand for more diverse and nutritious foods provided, in many cases, from American farmers and ranchers. Emerging markets currently purchase 20 percent of U.S. agriculture exports and that figure is expected to grow as populations boom.

Moving early to ensure stability in strategically significant regions requires long term planning and a disciplined, thoughtful strategy. To combat current threats and work to prevent future ones, our national leadership must employ the entire spectrum of our power including diplomatic, economic, and cultural elements. The best means to prevent future chaos and the resulting instability is positive engagement addressing the causes of instability before it occurs.

This is not rocket science. We know where the instability is most likely to occur. The world population will grow by 2.5 billion people by 2050. Unfortunately, this massive population boom is projected to occur primarily in the most fragile and food insecure countries. This alarming math is not just about total numbers. Projections show that the greatest increase is in the age groups most vulnerable to extremism. There are currently 200 million people in Africa between the ages of 15 and 24, with that number expected to double in the next 30 years. Already, 60% of the unemployed in Africa are young people.

Too often these situations deteriorate into shooting wars requiring the deployment of our military forces. We should be continually mindful that the price we pay for committing military forces is measured in our most precious national resource, the blood of those who serve. For those who live in rural America, this has a disproportionate impact. Fully 40% of those who serve in our military come from the farms, ranches, and non-urban communities that make up only 16% of our population.

Actions taken now to increase agricultural sector jobs can provide economic opportunity and stability for those unemployed youths while helping to feed people. A recent report by the Chicago Council on Global Affairs identifies agriculture development as the core essential for providing greater food security, economic growth, and population well-being.

Our active support for food security, including agriculture development, has helped stabilize key regions over the past 60 years. A robust food security strategy, as a part of our overall security strategy, can mitigate the growth of terrorism, build important relationships, and support continued American economic and agricultural prosperity while materially contributing to our Nation’s and the world’s security.

#### Independently, shipping cartels undermine all efforts to solve shipping emissions — self-regulations fail

Alger et al 21, global environmental politics scholar at the University of British Columbia. (Justin, with Jane Lister a Senior Research Fellow and Associate Director of the Centre for Transportation Studies at the Sauder School of Business, University of British Columbia, and Peter Dauvergne is Professor of International Relations at the University of British Columbia, Feb 18, 2021, Corporate Governance and the Environmental Politics of Shipping, https://brill.com/view/journals/gg/27/1/article-p144\_7.xml?language=en

. Of course, the problem is that any gains in efficiency are more than offset by the industry’s rapid growth. As projected, shipping emissions roughly doubled from 1970 to 2018.15 The IMO also projects that shipping carbon emissions will rise between 50 and 250 percent by 2050 under a business-as-usual scenario.16 Fuel efficiency matters for minimizing the environmental impact of shipping, but any gains risk being overshadowed by rising aggregate emissions. There is a similar challenge with emissions reduction efforts in ports. Despite regulatory efforts in many cities to reduce air pollution from ports, the IMO projects that port emissions are still likely to quadruple by 2050.17 The 100 most polluted ports alone affect approximately 230 million people.18 Building larger, more fuel-efficient ships is not enough to address these threats to the environment and human health. Focusing strictly on carbon emissions also risks neglecting the myriad of other environmental impacts of the shipping industry. As ships burn the lowest-grade heavy fuel oil (bunker fuel), the emissions include not just carbon but also sulfur dioxide, hydrocarbons, and various forms of nitrogen oxide, all of which have substantial environmental and human health effects. Low-grade marine fuel contains, for example, 3,500 times more sulfur than road diesel.19 According to one study, 30 percent of atmospheric sulfur aerosol around major shipping routes is directly attributable to shipping, contributing to the occurrence of acid rain and more intense storms.20 Other threats include oil spills, invasive species, disposal of hazardous material, and noise, among others. These environmental threats from global shipping have all grown since the 1970s despite progress in reducing emission rates. These trends point to a global shipping industry that looks much different today than it did in the 1970s. Transnational regulation and governance are an increasingly pervasive feature of both world affairs and scholarly analysis. An analysis of global shipping in the twenty-first century needs to account for the growing influence of corporations in global governance. Corporations, in many ways, now exert greater influence than states over global issues of stability, equity, and efficiency. This is especially true within the shipping industry. 3 The Roots of Industry Authority The shipping industry is the oldest transnational business and the transmission belt of the global economy. Historically, shipping and geopolitical power have gone hand in hand. In the past, it has been in the interest of states to limit regulations on the high seas to facilitate open competition and economies of scale in trade. The prevailing norm for high seas governance has been freedom of the seas—a norm that shipping companies have worked to reinforce in their efforts to avoid state regulation and consolidate their position. The industry’s privileged position in the global economy has made it especially effective in influencing its own governance. The freedom of the seas norm is central to why the shipping industry continues to be so difficult for states to regulate.21 This difficulty is partly the result of state design. Historically, states have advocated for minimal regulations at sea in pursuit of their strategic and economic interests. The legal justification for freedom of the seas dates back to 1609, when Dutch jurist Hugo Grotius made the case that shipping routes and ocean resources were inexhaustible resources and therefore should be available to all states equally—an important geostrategic priority for the then Dutch Republic.22 Grotius naturally could not predict the scale of extractive activity centuries later, but his legal basis for freedom of access to shipping routes largely endures today. The norm featured prominently throughout the ten-year negotiations for the UN Convention on the Law of the Sea (UNCLOS) adopted in 1982. As the world’s preeminent maritime powers throughout the nineteenth and twentieth centuries, the United Kingdom and United States viewed freedom of the seas as essential to the health of their economies. They used their collective power to enshrine it in international law. The evolution of the shipping regime since—around issues such as jurisdictional rights, damage control, and technical barriers—similarly reflects the prerogative of states to ensure free movement of ships and commerce. The historical state-based governance of shipping has, in short, worked toward enhancing industry autonomy in the name of geopolitics and commerce. States actively promoting industry autonomy gave major industry players a lot of leeway over how to organize, through their own banks and insurance companies, and most notably through loosely regulated industry “conferences” (essentially cartels).23 These conferences coordinated on maintaining control over certain shipping routes, often deliberately deploying ships on the same schedules as non-members to push them out of the market.24 Pushing smaller competitors out of the market allowed these conferences to fix prices at a higher rate, among other predatory business practices. The conference system would not endure, however. The emergence of containerization in the latter half of the twentieth century reduced shipping costs, making the market more competitive for smaller companies.25 New antitrust laws targeting conferences in Europe and the United States at the beginning of the twenty-first century followed, further undermining their viability. These regulations were intended to break up what was increasingly an unfair, oligopolistic market, but they had the unanticipated effect of providing the impetus for the further centralization of authority in the industry. This centralization of power has taken two forms: an increase in mergers and acquisitions, and the formation of shipping alliances. The high fixed-variable cost ratio of the shipping industry makes consolidation an imperative for major shipping countries.26 With the benefits of coordinating routes and prices through conferences increasingly restricted by governments, major industry players have resorted to strategic mergers and acquisitions to achieve greater economies of scale. Figure 2 depicts the sharp rise in these mergers and acquisitions in the 1990s that has continued steadily since. Some of these mergers reflect a dramatic shift in industry composition. For example, the merger of COSCO and China Shipping in 2016—China’s two largest state-owned shipping conglomerates—made COSCO Shipping the world’s fourth-largest shipping company at the time (it has since risen to third). Strategic alliances also emerged to replace conferences, and these now dominate the shipping landscape. The market share of the major alliances leaped from 30 percent in 2011 to 80 percent in 2018, depicted in Figure 3. Just three alliances—Ocean Alliance, The Alliance, and 2M Alliance—now account for 80 percent of global capacity. Formed in 2017 following a reshuffling, these three alliances allow major carriers to coordinate to enhance their global service coverage and optimize operational costs by sharing resources. The major distinction between these alliances and the conferences of old is that alliance partners do not share commercial information, including pricing. But in practice, these alliances allow a select few large shipping companies to dominate the industry even further. Minimal government antitrust efforts and lingering liner shipping block exemptions from competition policy have enabled the ongoing formation of an oligopoly in global shipping—driven by the advent of megaships and by the steady increase in industry consolidation through mergers, acquisitions, and alliances that began in the 1990s.27 The industry has, in short, been highly effective in avoiding regulation or in finding creative ways to limit its efficacy. There is perhaps no clearer instance of this than the “flags of convenience” model, by which ships can choose which country’s flag to fly. This model allows ships to fly the flag of a country of its choice, including those with minimal safety and environmental regulatory requirements. Countries that ignore IMO resolutions have an outsized ability to undermine new standards. Rather than adhering to new rules—environmental or otherwise—ships often can simply switch flags and ignore them altogether. This system has endured because it benefits all parties: flag states get more traffic, non-flag states get cheaper shipping costs, and shipping companies get increased profits.28 One possible solution is for governments to adopt an exclusion model that prohibits port access to ships that fly flags of convenience.29 But progress has been slow. In 2017, the five largest shipping fleets by flag of registration were Panama, Liberia, the Marshall Islands, Hong Kong, and Singapore.30 This model continues to allow ships to pick and choose which country’s regulations to adhere to, vastly undermining the ability of the IMO and national governments to set standards.31 The freedom of the seas norm that states have long sought to reinforce has had perverse effects on global shipping governance. Mergers and acquisitions, conferences, alliances, and flags of convenience all contribute to an industry structure that has systematically reinforced the power of major corporations. For their part, states have struggled to identify the right balance between the geopolitical and commercial importance of freedom of the seas and the need to regulate the industry (environmental or otherwise). Even when states do introduce new rules, they tend to have unintended consequences. Antitrust efforts helped break up shipping conferences, but led to today’s structure of powerful alliances. From price fixing to alliances to regulatory evasion, major corporations have significantly enhanced their market dominance and, by extension, their political power over global shipping—an outcome with perhaps unexpected consequences for the environmental governance of the industry. 4 Environmental Governance of Global Shipping The consolidation of the industry since the 1970s and the freedom of the seas approach to shipping governance have allowed major companies to exert substantial influence over their environmental governance. Consolidation can benefit states looking to better regulate industry by, most notably, making it easier to design and target regulations in an industry with fewer larger firms. But consolidation also means a few firms have substantial market power that they can leverage to shape the content of state regulation, or oppose it outright. The industry has used that leverage in tangible ways to shape the environmental governance of shipping. Historically, that influence has translated into efforts to avoid environmental regulation. The shipping industry was one of only two industries exempted from emissions cuts in the 2015 Paris Agreement on climate change—a trend that continues its similar exemption from the 1997 Kyoto Protocol. Shipping is responsible for approximately 3 percent of global carbon emissions, which would put it in the top ten global emitters if considered a country, so its exemption is a major blow to the climate regime. Environmentalists lamented the shipping exception, decrying the “corporate capture” of the IMO and UN by shipping and air transport lobbyists. But the global shipping industry has been nigh untouchable for states looking to curb the sector’s climate change impact. This untouchable status is partly by design. In addition to an embedded freedom of the seas norm, the industry further benefits from the norm of liberal environmentalism, which emerged out of the negotiations and compromises leading up to the 1992 UN Conference on Environment and Development (UNCED), often referred to as the Rio Earth Summit.32 In Rio, states confirmed the need to better protect the global environment, but with the major caveat that efforts should not interfere with economic growth and development. Ever since, this compromise has defined the state-led governance of environmental issues from climate change to deforestation to biodiversity loss. The maritime industry agreed to support the Rio agenda only as long as it could set its own regulatory agenda.33 As the transmission belt of the global economy, it was simply too essential to all countries to risk disruption. Exemptions in Paris and Kyoto, and the so-called corporate capture of the IMO, therefore merely reflect the application of this norm to global shipping and its centrality in the global economy. That is not to say that state-led governance of shipping has not been strong and successful at times. For example, states took action on oil spills by imposing stricter spill prevention standards on the industry. Oil spills can seriously damage corporate reputation, much more so than diffuse, long-term environmental impacts such as emissions. They have a lasting, visible impact, and generate public outcry. The industry has therefore been responsive to tougher IMO resolutions and technical guidelines for oil spill prevention.34 Despite the cost of implementing stricter safety standards in ship design, the industry sees the value in ceding authority on certain issues to external organizations such as the IMO. Adhering to best practices, as defined by outside governance bodies, has led to a sharp reduction in spills since the 1970s, as depicted in Figure 4. But it also provides the industry with a scapegoat in the event of a spill. Rather than a focus on internal malpractice, many oil spills become a lightning rod for reviewing the international standards set by the IMO. Oil spills can be reduced in number and their impact mitigated, but they are an inevitability of ship bunkering (refueling) and oil transport. By ceding authority on oil spills, the industry has effectively deflected the burden of responsibility to governments and international bodies on a high-profile, potentially market-damaging issue. Similarly, in 2008 the IMO adopted a sulfur cap of 0.5 percent of fuel composition to come into effect on 1 January 2020—a sizable decrease from the previous 3.5 percent limit. This regulation applies to all new and existing ships, generally requiring that ships substitute cleaner, more expensive fuel, but also requiring retrofitting of tanks and engines in many older ships. Individual flag states are still responsible for sanctions in the event of noncompliance, but the IMO has adopted a particularly aggressive stance on sulfur emissions, raising its profile as an environmental priority and effectively ratcheting up pressure on industry. Given the pressure, major industry players are expected to comply, with a projected cost for the container shipping industry of between $ 5 billion and $ 30 billion, depending on market rates for fuel.35 Regulations such as those for oil spills and the sulfur cap demonstrate that state-led governance of shipping can be effective with industry buy-in, often gained through political pressure. States can and have put limitations on certain activities with real consequences for the industry. But new safety designs, ship retrofitting, and cleaner fuels are costly. Given the potential cost of new regulations, major shipping companies have not sat idly by, instead taking the initiative to better shape the environmental governance of their industry through self-regulation. 5 Environmental Self-Governance Following the lead of their big brand customers like Coca-Cola, IKEA, Walmart, and countless others, the major shipping companies are seeking to control their regulatory fate through self-governance and CSR initiatives. By voluntarily committing to sustainability, these companies can simultaneously reduce the impetus for government-led regulation, while setting the terms of debate for future regulation.36 When companies environmentally self-regulate, even with unambitious goals, they tend to dissuade voters, activists, and government officials alike from supporting more robust regulations.37 They also create benchmarks for the rest of the industry to follow and they influence the agenda for state-led governance. In doing so, the companies enhance their autonomy from government-imposed regulation, allowing them to shape the future of the industry and protect their profitability. Put simply, through CSR major shipping companies gain political authority to decide which environmental issues to address, and how to address them in a way that will not have an oversized effect on their bottom line. The cost of these self-imposed initiatives is a price well worth paying to avoid the potential losses associated with a rigorous state-led regulatory regime. One such example was the approach that the International Chamber of Shipping (ICS) took to IMO-imposed greenhouse gas emissions reductions. Just as the IMO was advancing with a 2017–2023 road map for reducing greenhouse gases, the ICS submitted an alternative proposal to the IMO that voluntarily permitted the organization to impose reductions beginning in 2023. The ICS proposal did not specify any reduction targets. The IMO accepted the industry proposal, feeling that industry buy-in was important for compliance. But the cost of this buy-in was high. The proposal marginalized and delayed action, with the IMO ultimately setting an intensity target for 2030 while pushing back the absolute emission reduction target to 2050—letting industry off the hook in the short term. The ICS effectively co-opted the IMO reductions targets. Their watered-down proposal was representative of many CSR initiatives—weak, voluntary industry commitments that fail to adequately address the environmental problem in question.38 In this case and others, the industry used its bargaining power to supplant a more ambitious, IMO-driven plan. To the IMO—an organization that struggles with compliance—having industry on board was more important than rigorous emissions targets. In this instance, small and large firms unified through the ICS to undermine the IMO plan but, increasingly, just a few firms are able to go it alone to similar result. More recently, major industry players are moving toward greater environmental self-governance, as exemplified by green ship certification schemes. Spearheaded by industry leaders, these voluntary CSR programs, such as RightShip, Clean Cargo, Green Award, Green Ship of the Future, Environmental Ship Index, and the Clean Shipping Index, establish benchmark criteria to assess vessels on their environmental performance. They mainly measure carbon emissions and fuel efficiency. Ships that pass the mark receive a positive ranking and green seal of approval that qualifies the vessel for market incentives such as reduced port fees and better slot allocation at port. These ratings also bestow a market advantage to companies with certified vessels by allowing them to appeal to cargo customers seeking more environmentally responsible transport. More importantly, the voluntary standards are providing the industry with the opportunity to shape environmental rules. Container shipping companies representing approximately 85 percent of the world’s ocean container shipping volume, for example, participate in the Clean Cargo Program, which includes a business Climate Call to Action agenda. 6 Environmental Self-Governance at Maersk Beyond industry-led certification, there are a select few companies that are proactively pushing for better environmental regulation, most notably Maersk (or what is more formally known as A.P. Møller—Mærsk A/S). Maersk’s sustainability initiatives and its advocacy for better environmental performance by the industry have earned it a positive reputation, even among industry critics. InfluenceMap’s report on corporate capture of the IMO, for example, specifically lauds Maersk for its transparency and progressive voice in an otherwise scathing report.39 As Maersk CEO Søren Skou puts it, “Companies can no longer stay on the sidelines when it comes to global issues.”40 Maersk has been proactive on environmental governance, and its efforts are transforming not only the company but the industry itself. Other companies and associations concentrated in Northern European countries are already starting to follow suit and support environmental action such as through the Trident Alliance lobby for strong sulfur fuel regulation and enforcement. Beyond gaining political influence, there is a powerful business case for Maersk’s support for stronger environmental governance. The business value, we argue, goes beyond the standard CSR “eco-business” from enhancing environmental efficiencies, reducing waste, and gaining more control of supply chains.41 Given the nature of the global shipping industry, higher environmental standards are giving Maersk a significant competitive advantage. New environmental regulations tend to raise the costs of shipping in an industry with already low profit margins, especially for smaller carriers that cannot take advantage of economies of scale. Companies such as Maersk that benefit from the cost savings of megaships and alliances are much better positioned to absorb these kinds of financial shocks than smaller companies. Maersk wields substantial power as the market leader in an increasingly centralized industry, allowing it to pressure governments and ports to make new environmental standards compulsory and ensure “level-playing-field” enforcement to guard their competitive margins. The inevitable outcome of rising operating costs is further industry consolidation through mergers and acquisitions, smaller companies put out of business, and rising barriers to entry for aspiring companies. By escalating environmental requirements and, therefore, risks and costs on its competitors, Maersk solidifies its industry dominance. Maersk’s position on sulfur emission limits in the Port of Hong Kong exemplifies how a powerful company exerts its influence to push for stronger environmental regulations to give it a competitive advantage. In 2012, the Port of Hong Kong cut port fees in half for ships that used fuel with no more than 0.5 percent sulfur content. Maersk, along with seventeen other companies, took advantage of the program. But in 2013 Maersk threatened to switch back to cheaper, dirtier fuel if the port did not make the cleaner fuel mandatory for all. Maersk claimed the cleaner fuel cost an additional $ 2 million per year, only 40 percent of which was made up by cost savings from reduced port fees. This increased cost, Maersk argued, put it at a competitive disadvantage relative to its major competitors in East Asia.42 Maersk, however, was already using low-sulfur content fuel on its ships in part because it needed to abide by European standards. Its threat to switch to dirtier fuel was therefore somewhat hollow, as was its calculation of the additional cost to Maersk. Maersk’s incentive was certainly to level the playing field and it did so by pushing the Port of Hong Kong to adopt the same standards Maersk was already using internally. Bowing to Maersk, its largest customer, the Port of Hong Kong made the reduced-sulfur content fuel mandatory on all ships in 2015. Maersk is used here as an illustrative example, but Nordic shipping companies in particular are increasingly employing tactics similar to Maersk’s pressuring of the Port of Hong Kong. While the majority of shipping companies, often represented by the International Chamber of Shipping, remain silent on environmental issues, some of the largest shipping companies have been anything but. There are two key reasons why some of the major players like Maersk are becoming more environmentally conscious.43 The first is that they are more inclined to long-term planning. They see competitive advantage in being ahead of the curve on environmental performance, allowing them to attract environmentally conscious customers. As IKEA, Nike, Walmart, and others commit to sustainable supply chains, their public image increasingly depends on reducing the environmental cost of shipping. The CEO s of companies like Amazon, Cargill, and Walmart consistently rank in the top 100—and frequently the top 20—in lists of the most influential people in global shipping. Transnational retailers are increasingly looking to shipping emissions as one way of reducing their environmental footprints and enhancing their sustainability credentials. Large shipping companies are therefore using their strong market positions to capitalize on this growing demand for green shipping. Maersk, for example, has established “carbon pacts” with its major suppliers, notably Tetra Pak, BMW, and AkzoNobel, to meet the growing demand for greener ocean transport. Such pacts are also, however, a highly strategic means to lock customers into a long-term business relationship. The second reason is that companies such as Maersk tend to be more technologically advanced than their competition. The better environmental performance of these companies is due in large part to this technological prowess. This prowess not only includes their ability to design and build more fuel-efficient megaships, but also to conduct industry-leading research and development into the low- or zero-emissions vessels of the future. Many of these vessels will use cleaner fuels such as liquefied natural gas (LNG) and hydrogen, while others use advanced battery, fuel cell, wind, and solar technology. Whereas most shipping companies focus on operational measures such as improved maintenance and slow steaming for better fuel efficiency to address sustainability, the major industry sustainability leaders are pursuing fundamentally new ship designs. Being ahead of the curve with these advancements gives the big players an incentive to push for stricter environmental standards. Any new environmental regulations would have a greater impact on competitors lagging behind on these technologies. While the main target of these tactics may be major competitors (i.e., large Chinese shipping companies), the increased costs to smaller shipping companies are, at best, collateral damage. At worst, they represent systematic efforts by the world’s largest shipping companies to force their smaller competitors out of the market. The efforts of Maersk to use sustainability to enhance its market position is increasingly common in environmental governance. Corporations regularly look to co-opt environmental governance to set the terms for it.44 But as Strange noted in 1976, global shipping is unique in its geopolitical and commercial importance in the international system. The industry’s Paris exemption, as noted above, is perhaps the clearest indication of its exceptional status. The source of Maersk’s power is not just market dominance, but specifically market dominance in an industry that is essential to the majority of global commerce. The ongoing trend toward greater industry consolidation, particularly over the past decade, has only heightened the influence of major players. Put simply, major players such as Maersk are leveraging the industry’s status as well as their market dominance to dictate the direction and scope of environmental governance, significantly enhancing their competitiveness along the way. 7 Conclusion: The Path to Sustainability? The elephant in the room is whether, on balance, industry-driven governance is an effective mechanism for improving the overall environmental performance of the container shipping industry. It certainly is leading to short-term incremental improvements, but the answer is murkier with respect to strategic long-run advances. The progressive stance of companies such as Maersk on reducing greenhouse gas emissions is an important normative shift within the industry. It is certainly desirable that some of the largest companies in the world’s oldest transnational industry are acknowledging their environmental impacts. Such efforts are certainly better than avoidance and obfuscation, as has been common in the past. In addition, many of the technological advances in shipping are helping to decrease environmental consequences. The shipping industry is not going anywhere, so these advances are necessary if it is to become more sustainable. Yet we need to keep in mind that corporate self-governance of environmental matters is further consolidating power and authority within the shipping industry. Concentration is happening on two fronts. First, industry self-governance is co-opting governance from state-led processes. Industry increasingly decides which problems to address and how to address them. These decisions tend to lead to marginal, incremental steps that benefit business by minimizing any impact on profitability. Fuel efficiency gains, for example, do not compensate for rapid growth in global shipping. On aggregate, the environmental impact of the industry is rising despite better efficiency. As noted, international shipping currently accounts for 3 percent of global greenhouse gas emissions. One European Union study predicts that this percentage will rise to 17 percent by 2050, if left unregulated.45 Private governance alone is not enough to reduce this impact meaningfully. The problem is compounded because shipping is a derived demand industry, so its impact also depends on unregulated global consumption levels and supply chains.46 The current industry-led approach nonetheless risks being a linear solution to an exponential problem. Second, major industry players in container shipping are using environmental regulation as a tool to enhance their market dominance, leading to even greater consolidation of the industry. It is not necessarily problematic for industry leaders like Maersk to raise the bar of environmental performance and force laggards to follow suit. But as noted above, this could be problematic for global shipping because smaller companies cannot keep up in an already centralized industry with low profit margins, aggravating already existing inequities common across the international political economy. Sustainability has become, in part, a competitive tool for some corporate players to make the industry even less democratic. It can raise costs that are more easily absorbed by large companies, put a premium on economies of scale, and increase barriers to entry: all further enhancing the power and authority of major companies to dictate governance. Industry sustainability initiatives are, unexpectedly, hastening global shipping’s march toward becoming a global oligopoly, if it is not already there. We could arguably consider this trade-off between consolidation and a commitment to environmental self-governance a good thing for the industry’s performance. If it meant sustainability in global shipping, then perhaps the case could be made that a less democratic industry is an acceptable cost. The prevailing question is whether a few large container shipping companies, increasingly self-regulating, will be willing to make greater sacrifices for sustainability to prevent the bleaker projections of the industry’s environmental impact from becoming reality.

#### Ports are hotspots for future climate investment

UNEP 21, United Nations Environmental Programme (August 5, 2021, 5 EXAMPLES OF BEST PRACTICE TO SUSTAINABLY FINANCE THE PORT SECTOR, <https://www.unepfi.org/news/themes/ecosystems/5-examples-of-best-practice-to-sustainably-finance-the-port-sector/>

The blue (ocean) economy offers many opportunities for private finance to lend and invest in a sustainable and nature-positive way. Here we look at some of the leading examples of best practice in social and environmental sustainability across the port sector which banks, insurers and investors can seek out. Ports are gateways for development, global trade and maritime innovation, and being located at sea level, they are on the front lines of climate change. Ports are also clusters of companies and hubs of economic activity. With strong scale and scope advantages they are ideal hubs for sustainable maritime innovation and have become a key part of development strategies employed by many nations (Rodrigue and Notteboom 2020). To further encourage the sustainable development of the sector, we have listed 5 examples of innovative best practice in ports that you might not know about. Check out Turning the Tide, UNEP FI’s detailed guidance on financing for the sustainable blue economy for more examples and how they may be material to your institution. The guide also includes an overview of activities to challenge or to avoid financing altogether, based on their sustainability credentials and overall risk. The recommendation may be to challenge certain activities, even where best practice is present in other areas. 1. Green transport Ports are the gateways between land and sea, and can offer opportunities for linking the blue economy with the green economy. Seek out ports or companies that provide green port-hinterland connections that are less reliant on additional travel or offer alternatives like rail terminal development. 2. Green technology Ports can be a hub for sustainable innovation and a centre for spinning off new business opportunities. Seek out ports that have skills and systems available to support green port technologies, for example in funding green technology development, as in the case of the Maritime and Port Authority of Singapore’s Maritime Decarbonisation Centre. Another green port initiative in Singapore is led by ship management company Eastern Pacific Shipping (EPS) and entrepreneur network Techstars. The duo announced a joint-venture project to launch a global start-up accelerator, the “EPS MaritimeTech Accelerator Powered by Techstars”. Digital technology is transforming the maritime space, making it possible to advance and monitor sustainability goals in everything from port operations to fuel efficiency and sustainable fishing. A shortlist of start-up companies was chosen for an intensive three-month programme of research and development, mentorship, and collaboration. The companies then pitched their business to an audience of venture capitalists, corporate innovation leaders and industry experts (Port Technology 2019). “The maritime world has traditionally lagged behind other sectors when it comes to embracing and leveraging the power of digital solutions and new technology,” says Dhritiman Hui, the new managing director of the mentorship-driven Techstars accelerator program. “Now, the confluence of new regulation, an influx of tech-savvy entrepreneurs interested in the space, and large, deep-pocketed VC funds, intrigued by the size and the possibilities of the maritime sector, are threatening to shift that paradigm.” 3. Spatial management Ports are heavily trafficked areas with vessels arriving and departing throughout the day. This can cause impacts on wildlife and habitats. Seek out ports with policies and practices in place that protect vulnerable species and habitats and adapt to known animal aggregation migration routes – for example along the California coast annual incentives are offered for vessels to reduce speed in and around ports to avoid fatal collisions with whales and reduce noise pollution. 4. Supply chains How ports are powered and supplied carries significant environmental impacts, and when done sustainably can set an example for their hinterlands and associated ecosystem of businesses. Focusing on renewable energy, utilising waste heat, carbon capture and storage as well as improving energy efficiency are all steps that can be taken, as demonstrated by the Port of Rotterdam. Seek out ports or associated companies using green supply chains for renewable energy, waste management, and sustainable sourcing. 5. Emissions incentives Ports can incentivise their visiting ships to move towards best practice on e.g. carbon emissions, for example by offering incentives for good emission ratings through discounted port fees as done by a number of ports worldwide through the Environmental Ship Index. Seek out ports that offer lower fees or other incentives to attract ships with good emissions ratings.

#### Warming causes extinction

Kareiva 18, Ph.D. in ecology and applied mathematics from Cornell University, director of the Institute of the Environment and Sustainability at UCLA, Pritzker Distinguished Professor in Environment & Sustainability at UCLA, et al. (Peter, “Existential risk due to ecosystem collapse: Nature strikes back,” *Futures*, 102)

In summary, six of the nine proposed planetary boundaries (phosphorous, nitrogen, biodiversity, land use, atmospheric aerosol loading, and chemical pollution) are unlikely to be associated with existential risks. They all correspond to a degraded environment, but in our assessment do not represent existential risks. However, the three remaining boundaries (climate change, global freshwater cycle, and ocean acidification) do pose existential risks. This is because of intrinsic positive feedback loops, substantial lag times between system change and experiencing the consequences of that change, and the fact these different boundaries interact with one another in ways that yield surprises. In addition, climate, freshwater, and ocean acidification are all directly connected to the provision of food and water, and shortages of food and water can create conflict and social unrest. Climate change has a long history of disrupting civilizations and sometimes precipitating the collapse of cultures or mass emigrations (McMichael, 2017). For example, the 12th century drought in the North American Southwest is held responsible for the collapse of the Anasazi pueblo culture. More recently, the infamous potato famine of 1846–1849 and the large migration of Irish to the U.S. can be traced to a combination of factors, one of which was climate. Specifically, 1846 was an unusually warm and moist year in Ireland, providing the climatic conditions favorable to the fungus that caused the potato blight. As is so often the case, poor government had a role as well—as the British government forbade the import of grains from outside Britain (imports that could have helped to redress the ravaged potato yields). Climate change intersects with freshwater resources because it is expected to exacerbate drought and water scarcity, as well as flooding. Climate change can even impair water quality because it is associated with heavy rains that overwhelm sewage treatment facilities, or because it results in higher concentrations of pollutants in groundwater as a result of enhanced evaporation and reduced groundwater recharge. Ample clean water is not a luxury—it is essential for human survival. Consequently, cities, regions and nations that lack clean freshwater are vulnerable to social disruption and disease. Finally, ocean acidification is linked to climate change because it is driven by CO2 emissions just as global warming is. With close to 20% of the world’s protein coming from oceans (FAO, 2016), the potential for severe impacts due to acidification is obvious. Less obvious, but perhaps more insidious, is the interaction between climate change and the loss of oyster and coral reefs due to acidification. Acidification is known to interfere with oyster reef building and coral reefs. Climate change also increases storm frequency and severity. Coral reefs and oyster reefs provide protection from storm surge because they reduce wave energy (Spalding et al., 2014). If these reefs are lost due to acidification at the same time as storms become more severe and sea level rises, coastal communities will be exposed to unprecedented storm surge—and may be ravaged by recurrent storms. A key feature of the risk associated with climate change is that mean annual temperature and mean annual rainfall are not the variables of interest. Rather it is extreme episodic events that place nations and entire regions of the world at risk. These extreme events are by definition “rare” (once every hundred years), and changes in their likelihood are challenging to detect because of their rarity, but are exactly the manifestations of climate change that we must get better at anticipating (Diffenbaugh et al., 2017). Society will have a hard time responding to shorter intervals between rare extreme events because in the lifespan of an individual human, a person might experience as few as two or three extreme events. How likely is it that you would notice a change in the interval between events that are separated by decades, especially given that the interval is not regular but varies stochastically? A concrete example of this dilemma can be found in the past and expected future changes in storm-related flooding of New York City. The highly disruptive flooding of New York City associated with Hurricane Sandy represented a flood height that occurred once every 500 years in the 18th century, and that occurs now once every 25 years, but is expected to occur once every 5 years by 2050 (Garner et al., 2017). This change in frequency of extreme floods has profound implications for the measures New York City should take to protect its infrastructure and its population, yet because of the stochastic nature of such events, this shift in flood frequency is an elevated risk that will go unnoticed by most people. 4. The combination of positive feedback loops and societal inertia is fertile ground for global environmental catastrophes Humans are remarkably ingenious, and have adapted to crises throughout their history. Our doom has been repeatedly predicted, only to be averted by innovation (Ridley, 2011). However, the many stories of human ingenuity successfully addressing existential risks such as global famine or extreme air pollution represent environmental challenges that are largely linear, have immediate consequences, and operate without positive feedbacks. For example, the fact that food is in short supply does not increase the rate at which humans consume food—thereby increasing the shortage. Similarly, massive air pollution episodes such as the London fog of 1952 that killed 12,000 people did not make future air pollution events more likely. In fact it was just the opposite—the London fog sent such a clear message that Britain quickly enacted pollution control measures (Stradling, 2016). Food shortages, air pollution, water pollution, etc. send immediate signals to society of harm, which then trigger a negative feedback of society seeking to reduce the harm. In contrast, today’s great environmental crisis of climate change may cause some harm but there are generally long time delays between rising CO2 concentrations and damage to humans. The consequence of these delays are an absence of urgency; thus although 70% of Americans believe global warming is happening, only 40% think it will harm them (http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/). Secondly, unlike past environmental challenges, the Earth’s climate system is rife with positive feedback loops. In particular, as CO2 increases and the climate warms, that very warming can cause more CO2 release which further increases global warming, and then more CO2, and so on. Table 2 summarizes the best documented positive feedback loops for the Earth’s climate system. These feedbacks can be neatly categorized into carbon cycle, biogeochemical, biogeophysical, cloud, ice-albedo, and water vapor feedbacks. As important as it is to understand these feedbacks individually, it is even more essential to study the interactive nature of these feedbacks. Modeling studies show that when interactions among feedback loops are included, uncertainty increases dramatically and there is a heightened potential for perturbations to be magnified (e.g., Cox, Betts, Jones, Spall, & Totterdell, 2000; Hajima, Tachiiri, Ito, & Kawamiya, 2014; Knutti & Rugenstein, 2015; Rosenfeld, Sherwood, Wood, & Donner, 2014). This produces a wide range of future scenarios. Positive feedbacks in the carbon cycle involves the enhancement of future carbon contributions to the atmosphere due to some initial increase in atmospheric CO2. This happens because as CO2 accumulates, it reduces the efficiency in which oceans and terrestrial ecosystems sequester carbon, which in return feeds back to exacerbate climate change (Friedlingstein et al., 2001). Warming can also increase the rate at which organic matter decays and carbon is released into the atmosphere, thereby causing more warming (Melillo et al., 2017). Increases in food shortages and lack of water is also of major concern when biogeophysical feedback mechanisms perpetuate drought conditions. The underlying mechanism here is that losses in vegetation increases the surface albedo, which suppresses rainfall, and thus enhances future vegetation loss and more suppression of rainfall—thereby initiating or prolonging a drought (Chamey, Stone, & Quirk, 1975). To top it off, overgrazing depletes the soil, leading to augmented vegetation loss (Anderies, Janssen, & Walker, 2002). Climate change often also increases the risk of forest fires, as a result of higher temperatures and persistent drought conditions. The expectation is that forest fires will become more frequent and severe with climate warming and drought (Scholze, Knorr, Arnell, & Prentice, 2006), a trend for which we have already seen evidence (Allen et al., 2010). Tragically, the increased severity and risk of Southern California wildfires recently predicted by climate scientists (Jin et al., 2015), was realized in December 2017, with the largest fire in the history of California (the “Thomas fire” that burned 282,000 acres, https://www.vox.com/2017/12/27/16822180/thomas-fire-california-largest-wildfire). This catastrophic fire embodies the sorts of positive feedbacks and interacting factors that could catch humanity off-guard and produce a true apocalyptic event. Record-breaking rains produced an extraordinary flush of new vegetation, that then dried out as record heat waves and dry conditions took hold, coupled with stronger than normal winds, and ignition. Of course the record-fire released CO2 into the atmosphere, thereby contributing to future warming. Out of all types of feedbacks, water vapor and the ice-albedo feedbacks are the most clearly understood mechanisms. Losses in reflective snow and ice cover drive up surface temperatures, leading to even more melting of snow and ice cover—this is known as the ice-albedo feedback (Curry, Schramm, & Ebert, 1995). As snow and ice continue to melt at a more rapid pace, millions of people may be displaced by flooding risks as a consequence of sea level rise near coastal communities (Biermann & Boas, 2010; Myers, 2002; Nicholls et al., 2011). The water vapor feedback operates when warmer atmospheric conditions strengthen the saturation vapor pressure, which creates a warming effect given water vapor’s strong greenhouse gas properties (Manabe & Wetherald, 1967). Global warming tends to increase cloud formation because warmer temperatures lead to more evaporation of water into the atmosphere, and warmer temperature also allows the atmosphere to hold more water. The key question is whether this increase in clouds associated with global warming will result in a positive feedback loop (more warming) or a negative feedback loop (less warming). For decades, scientists have sought to answer this question and understand the net role clouds play in future climate projections (Schneider et al., 2017). Clouds are complex because they both have a cooling (reflecting incoming solar radiation) and warming (absorbing incoming solar radiation) effect (Lashof, DeAngelo, Saleska, & Harte, 1997). The type of cloud, altitude, and optical properties combine to determine how these countervailing effects balance out. Although still under debate, it appears that in most circumstances the cloud feedback is likely positive (Boucher et al., 2013). For example, models and observations show that increasing greenhouse gas concentrations reduces the low-level cloud fraction in the Northeast Pacific at decadal time scales. This then has a positive feedback effect and enhances climate warming since less solar radiation is reflected by the atmosphere (Clement, Burgman, & Norris, 2009). The key lesson from the long list of potentially positive feedbacks and their interactions is that runaway climate change, and runaway perturbations have to be taken as a serious possibility. Table 2 is just a snapshot of the type of feedbacks that have been identified (see Supplementary material for a more thorough explanation of positive feedback loops). However, this list is not exhaustive and the possibility of undiscovered positive feedbacks portends even greater existential risks. The many environmental crises humankind has previously averted (famine, ozone depletion, London fog, water pollution, etc.) were averted because of political will based on solid scientific understanding. We cannot count on complete scientific understanding when it comes to positive feedback loops and climate change.

### 1AC — Plan

#### The United States federal government should increase prohibitions on anticompetitive practices in container shipping expanding the authority of the Federal Maritime Commission and maritime industry to pursue legal remedies.

### 1AC — Solvency

#### Finally, Solvency —

#### Removing immunity from international shipping is key

O’Shea 17, an attorney who works on transportation and infrastructure issues, (Sean, October 3, 2017, Congress Must Stop Foreign Ocean Carriers From Harming U.S. Economy, https://morningconsult.com/opinions/congress-must-stop-foreign-ocean-carriers-from-harming-u-s-economy/)

It is long past time for Congress to update the Shipping Act to give the FMC the power it needs to bring lawsuits to block foreign carriers from colluding to set unfair prices and service terms. At the same time, lawmakers also must allow U.S. port service providers to demonstrate in court how these anticompetitive practices by the foreign cartels are harming their businesses and workers. Currently, their interests are barred from being considered in antitrust actions against foreign ocean carriers. Absent reform of this outdated regulatory environment, ports will be unable to make critical infrastructure upgrades that will allow the U.S. maritime industry to continue serving as vital economic engine for the country. Ports currently support 23 million jobs and generate more than $320 billion in tax revenue each year. And if current growth projections hold, they will become even more indispensable. By 2030, America’s trade volume is expected to quadruple, including tremendous growth in the amount of freight bound for export. Within 20 years, 60 percent of the U.S. economy is expected to depend upon port-related activity. But America’s maritime industry will not be able to continue to attract private investors and lenders to build infrastructure to meet this future economic demand unless Congress takes action now to end price-fixing and other anticompetitive practices by foreign ocean carriers that stifle industry profits, put jobs at risk and stifle private investment in much-needed port infrastructure upgrades. In particular, carriers immunized from antitrust regulation are also ordering enormous, new 22,000-container ships that will require new cranes and shore facilities, but they will not provide long-term volume guarantees necessary for ports to finance these capital improvements through regular commercial markets. Aside from this obvious legislative restoration of reasonable balance to enable private industry to meet demands, the two equally unacceptable outcomes are to do without the infrastructure and pay the economic penalty when bottlenecks occur, or look to taxpayer-funded solutions. Many lawmakers in Congress have talked about the need for modernizing regulations that constrain U.S. economic and job growth. They now have the perfect opportunity to reform U.S. maritime laws so they protect America’s shipping industry and port workers instead of lining the wallets of foreign competitors. And these reforms must begin with giving the FMC and the American maritime industry the power to take legal action to block unfair, anticompetitive actions by foreign cartels.

#### That empowers private antitrust action that is necessary to deter international collusion

Lande 16, Professor of Law at the University of Baltimore School of Law, Director of the American Antitrust Institute. {Robert; Spring 2016; Antitrust, “Class Warfare: Why Antitrust Class Actions Are Essential for Compensation and Deterrence,” <https://scholarworks.law.ubalt.edu/cgi/viewcontent.cgi?article=2019&context=all_fac>)

OUR RECENT EMPIRICAL STUDIES demonstrate five reasons why antitrust class action cases are essential: (1) class actions are virtually the only way for most victims of antitrust violations to receive compensation; (2) most successful class actions involve collusion that was anticompetitive; (3) class victims’ compensation has been modest, generally less than their damages; (4) class actions deter significant amounts of collusion and other anticompetitive behavior; and (5) anticompetitive collusion is underdeterred, a problem that would be exacerbated without class actions. Recent court decisions undermine class action cases, thus preventing much effective and important antitrust enforcement.1 Class Actions Are Virtually the Only Way for Most Victims of Federal Antitrust Violations to Receive Compensation The antitrust statutes provide that violations result in automatic treble damages for the victims.2 The legislative history 3 and case law indicate that compensation of victims is a goal, perhaps the dominant goal, of antitrust law’s damages remedy.4 Class actions play an essential role in ensuring that the treble damages remedy serves its intended function of “protecting consumers from overcharges resulting from price fixing.”5 As the Supreme Court noted, “[C]lass actions . . . may enhance the efficacy of private [antitrust] actions by permitting citizens to combine their limited resources to achieve a more powerful litigation posture.”6 Accordingly, “courts have repeatedly found antitrust claims to be particularly well suited for class actions . . . .”7 Without class actions, cartels and other antitrust violators that inflict widespread economic harm would have little to fear from the treble damages remedy. This is because, as a practical matter, class action cases are virtually the only way for most victims of anticompetitive behavior to receive compensation.8 A 2013 study that Professor Joshua Davis and I conducted documents the benefits of private enforcement by analyzing 60 of the largest recent successful private U.S. antitrust cases (defined as suits resolved since 1990 that recovered at least $50 million in cash for the victims9 ). These actions returned a total of $33.8–$35.8 billion in cash to victims of anticompetitive behavior.10 These figures do not include products, discounts, coupons, or the value of injunctive relief or precedent—only cash.11 Consequently, these totals significantly understate the actual benefits of this litigation to the victims involved. And, of course, this study covered only 60 suits (albeit 60 of the largest private recoveries) out of the many hundreds of private cases filed in the United States during this period. Of these 60 large private cases, 49 were class action suits.12 These cases recovered a total of $19.4–$21.0 billion—the majority of the amount analyzed in our study.13 Since these were among the largest private actions ever filed, specific conclusions based upon these results may not generalize perfectly to all class action cases. They do suggest, however, that without class action cases, effective and significant victim compensation would be reduced dramatically. Most Successful Class Actions Involve Collusion that Was Anticompetitive Almost every private antitrust case that results in a remedy does so through a settlement,14 so the underlying merits of the plaintiffs’ claims usually have not been definitively assessed by a court or jury. Critics sometimes use this fact to support assertions that class actions usually are meritless, that plaintiffs often receive huge sums from cases not involving anticompetitive conduct, and that private antitrust actions often amount to legalized blackmail or extortion.15 Antitrust class actions arise in widely varied market and factual settings, and views about the merits of specific cases and the litigation risks involved vary as well. This makes it extremely difficult to draw objective conclusions about the merits of settlements. Nevertheless, there are good reasons to believe that the vast majority of class action cases in the Davis/Lande study involved legitimate claims. Forty-one of the 49 class actions involved allegations of collusion,16 and the same conduct supporting the settlements gave rise to criminal penalties in 20 cases; to civil relief by the FTC or DOJ in 8 cases; to civil relief by a state or other governmental unit in 9 cases; to a trial that the defendants lost and that was not overturned on appeal in 7 cases; to a class being certified in 22 cases; and to plaintiffs surviving or prevailing at summary judgment in 12 cases.17 Overall, 44 of the 49 class action suits (90 percent) exhibited at least one of these forms of legal validation as to their merits. (The 5 actions that did not have at least one of these indicia settled too early for a substantive evaluation of their merits).18 These results are broadly consistent with a finding that Professor John Connor derived from an analysis of 130 private recoveries worldwide in international cartel cases for which he could obtain the necessary data.19 He found that of the 50 largest worldwide settlements, measured by their monetary recoveries in constant dollars, 49 had been filed against international cartels.20 Of these, 51 percent were follow-ups to successful DOJ prosecutions, and another 8 percent were filed after fines by the EC or other non-U.S. antitrust authorities.21 Using a different data set, Connor and I found that 36 of 71 (also 51 percent) successful U.S. class action recoveries followed successful DOJ criminal cases.22 This data does not prove that these or any other specific class action cases involved anticompetitive conduct. But critics who assert that most antitrust class actions are little more than legalized blackmail rely only on anecdotes, hypotheticals, and opinions (often of defendants in the cases), without support from studies, and with no reliable empirical evidence that the actions lack merit or that settlement amounts are excessive compared to the anticompetitive harm.23 To be fair, one should compare the above indicia of validity to the absence of any systematic evidence underpinning the critics’ charges. Critics also sometimes assert that remedies typically secured in class action settlements are at best dubious and often are completely worthless, consisting of useless coupons, meaningless discounts, and obsolete products. They argue with regard to cash payments (without providing even a single anecdote) that “issuing [class members] a check is often so expensive that administrative costs swallow the entire recovery.”24 According to many critics the only ones to benefit from private enforcement are the attorneys involved.25 The critics who make these charges, however, never offer evidence beyond opinions, hypotheticals, and occasional anecdotes. Indeed, for the 49 antitrust class action cases that Davis and I studied, the data show that, overall, only a total of approximately 20 percent of the recoveries went for attorney fees (14.3 percent) or claims administration expenses (4.1 percent).26 The rest was returned to the victims. This result is consistent with older estimates of legal fees in antitrust class action cases in the 6.5 to 21 percent range.27 Critics also sometimes examine what happened in other areas of law and assert that these outcomes occur in contemporary antitrust class action suits as well. But they never offer systematic evidence from antitrust cases to support their opinions.28 Interestingly, only one of the lawsuits in the Davis/Lande study involved a coupon remedy—the Auction Houses cases. However, those coupons were fully redeemable for cash if they were not used for five years.29 The actions Davis and I studied were among the largest antitrust class actions ever brought and therefore might not be representative of class action cases in general. Abuses surely occur from time to time in class action cases, as they do almost everywhere in the legal system. But a majority of the critics’ most egregious examples are from other areas of law or are quite old.30 No one has ever presented reliable evidence showing that such examples occur frequently or are typical of contemporary antitrust class action cases.31 Class Victims’ Compensation Has Been Modest, Generally Less than Their Damages Even though the $19.4–$21.0 billion that Davis and I showed had been returned to victims in 49 class action cases is a significant figure when viewed in absolute terms, it probably was not nearly enough to fully compensate all of the victims involved. To ascertain “Recovery Ratios” (the percentage of the illegal overcharges that was obtained in the form of monetary payments to victims in private actions), Professor Connor and I assembled a sample consisting of every completed private case against cartels discovered from 1990 to mid-2014 for which we could find the necessary information. For each of these 71 cases we assembled neutral scholarly estimates of affected commerce and overcharges and compared these estimates to the damages secured in the private actions filed against these cartels.32 The victims of only 14 of the 71 cartels (20 percent) recovered their damages (or more) in settlement. Only seven (10 percent) received more than double damages. The rest— the victims in 57 cases—received less than their damages. In four cases, the victims received less than 1 percent of damages, and in 12 cases they received less than 10 percent of damages. Overall, the median average settlement was 37 percent of single damages. The unweighted mean settlement (a figure that gives equal weights to the cartels that operated in large and small markets) was 66 percent. The mean and median average Recovery Ratios are higher (81 percent and 52 percent, respectively), for the 36 cases that were follow-ups to DOJ prosecutions that imposed criminal sanctions.33 Because these Recovery Ratios do not include any valuations of products, discounts, coupons, or the value of injunctive relief or precedent, the actual worth of these remedies to the victims is greater than the figures reported above. Nevertheless, it fairly can be concluded that antitrust class action cases often return important recoveries to victims that are significant in absolute terms, but usually are modest when measured against the sizes of the overcharges involved. Class Actions Deter Significant Amounts of Collusion and Other Anticompetitive Behavior Private class action cases serve to deter a substantial amount of anticompetitive activity, perhaps even more than the highly acclaimed anti-cartel program of the U.S. Department of Justice, which often results in prison sentences for cartel participants.34 Virtually every contemporary analysis of antitrust enforcement assumes that deterrence is an important purpose of the private treble damages remedy provision.35 The Supreme Court has underscored this point. For example, in Reiter v. Sonotone Corp., the Court explained: Congress created the treble-damages remedy of § 4 precisely for the purpose of encouraging private challenges to antitrust violations. These private suits provide a significant supplement to the limited resources available to the Department of Justice for enforcing the antitrust laws and deterring violations.36 The government, however, cannot be expected to do all of the necessary enforcement for a number of reasons, including budgetary constraints, “undue fear of losing cases; lack of awareness of industry conditions; overly suspicious views about complaints by ‘losers’ that they were in fact victims of anticompetitive behavior; higher turnover among government attorneys; and the unfortunate, but undeniable, reality that government enforcement (or non-enforcement) decisions are, at times, politically motivated.”37 A recent study highlights the deterrence benefits of private enforcement by comparing the likely deterrent effects of private antitrust enforcement to that of criminal anti-cartel enforcement by the Antitrust Division.38The surprising result is that private enforcement—and even just antitrust class action cases considered separately—probably deters more anticompetitive behavior. From 1990 through 2011 the total of DOJ corporate antitrust fines, individual fines, and restitution payments totaled $8.2 billion. (Dis)valuing a year of prison or house arrest at $6 million39 adds another $3.6 billion in total deterrence from the DOJ’s anti-cartel cases, yielding a total of approximately $11.8 billion. This is a substantial figure, and the possibility of incurring such sanctions surely has deterred a significant number of would-be antitrust violators.40 Nevertheless, these penalties amount to approximately 50 percent of the $19.4–$21.0 billion in cash alone (not including products, etc.) secured by just the 49 studied class cases that were completed during the same period.41 These private cases were only a portion of the hundreds of successful class action cases completed during this period (albeit they were many of the largest).42 The total amount of payouts in class action cases is so high that it probably deters more anticompetitive conduct than even the DOJ’s anti-cartel enforcement efforts.

#### Those cases force a reduction in ship size, improvement in services, and lower costs

Haralambides 19, Professor of Maritime Economics and Logistics at Erasmus University Rotterdam. (Hercules, 2019, Gigantism in container shipping, ports and global logistics: a time-lapse into the future Maritime Economics & Logistics volume 21, pages1–60, https://link.springer.com/article/10.1057/s41278-018-00116-0)

Such consolidation in an industry that is already highly concentrated is bound to take place under the increasing scrutiny of the regulator who, with the final consumer in mind, is likely to encourage more competition rather than further consolidation. If the liner shipping market thus becomes more open and competitive in the future, i.e. if alliance agreements regarding vessel sharing, investment planning, etc. are scrutinized more closely for their compatibility with competition law, as I expect, the joint filling of the ship will become more difficult and ship sizes shall by necessity decrease, together with an increase in the number of ports of call. Low prices would then be achieved through higher competition rather than big ship sizes. In such a scenario, shipping companies will be forced to provide the services their customers want, rather than the ones they find it convenient to offer. Shippers do not like too much transshipment and, if they could help it, they would like their container as close to them as possible. Reduction in ship size and more direct calls could thus follow the example of the air-transport industry. The most common jet flying across the Atlantic is not the 420-seat 747 jumbo but the 200 plus-seat Boeing 767. Eight out of 10 transatlantic planes are twin-engine craft such as the 767, its bigger brother the 777, or the various airbuses. This taste for smaller international jets reflects the fact that travellers now like to shun big international hubs such as London and New York and fly directly to their destinations. This is changing the international market into a web of direct intercontinental flights rather than one big air-bridge between London and New York.

#### Only antitrust can reduce the size of mega ships

Haralambides 19, Professor of Maritime Economics and Logistics at Erasmus University Rotterdam. (Hercules, 2019, Gigantism in container shipping, ports and global logistics: a time-lapse into the future Maritime Economics & Logistics volume 21, pages1–60, https://link.springer.com/article/10.1057/s41278-018-00116-0)

The impact of alliances on container shipping and ports I just stated that the gigantism in shipping has been induced by both port competition and shipping alliances. Indeed, without the ability to use each other’s ships, no carrier alone would be able to achieve a capacity utilization high enough to justify the use of present day mega-ships, while at the same time offering the frequency that shippers demand. But carriers have gone a step too far: At the time of writing, three alliances carry 80% of global trade. Such consolidation, in an industry that is already highly concentrated, is bound to take place under the increasing scrutiny of the regulator who, with the final consumer in mind, is likely to encourage more competition rather than further consolidation. If this happens, i.e., if container shipping becomes more open and competitive in the future, and alliance agreements regarding vessel sharing, investment planning, etc. are scrutinized more closely for their compatibility with competition law, as I expect, the joint filling of the ship will become more difficult and ship sizes shall by necessity decrease, together with an increase in the number of ports of call. Low prices would then be achieved through more competition rather than big ship sizes. This is more so when it is doubtful if the economies of scale in shipping are passed on to the final consumer, as required by the consortia block exception from the provisions of competition law in Europe.Footnote51

# 2AC

## Theory — New Affs Bad

## T — Private Sector

#### Counter-interpretation---the private sector includes an industry.

The Law Dictionary N.D., (The Law Dictionary: Featuring Black's Law Dictionary Free Online Legal Dictionary 2nd Ed. “Private Sector” , <https://thelawdictionary.org/private-sector/> , date accessed 9/11/21)

What is PRIVATE SECTOR? An industry that is composed of private companies. The corporate sector and the personal sector are encompassed in the private sector and they are responsible for the allocation of the majority of resources within the economy.

#### The private sector includes subsets---refers to many different actors.

Waler and Hofstetter 16 (Katharina Walker is Advisor for vocational skills development and Helvetas’ youth focal person. Sonja Hofstetter joined Swisscontact in Cambodia in July 2016. She is the Quality Assurance Manager and Deputy Team Leader of the Skills Development Programme. “ Study on Agricultural Technical and Vocational Education and Training (ATVET) in Developing Countries” Federal Department of Foreign Affairs FDFA, Swiss Agency for Development and Cooperation SDC, Global Programme Food Security, 25.1.2016, <https://www.shareweb.ch/site/Agriculture-and-Food-Security/focusareas/Documents/ras_capex_ATVET_Study_2016.pdf> , date accessed 7/19/21)

In many developing countries, the private sector1 [[BEGIN FOOTNOTE 1]] 1 The private sector is not perceived as a homogenous mass even though the terminology might suggest this to be the case. In this study, the term “private sector” is used to circumscribe the various actors such as small and medium sized companies, large companies, sectorial associations, business associations, chambers of commerce, etc.[[END FOOTNOTE 1]] faces challenges in finding adequately skilled employees. This also holds true for sectors linked to agriculture, e.g. processing, distribution, marketing, etc. The development of ATVET from a purely productivity-oriented approach to provide broader and more specialised skills sets along agricultural value chains is likely to raise the interest of private sector actors. This incentive can result in a stronger and more sustainable financial and conceptual engagement of employers in ATVET.

#### ‘By’ only requires anticompetitive practices resulting from private sector action.

Michigan Court of Appeals 10 (SAWYER, J. Opinion in DEQ. v. Worth Twp., 808 N.W.2d 260, 289 Mich. App. 414 (Ct. App. 2010). Google scholar caselaw. Date accessed 7/23/21).

Second, we look to the meaning of the phrase "by the municipality." This phrase is key because it answers plaintiffs' contention that MCL 324.3109(2) imposes responsibility for a discharge on a municipality without regard to the source of the discharge. That is, plaintiffs argue that any discharge of raw sewage within a municipality constitutes prima facie evidence of a violation by the municipality even if the municipality is not the source of the discharge. We disagree. The word "by" has many meanings. For its meaning as a nonlegal term, we look to a layman's dictionary rather than a legal one. Horace v. City of Pontiac, 456 Mich. 744, 756, 575 N.W.2d 762 (1998). We find these definitions from the Random House Webster's College Dictionary (1997) to be particularly helpful: "10. through the agency of" and "12. as a result or on the basis of[.]" Thus, MCL 324.3109(2) imposes responsibility on the municipality not when the violation merely occurs within the boundaries 264\*264 of the municipality, but when the violation occurs "through the agency of" the municipality or "as a result" of the municipality, that is to say, when it is the actions of the municipality that lead to the discharge.

## T — Prohibition

#### We meet---the plan increases prohibitions on alliance price fixing which is a per se violation.

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Many cooperative ventures between competing firms give way to greater competition, even though the absolute number of competing firms might be reduced. A collaborative effort would be labeled as a cartel if horizontal competitors collaborated with respect to price or some other market policy that had a direct and substantial effect on price. Collaboration for such purposes has in the past been declared per se illegal, without elaborate inquiry as to the precise harm caused, or the business' reasons for collaborating.

#### Even if not, the rule of reason is simply a test that decides whether certain conduct actually violates said prohibition.

Fishman 19, \*Todd Fishman, [Allen & Overy LLP](https://www.jdsupra.com/profile/Allen_Overy_docs/); (January 31st, 2019, “The Rule of Reason as a Bar to Criminal Antitrust Enforcement”, https://www.jdsupra.com/legalnews/the-rule-of-reason-as-a-bar-to-criminal-87406/)

Antitrust law’s rule of reason was born of technical necessity. By its terms, §1 of the Sherman Act prohibits “[e] very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade.” 15 U.S.C. §1. Despite the expansive language of the statutory prohibition, the Supreme Court has held that §1 prohibits only agreements that unreasonably restrain trade. *Board of Trade of Chicago v. United States*, 246 U.S. 231, 238 (1918); *Standard Oil Co. of N.J. v. United States*, 221 U.S. 1, 58-60 (1911). With the rule of reason, antitrust courts assumed a prudential role in administering the scope of antitrust violations, applying a factual inquiry weighing legitimate justifications for a restraint against any anticompetitive effects. Under the rule of reason, “the factfinder weighs all of the circumstances of a case in deciding whether a restrictive practice should be prohibited as imposing an unreasonable restraint on competition.” *Continental T.V. v. GTE Sylvania,* 433 U.S. 36, 49 (1977).

#### Counter-interpretation---rule of reason is a prohibition.

Light 19, Sarah E. Light Assistant Professor of Legal Studies and Business Ethics, The Wharton School, University of Pennsylvania., The Law of the Corporation as Environmental Law, 71 Stan. L. Rev. 137, 2019, Lexis/Nexis

While antitrust law can serve as an environmental mandate by prohibiting collusive behavior that keeps environmentally preferable goods from the market, there is also conflict between antitrust law's goals of promoting competition and environmental law's goals of promoting [\*177] conservation. 192 Because antitrust law's per se rule and rule of reason operate on a somewhat fluid continuum, 193 this Subpart discusses the two doctrines together. The per se rule operates as a prohibition, whereas the rule of reason operates as both a prohibition and a disincentive. As noted above, antitrust law generally prohibits certain types of market activity - price fixing, horizontal boycotts, and output limitations - as illegal per se, and harm to competition is presumed. 194 For example, if an industry association declines to award a seal of approval necessary for a product's sale without any good faith attempt to test the product's performance, but rather simply because that product is manufactured by a competitor, such an action would be illegal per se. 195 Under this Article's framework, a per se violation is thus a prohibition. The more fact-intensive inquiry under the rule of reason tests "whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition." 196 While this extremely broad statement might suggest that any fact is relevant to the inquiry, the salient facts under the rule of reason are "those that tend to establish whether a restraint increases or decreases output, or decreases or increases prices." 197 If an anticompetitive effect is found, then the action is illegal and the rule of reason operates, like the per se rule, as a prohibition. 198 The rule of reason can also operate as a disincentive, even if no [\*178] court finds an anticompetitive effect, as uncertainty and litigation risk may discourage firms from undertaking legally permissible, environmentally positive industry collaborations. 199 Associations of firms have adopted numerous mechanisms of private environmental governance to address the management of common pool resources like fisheries, forests, and the global climate. 200 Examples include the Sustainable Apparel Coalition's Higg Index 201 and the American Chemistry Council's Responsible Care program. 202 But private industry standards raise special antitrust concerns. An agreement among competitors with respect to product or process specifications may exclude competitors who fail to meet such standards, raising the specter that such industry collaborations really constitute output limitations or efforts to limit competition. 203 While the U.S. Supreme Court has scrutinized private standard-setting associations carefully, 204 it has noted that if associations "promulgate … standards based on the merits of objective expert judgments and through procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition … , those private standards can have significant procompetitive advantages." 205 In the absence of price fixing or a boycott, a rule of reason analysis generally applies to product standard setting by private associations. 206 The uncertain outcome [\*179] inherent in the application of antitrust law in this context could therefore serve as a potential disincentive to the adoption of private industry standards. 207 The challenge of course is that some form of explicit sanctions on noncompliant industry members may be necessary for private industry standards to be effective. In the context of private reputational mechanisms like the New York Diamond Dealers Club, 208 Barak Richman has pointed out that the Club's use of reputational sanctions and voluntary refusals to deal with actors who flout industry norms, while welfare enhancing, could nonetheless amount to violations of antitrust law. 209 This echoes the concern raised by Andrew King and Michael Lenox in their extensive empirical analysis of the Responsible Care program created by the Chemical Manufacturers Association (now the American Chemistry Council). 210 King and Lenox concluded that the absence of explicit sanctions on members who failed to meet the standards set by the program left the program vulnerable to "opportunism." 211 While they suggested that industry associations could look to third parties to enforce the rules, 212 an alternative way to facilitate the long-term environmental benefits of stronger sanctions would be to interpret antitrust law in conformity with the environmental priority principle presented below. 213 [\*180] In some instances, the conflict between the values of promoting competition and conserving environmental resources can be stark. 214 Jonathan Adler, for example, has identified this conflict in the context of fisheries - a tragedy of the commons situation in which some form of collective action is required to avoid overfishing. 215 He cites as an example Manaka v. Monterey Sardine Industries, Inc., in which a fisherman was excluded from a local fishing cooperative. 216 The fisherman sued the cooperative under the Sherman Act, and the court found an antitrust violation in his exclusion. 217 While the fishing cooperative's policies were no doubt exclusionary, Adler contends that they also promoted conservation by restricting catch. 218 The fishery collapsed by the 1950s, a collapse Adler hypothesizes might have been "inevitable" but that perhaps might not have occurred in the absence of the antitrust suit. 219 While a court performing a rule of reason analysis must consider whether a restraint on trade suppresses or destroys competition, Adler points out that courts may also "consider offsetting efficiencies from otherwise anticompetitive arrangements." 220 It is not clear, however, that the courts have consistently taken these factors into account. 221 Among other potential remedies, Adler argues that to resolve this tension between antitrust law, on the one hand, and private collective action to conserve environmental resources, on the other, courts should more actively consider the "ancillary conservation benefits of otherwise anticompetitive conduct." 222 Recognizing the long-term health of a fishery would be consistent with antitrust law's purpose of ensuring viable markets exist in the future, and consistent with the environmental priority principle introduced below. 223

## CP — Multilat Cooperation

## CP — Proto

#### Space colonization causes asteroid terrorism---extinction

Singer 1 (Clifford E., professor of nuclear engineering and director of the Program in Arms Control, Disarmament, and International Security at the University of Illinois at Urbana — Champaign, Spring 2001, Swords and Ploughshares, <http://www.acdis.uiuc.edu/homepage_docs/pubs_docs/S&P_docs/S&P_XIII/Singer.htm>

However the technology to build isolated extraterrestrial settlements naturally brings along with it another potentially powerful technology—the ability to move sizeable asteroids. Back in 1979 it was shown that this is not as difficult as one might at first think. The requisite technique is to land a spacecraft on one asteroid, dig up material and throw it the path of another asteroid that will approach nearby, and perturb the orbit of that asteroid until it passes nearby another large object. Once an asteroid or comet makes a controlled approach near any planet but Mercury or Pluto, then it can easily be directed near or at the earth at enormous velocity. Fortunately for our hypothetical descendants here destroying all human life on earth by asteroid impact would likely require moving objects with a diameter in excess of ten kilometers. While there are many of these, the required orbit perturbation would require a lot of lead-time and work and could be very difficult to motivate and conceal. Nevertheless with contributions from this technology a dispute between the earth and a handful of its fragile far-flung offspring in space that is carried to the extreme could conceivably lead to human extinction. Only when settlements in space are sufficiently numerous or far flung would such a possibility effectively be ruled out, primarily by physical considerations.

#### Space exploration will cause superdiseases---Earth bacteria rapidly mutate

O’Neill 08 [Ian O’Neill, 3-11-2008, “Germs Living In Space,” Universe Today, <http://www.universetoday.com/2008/03/11/germs-living-in-space-almost-three-times-as-likely-to-cause-disease/>]///CW

In one experiment on board Space Shuttle Endeavor (STS-123) launched early this morning (at 2:28 am EST), the reaction of terrestrial bacteria to zero-G will be tested. When compared with test bacteria bred here on Earth, previous studies suggest that germs bred in space are far more potent and are more likely to cause illness to people in space. The Endeavor mission will continue this experiment in the aim to find some way to prevent these microscopic astronauts causing too many problems to the continuing missions on board the International Space Station and future space tourism companies. Until a solution is found, don't go ordering fish off the in-flight menu on your next spaceship ride… Wherever humans go, a whole zoo of bacteria will follow. Most of the bacteria hitching a ride on our skin and inside our bodies live in symbiosis with us, but occasionally problem bugs like salmonella or Escherichia coli (E-coli) can get out of control, causing problems such as common food poisoning to more serious, life-threatening ailments such as tetanus, diphtheria, syphilis, cholera… (the list is pretty long.) So, as humans venture into space, it is inevitable that bacteria will come too - the whole symbiotic and parasitic jungle - exploring space with us. Bacteria will mutate, often very quickly, adapting to the environment surrounding the little microbes. Mutation is the difference between a bacteria being harmless to becoming deadly. Mutations help bacteria to survive and as an example, they can become antibiotic resistant. This is a huge problem in places where antibiotics are used very regularly (such as hospitals); genetic information is passed down the generations of bacteria (often doubling in population in a matter of minutes). If just one microbe has the genetic ability to survive a type of antibiotic, its number will multiply, creating a strain of "superbug" that can avoid being killed by antibiotics - one of the most basic examples of "natural selection". Methicillin-resistant Staphylococcus aureus (MRSA) is one particular nasty strain of the otherwise benign Staphylococcus genus which has mutated to resist commonly used antibiotics.

## K — Abolition

## Case — Wipeout ☹

#### Human existence is desirable---life is a prerequisite to generate value and ponder secondary questions of ethics

Elizabeth Burns 17. Elizabeth Finneron-Burns is a Teaching Fellow at the University of Warwick and an Affiliated Researcher at the Institute for Futures Studies in Stockholm, What’s wrong with human extinction?, <http://www.tandfonline.com/doi/pdf/10.1080/00455091.2016.1278150?needAccess=true>, Canadian Journal of Philosophy, 2017)

Many, though certainly not all, people might believe that it would be wrong to bring about the end of the human species, and the reasons given for this belief are various. I begin by considering four reasons that could be given against the moral permissibility of human extinction. I will argue that only those reasons that impact the people who exist at the time that the extinction or the knowledge of the upcoming extinction occurs, can explain its wrongness. I use this conclusion to then consider in which cases human extinction would be morally permissible or impermissible, arguing that there is only a small class of cases in which it would not be wrong to cause the extinction of the human race or allow it to happen. 2.1. It would prevent the existence of very many happy people One reason of human extinction might be considered to be wrong lies in the value of human life itself. The thought here might be that it is a good thing for people to exist and enjoy happy lives and extinction would deprive more people of enjoying this good. The ‘good’ in this case could be understood in at least two ways. According to the first, one might believe that you benefit a person by bringing them into existence, or at least, that it is good for that person that they come to exist. The second view might hold that if humans were to go extinct, the utility foregone by the billions (or more) of people who could have lived but will now never get that opportunity, renders allowing human extinction to take place an incidence of wrongdoing. An example of this view can be found in two quotes from an Effective Altruism blog post by Peter Singer, Nick Beckstead and Matt Wage: One very bad thing about human extinction would be that billions of people would likely die painful deaths. But in our view, this is by far not the worst thing about human extinction. The worst thing about human extinction is that there would be no future generations. Since there could be so many generations in our future, the value of all those generations together greatly exceeds the value of the current generation. (Beckstead, Singer, and Wage 2013) The authors are making two claims. The first is that there is value in human life and also something valuable about creating future people which gives us a reason to do so; furthermore, it would be a very bad thing if we did not do so. The second is that, not only would it be a bad thing for there to be no future people, but it would actually be the worst thing about extinction. Since happy human lives have value, and the number of potential people who could ever exist is far greater than the number of people who exist at any one time, even if the extinction were brought about through the painful deaths of currently existing people, the former’s loss would be greater than the latter’s. Both claims are assuming that there is an intrinsic value in the existence of potential human life. The second claim makes the further assumption that the forgone value of the potential lives that could be lived is greater than the disvalue that would be accrued by people existing at the time of the extinction through suffering from painful and/or premature deaths. The best-known author of the post, Peter Singer is a prominent utilitarian, so it is not surprising that he would lament the potential lack of future human lives per se. However, it is not just utilitarians who share this view, even if implicitly. Indeed, other philosophers also seem to imply that they share the intuition that there is just something wrong with causing or failing to prevent the extinction of the human species such that we prevent more ‘people’ from having the ‘opportunity to exist’. Stephen Gardiner (2009) and Martin O’Neill (personal correspondence), both sympathetic to contract theory, for example, also find it intuitive that we should want more generations to have the opportunity to exist, assuming that they have worth-living lives, and I find it plausible to think that many other people (philosophers and non-philosophers alike) probably share this intuition. When we talk about future lives being ‘prevented’, we are saying that a possible person or a set of possible people who could potentially have existed will now never actually come to exist. To say that it is wrong to prevent people from existing could either mean that a possible person could reasonably reject a principle that permitted us not to create them, or that the foregone value of their lives provides a reason for rejecting any principle that permits extinction. To make the first claim we would have to argue that a possible person could reasonably reject any principle that prevented their existence on the grounds that it prevented them in particular from existing. However, this is implausible for two reasons. First, we can only wrong someone who did, does or will actually exist because wronging involves failing to take a person’s interests into account. When considering the permissibility of a principle allowing us not to create Person X, we cannot take X’s interest in being created into account because X will not exist if we follow the principle. By considering the standpoint of a person in our deliberations we consider the burdens they will have to bear as a result of the principle. In this case, there is no one who will bear any burdens since if the principle is followed (that is, if we do not create X), X will not exist to bear any burdens. So, only people who do/will actually exist can bear the brunt of a principle, and therefore occupy a standpoint that is owed justification. Second, existence is not an interest at all and a possible person is not disadvantaged by not being caused to exist. Rather than being an interest, it is a necessary requirement in order to have interests. Rivka Weinberg describes it as ‘neutral’ because causing a person to exist is to create a subject who can have interests; existence is not an interest itself.3 In order to be disadvantaged, there must be some detrimental effect on your interests. However, without existence, a person does not have any interests so they cannot be disadvantaged by being kept out of existence. But, as Weinberg points out, ‘never having interests itself could not be contrary to people’s interests since without interest bearers, there can be no ‘they’ for it to be bad for’ (Weinberg 2008, 13). So, a principle that results in some possible people never becoming actual does not impose any costs on those ‘people’ because nobody is disadvantaged by not coming into existence.4 It therefore seems that it cannot be wrong to fail to bring particular people into existence. This would mean that no one acts wrongly when they fail to create another person. Writ large, it would also not be wrong if everybody decided to exercise their prerogative not to create new people and potentially, by consequence, allow human extinction. One might respond here by saying that although it may be permissible for one person to fail to create a new person, it is not permissible if everyone chooses to do so because human lives have value and allowing human extinction would be to forgo a huge amount of value in the world. This takes us to the second way of understanding the potential wrongness of preventing people from existing — the foregone value of a life provides a reason for rejecting any principle that prevents it. One possible reply to this claim turns on the fact that many philosophers acknowledge that the only, or at least the best, way to think about the value of (individual or groups of) possible people’s lives is in impersonal terms (Parfit 1984; Reiman 2007; McMahan 2009). Jeff McMahan, for example, writes ‘at the time of one’s choice there is no one who exists or will exist independently of that choice for whose sake one could be acting in causing him or her to exist … it seems therefore that any reason to cause or not to cause an individual to exist … is best considered an impersonal rather than individual-affecting reason’ (McMahan 2009, 52). Another reply along similar lines would be to appeal to the value that is lost or at least foregone when we fail to bring into existence a next (or several next) generations of people with worth-living lives. Since ex hypothesi worth-living lives have positive value, it is better to create more such lives and worse to create fewer. Human extinction by definition is the creation of no future lives and would ‘deprive’ billions of ‘people’ of the opportunity to live worth-living lives. This might reduce the amount of value in the world at the time of the extinction (by killing already existing people), but it would also prevent a much vaster amount of value in the future (by failing to create more people). Both replies depend on the impersonal value of human life. However, recall that in contractualism impersonal values are not on their own grounds for reasonably rejecting principles. Scanlon himself says that although we have a strong reason not to destroy existing human lives, this reason ‘does not flow from the thought that it is a good thing for there to be more human life rather than less’ (104). In contractualism, something cannot be wrong unless there is an impact on a person. Thus, neither the impersonal value of creating a particular person nor the impersonal value of human life writ large could on its own provide a reason for rejecting a principle permitting human extinction. It seems therefore that the fact that extinction would deprive future people of the opportunity to live worth-living lives (either by failing to create either particular future people or future people in general) cannot provide us with a reason to consider human extinction to be wrong. Although the lost value of these ‘lives’ itself cannot be the reason explaining the wrongness of extinction, it is possible the knowledge of this loss might create a personal reason for some existing people. I will consider this possibility later on in section (d). But first I move to the second reason human extinction might be wrong per se. 2.2. It would mean the loss of the only known form of intelligent life and all civilization and intellectual progress would be lost A second reason we might think it would be wrong to cause human extinction is the loss that would occur of the only (known) form of rational life and the knowledge and civilization that that form of life has created. One thought here could be that just as some might consider it wrong to destroy an individual human heritage monument like the Sphinx, it would also be wrong if the advances made by humans over the past few millennia were lost or prevented from progressing. A related argument is made by those who feel that there is something special about humans’ capacity for rationality which is valuable in itself. Since humans are the only intelligent life that we know of, it would be a loss, in itself, to the world for that to end. I admit that I struggle to fully appreciate this thought. It seems to me that Henry Sidgwick was correct in thinking that these things are only important insofar as they are important to humans (Sidgwick 1874, I.IX.4).5 If there is no form of intelligent life in the future, who would there be to lament its loss since intelligent life is the only form of life capable of appreciating intelligence? Similarly, if there is no one with the rational capacity to appreciate historic monuments and civil progress, who would there be to be negatively affected or even notice the loss?6 However, even if there is nothing special about human rationality, just as some people try to prevent the extinction of nonhuman animal species, we might think that we ought also to prevent human extinction for the sake of biodiversity. The thought in this, as well as the earlier examples, must be that it would somehow be bad for the world if there were no more humans even though there would be no one for whom it is bad. This may be so but the only way to understand this reason is impersonally. Since we are concerned with wrongness rather than badness, we must ask whether something that impacts no one’s well-being, status or claims can be wrong. As we saw earlier, in the contractualist framework reasons must be personal rather than impersonal in order to provide grounds for reasonable rejection (Scanlon 1998, 218–223). Since the loss of civilization, intelligent life or biodiversity are per se impersonal reasons, there is no standpoint from which these reasons could be used to reasonably reject a principle that permitted extinction. Therefore, causing human extinction on the grounds of the loss of civilization, rational life or biodiversity would not be wrong. 2.3. Existing people would endure physical pain and/or painful and/or premature deaths Thinking about the ways in which human extinction might come about brings to the fore two more reasons it might be wrong. It could, for example, occur if all humans (or at least the critical number needed to be unable to replenish the population, leading to eventual extinction) underwent a sterilization procedure. Or perhaps it could come about due to anthropogenic climate change or a massive asteroid hitting the Earth and wiping out the species in the same way it did the dinosaurs millions of years ago. Each of these scenarios would involve significant physical and/or non-physical harms to existing people and their interests. Physically, people might suffer premature and possibly also painful deaths, for example. It is not hard to imagine examples in which the process of extinction could cause premature death. A nuclear winter that killed everyone or even just every woman under the age of 50 is a clear example of such a case. Obviously, some types of premature death themselves cannot be reasons to reject a principle. Every person dies eventually, sometimes earlier than the standard expected lifespan due to accidents or causes like spontaneously occurring incurable cancers. A cause such as disease is not a moral agent and therefore it cannot be wrong if it unavoidably kills a person prematurely. Scanlon says that the fact that a principle would reduce a person’s well-being gives that person a reason to reject the principle: ‘components of well-being figure prominently as grounds for reasonable rejection’ (Scanlon 1998, 214). However, it is not settled yet whether premature death is a setback to well-being. Some philosophers hold that death is a harm to the person who dies, whilst others argue that it is not.7 I will argue, however, that regardless of who is correct in that debate, being caused to die prematurely can be reason to reject a principle when it fails to show respect to the person as a rational agent. Scanlon says that recognizing others as rational beings with interests involves seeing reason to preserve life and prevent death: ‘appreciating the value of human life is primarily a matter of seeing human lives as something to be respected, where this involves seeing reasons not to destroy them, reasons to protect them, and reasons to want them to go well’ (Scanlon 1998, 104). The ‘respect for life’ in this case is a respect for the person living, not respect for human life in the abstract. This means that we can sometimes fail to protect human life without acting wrongfully if we still respect the person living. Scanlon gives the example of a person who faces a life of unending and extreme pain such that she wishes to end it by committing suicide. Scanlon does not think that the suicidal person shows a lack of respect for her own life by seeking to end it because the person whose life it is has no reason to want it to go on. This is important to note because it emphasizes the fact that the respect for human life is person-affecting. It is not wrong to murder because of the impersonal disvalue of death in general, but because taking someone’s life without their permission shows disrespect to that person. This supports its inclusion as a reason in the contractualist formula, regardless of what side ends up winning the ‘is death a harm?’ debate because even if death turns out not to harm the person who died, ending their life without their consent shows disrespect to that person. A person who could reject a principle permitting another to cause his or her premature death presumably does not wish to die at that time, or in that manner. Thus, if they are killed without their consent, their interests have not been taken into account, and they have a reason to reject the principle that allowed their premature death.8 This is as true in the case of death due to extinction as it is for death due to murder. However, physical pain may also be caused to existing people without killing them, but still resulting in human extinction. Imagine, for example, surgically removing everyone’s reproductive organs in order to prevent the creation of any future people. Another example could be a nuclear bomb that did not kill anyone, but did painfully render them infertile through illness or injury. These would be cases in which physical pain (through surgery or bombs) was inflicted on existing people and the extinction came about as a result of the painful incident rather than through death. Furthermore, one could imagine a situation in which a bomb (for example) killed enough people to cause extinction, but some people remained alive, but in terrible pain from injuries. It seems uncontroversial that the infliction of physical pain could be a reason to reject a principle. Although Scanlon says that an impact on well-being is not the only reason to reject principles, it plays a significant role, and indeed, most principles are likely to be rejected due to a negative impact on a person’s well-being, physical or otherwise. It may be queried here whether it is actually the involuntariness of the pain that is grounds for reasonable rejection rather than the physical pain itself because not all pain that a person suffers is involuntary. One can imagine acts that can cause physical pain that are not rejectable — base jumping or life-saving or improving surgery, for example. On the other hand, pushing someone off a cliff or cutting him with a scalpel against his will are clearly rejectable acts. The difference between the two cases is that in the former, the person having the pain inflicted has consented to that pain or risk of pain. My view is that they cannot be separated in these cases and it is involuntary physical pain that is the grounds for reasonable rejection. Thus, the fact that a principle would allow unwanted physical harm gives a person who would be subjected to that harm a reason to reject the principle. Of course the mere fact that a principle causes involuntary physical harm or premature death is not sufficient to declare that the principle is rejectable — there might be countervailing reasons. In the case of extinction, what countervailing reasons might be offered in favour of the involuntary physical pain/ death-inducing harm? One such reason that might be offered is that humans are a harm to the natural environment and that the world might be a better place if there were no humans in it. It could be that humans might rightfully be considered an all-things-considered hindrance to the world rather than a benefit to it given the fact that we have been largely responsible for the extinction of many species, pollution and, most recently, climate change which have all negatively affected the natural environment in ways we are only just beginning to understand. Thus, the fact that human extinction would improve the natural environment (or at least prevent it from degrading further), is a countervailing reason in favour of extinction to be weighed against the reasons held by humans who would experience physical pain or premature death. However, the good of the environment as described above is by definition not a personal reason. Just like the loss of rational life and civilization, therefore, it cannot be a reason on its own when determining what is wrong and countervail the strong personal reasons to avoid pain/death that is held by the people who would suffer from it.9 Every person existing at the time of the extinction would have a reason to reject that principle on the grounds of the physical pain they are being forced to endure against their will that could not be countervailed by impersonal considerations such as the negative impact humans may have on the earth. Therefore, a principle that permitted extinction to be accomplished in a way that caused involuntary physical pain or premature death could quite clearly be rejectable by existing people with no relevant countervailing reasons. This means that human extinction that came about in this way would be wrong. There are of course also additional reasons they could reject a similar principle which I now turn to address in the next section. 2.4. Existing people could endure non-physical harms I said earlier than the fact in itself that there would not be any future people is an impersonal reason and can therefore not be a reason to reject a principle permitting extinction. However, this impersonal reason could give rise to a personal reason that is admissible. So, the final important reason people might think that human extinction would be wrong is that there could be various deleterious psychological effects that would be endured by existing people having the knowledge that there would be no future generations. There are two main sources of this trauma, both arising from the knowledge that there will be no more people. The first relates to individual people and the undesired negative effect on well-being that would be experienced by those who would have wanted to have children. Whilst this is by no means universal, it is fair to say that a good proportion of people feel a strong pull towards reproduction and having their lineage continue in some way. Samuel Scheffler describes the pull towards reproduction as a ‘desire for a personalized relationship with the future’ (Scheffler 2012, 31). Reproducing is a widely held desire and the joys of parenthood are ones that many people wish to experience. For these people knowing that they would not have descendants (or that their descendants will endure painful and/or premature deaths) could create a sense of despair and pointlessness of life. Furthermore, the inability to reproduce and have your own children because of a principle/policy that prevents you (either through bans or physical interventions) would be a significant infringement of what we consider to be a basic right to control what happens to your body. For these reasons, knowing that you will have no descendants could cause significant psychological traumas or harms even if there were no associated physical harm. The second is a more general, higher level sense of hopelessness or despair that there will be no more humans and that your projects will end with you. Even those who did not feel a strong desire to procreate themselves might feel a sense of hopelessness that any projects or goals they have for the future would not be fulfilled. Many of the projects and goals we work towards during our lifetime are also at least partly future-oriented. Why bother continuing the search for a cure for cancer if either it will not be found within humans’ lifetime, and/or there will be no future people to benefit from it once it is found? Similar projects and goals that might lose their meaning when confronted with extinction include politics, artistic pursuits and even the type of philosophical work with which this paper is concerned. Even more extreme, through the words of the character Theo Faron, P.D. James says in his novel The Children of Men that ‘without the hope of posterity for our race if not for ourselves, without the assurance that we being dead yet live, all pleasures of the mind and senses sometimes seem to me no more than pathetic and crumbling defences shored up against our ruins’ (James 2006, 9). Even if James’ claim is a bit hyperbolic and all pleasures would not actually be lost, I agree with Scheffler in finding it not implausible that the knowledge that extinction was coming and that there would be no more people would have at least a general depressive effect on people’s motivation and confidence in the value of and joy in their activities (Scheffler 2012, 43). Both sources of psychological harm are personal reasons to reject a principle that permitted human extinction. Existing people could therefore reasonably reject the principle for either of these reasons. Psychological pain and the inability to pursue your personal projects, goals, and aims, are all acceptable reasons for rejecting principles in the contractualist framework. So too are infringements of rights and entitlements that we accept as important for people’s lives. These psychological reasons, then, are also valid reasons to reject principles that permitted or required human extinction.

#### Universal extinction inevitable

**Kaku in ’04** (Michio, Professor of Physics at City University of New York, Discover, “How to Survive the End of the Universe (In 7 Steps): The cold, dark end is coming. We need an escape plan”, Volume 25, Number 12, December, http://www.discover.com/issues/dec-04/features/survive-end-of-universe/)

The universe is out of control. Not only is it expanding but the expansion itself is accelerating. Most likely, such expansion can end only one way: in stillness and total darkness, with temperatures near absolute zero, conditions utterly inhospitable to life. That became evident in 1998, when astronomers at the Lawrence Berkeley National Laboratory and Australian National University were analyzing extremely distant, and thus ancient, Type Ia supernova explosions to measure their rate of motion away from us. (Type Ia supernovas are roughly the same throughout the universe, so they provide an ideal “standard candle” by which to measure the rate of expansion of the universe.) Physicists, scrambling to their blackboards, deduced that a “dark energy” of unknown origin must be acting as an antigravitational force, pushing galaxies apart. The more the universe expands, the more dark energy there is to make it expand even faster, ultimately leading to a runaway cosmos. Albert Einstein introduced the idea of dark energy mathematically in 1917 as he further developed his theory of general relativity. More evidence came last year, when data from the Wilkinson Microwave Anisotropy Probe, or WMAP, which analyzes the cosmic radiation left over from the Big Bang, found that dark energy makes up a full 73 percent of everything in the universe. Dark matter makes up 23 percent. The matter we are familiar with—the stuff of planets, stars, and gas clouds—makes up only about 4 percent of the universe. As the increasing amount of dark energy pushes galaxies apart faster and faster, the universe will become increasingly dark, cold, and lonely. Temperatures will plunge as the remaining energy is spread across more space. The stars will exhaust their nuclear fuel, galaxies will cease to illuminate the heavens, and the universe will be littered with dead dwarf stars, decrepit neutron stars, and black holes. The most advanced civilizations will be reduced to huddling around the last flickering embers of energy—the faint Hawking radiation emitted by black holes. Insofar as intelligence involves the ability to process information, this, too, will fade. Machines, whether cells or hydroelectric dams, extract work from temperature and energy gradients. As cosmic temperatures approach the same ultralow point, those differentials will disappear, bringing all work, energy flow, and information—and the life that depends on them—to a frigid halt. So much for intelligence.

#### Aliens don’t exist---new studies disprove

Redd, 18—Space.com contributor, citing Anders Sandberg, philosopher at the University of Oxford (Nolan Taylor, “Alien Life May Be Rare in Our Galaxy Today,” <https://www.space.com/41080-alien-life-may-be-rare-today.html>, dml)

The hunt for E.T. may have gotten more difficult. New research suggests that alien life may not be as widespread as we had hoped. When it comes to hunting for alien civilizations, a key question is how plentiful intelligent extraterrestrials are in the universe — but the answer to that question depends on a lot of knowledge scientists don't have yet. In 1960, Frank Drake, an astronomer and hunter of extraterrestrial intelligence, devised an equation to calculate the probability of hearing from an intelligent, communicating alien civilization. The Drake equation relies on the values of several constants to determine how widespread such civilizations might be, how likely they are to evolve and how likely they are to have broadcast when we were able to detect. While some of the numbers, such as how many stars have planets around them, are fairly well-known, others, such as the fraction of those worlds with life, remain uncertain. [The Father of SETI: Q&A with Astronomer Frank Drake] Over the years, scientists have attempted to "solve" the Drake equation. But the uncertain quantities required estimation. Optimists tended to put in numbers that would reflect their thoughts — life on other planets is plentiful! Civilizations last for millions of years! Pessimists skew their results the other way, assuming life is rare and civilizations quickly burn out. Searching for a more accurate answer to the question 'Are we alone?' the new study's researchers have included the uncertainties of the numbers — how confident scientists are in them. Rather than giving each component a hard-and-fast amount, they attempted to gauge the strength of the research into these questions. "We can show that, given current scientific uncertainty, we get a distribution that could make both the optimists and pessimists happy at the same time: a fair chance of several alien civilizations, but also a fair chance of no aliens within the visible universe," Anders Sandberg told Space.com by email. Sandberg, a philosopher at the University of Oxford, is the lead author on the new research. "The uncertain sky should not be surprising given our level of uncertainty," Sandberg said. The study, which is available on the preprint site Arxiv, has been submitted to the journal Royal Society of London A. Alone in the universe? In 1950, Italian-American physicist Enrico Fermi looked to the skies and asked, "Where are they?" If the universe is filled with alien civilizations, why have none of them contacted Earth? The question, referred to as the Fermi paradox, provided the fuel for the Drake equation. The Drake equation has never sought a definite number. Instead, it has been used to make a rough estimate of the number of detectable civilizations in the Milky Way (N). According to the equation, N = RfpncflfifcL That number is based on the rate of star formation per year (R), the fraction of stars with planets (fp), the number of habitable planets per system of planets (nc), the fraction of those planets with life (fl), the fraction of life that is intelligent (fi), the fraction of intelligent civilizations that are detectable (fc), and the average lifetime of such civilizations in years (L). Observations of distant stars, with instruments such as NASA's Kepler telescope, have revealed that planets are plentiful around stars, and habitable worlds are spread across the galaxy. All the other variables remain up in the air. [The Most Intriguing Alien Planet Discoveries of 2017] Sandberg and his colleagues decided to change the inputs for the unknown parts of the equation. Rather than estimating a single number, they included the range. For instance, saying that there is a 1/100 chance for life to evolve doesn't make it clear whether the odds are exactly 1 out of 100, between 1/1000 and 1/10, or between one and one in a googol (10^100), Sandberg said. "One of the features that differs in [the new research] from previous Fermi paradox analyses is that the current authors tackle the problem of order-of-magnitude uncertainties in each component of Drake's equation in a less-biased, more robust way," Ian Jordan, an astronomer and engineer at the Space Telescope Science Institute in Baltimore, told Space.com in an email. Jordan is not part of the new research. By factoring in the scientific uncertainty for components like how often life evolves, the researchers determined that the odds that we are the only intelligent life in the Milky Way range between 53 and 99.6 percent. The odds get a bit better when they include the observable universe — the chance that humanity is alone ranges between 39 and 85 percent. The research was published on the journal preprint server arXiv. The new numbers mean there's a good chance humanity is the only detectable intelligent civilization around. Sandberg doesn't necessarily think that's a bad thing.

#### No extinction – or cosmic rays would have destroyed us

Don Lincoln 2-10-2016; Don Lincoln, Senior Scientist, Fermi National Accelerator Laboratory; Adjunct Professor of Physics, University of Notre Dame “Will the World's Largest Supercollider Spawn a Black Hole? (Op-Ed)” http://www.livescience.com/53669-can-particle-accelerators-spawn-black-holes-and-global-extinction.html

Luckily, we have the most compelling answer of all: Nature has been running the equivalent of countless LHC experiments since the universe began — and still does, every day, on Earth. Space is a violent place, with stars throwing off literally tons of material every second — and that's the tamest of phenomena. Supernovas occur, blasting star stuff across the cosmos. Neutron stars can use intense magnetic fields to accelerate particles from one side of the universe to another. Pairs of orbiting black holes can merge, shaking the very fabric of space itself. All of those phenomena, as well as many others, cause subatomic particles to be flung across space. Mostly consisting of protons, those particles travel the lengths of the universe, stopping only when an inconvenient bit of matter gets in their way. And, occasionally, that inconvenient bit of matter is the Earth. We call these intergalactic bullets — mostly high-energy protons — "cosmic rays." Cosmic rays carry a range of energies, from the almost negligible, to energies that absolutely dwarf those of the LHC. To give a sense of scale, the LHC collides particles together with a total energy of 13 trillion (or tera) electron volts of energy (TeV). The highest-energy cosmic ray ever recorded was an unfathomable 300,000,000 TeV of energy. Now, cosmic rays of that prodigious energy are very rare. The energy of more common cosmic rays is much lower. But here's the point: Cosmic rays of the energy of a single LHC beam hit the Earth about half a quadrillion times per second. No collider necessary. Remember that cosmic rays are mostly protons. That's because almost all of the matter in the universe is hydrogen, which consists of a single proton and a single electron. When they hit the Earth's atmosphere, they collide with nitrogen or oxygen or other atoms, which are composed of protons and neutrons. Accordingly, cosmic rays hitting the Earth are just two protons slamming together — this is exactly what is happening inside the LHC. Two protons slamming together. Thus, the barrage of cosmic rays from space have been doing the equivalent of LHC research since the Earth began — we just haven't had the luxury of being able to watch. Now one must be careful. It's easy to throw numbers around a bit glibly. While there are lots of cosmic rays hitting the atmosphere with LHC energies, the situations between what happens inside the LHC and what happens with cosmic rays everywhere on Earth are a bit different. Cosmic ray collisions involve fast-moving protons hitting stationary ones, while LHC collisions involve two beams of fast-moving protons hitting head-on. Head-on collisions are intrinsically more violent; so to make a fair comparison, we need to consider cosmic rays that are much higher in energy, specifically about 100,000 times higher than LHC energies. Cosmic rays of that energy are rarer than the lower energy ones, but still 500,000,000 of them hit the Earth's atmosphere every year. When you remember that the Earth is 4.5 billion years old, you realize that the Earth has experienced something like 2 billion billion cosmic ray collisions with LHC-equivalent energies (or higher) in the atmosphere since the Earth formed. In order to make that many collisions, we'd need to run the LHC continuously for 70 years. Given that we're still here, we can conclude that we're safe.

#### Humans are critical to save the universe from the big crunch- big bang rebounds- we outweigh

**Zey** ’**01** (Michael, executive director of the expansionary institute The Futurist n3 v35 p28, May 21\_

**Our species is guided by a sense of higher purpose, a destiny, as it were, of which we are only now becoming aware. This new vision synthesizes a century of scientific and theoretic research into the nature of the human species and our ultimate place and role in the evolving universe.** The emergence of human consciousness and human intelligence is a unique historical event—**the human race’s capacity to vitalize, bring life, order, creativity, and novelty to everything it touches, sets the world on a completely new evolutionary trajectory. Moreover, the world now possesses an entity, the human species, that could develop tools to save the universe from the Big Chill or the Big Crunch, the demise argued by the Big Bang theory.**

#### No impact – there are an infinite number of universes.

**Chaikin, ‘2** (Andrew, Editor of Space and Science, Space.com, “Are there other universes?” February 5, <http://www.space.com/scienceastronomy/generalscience/5mysteries_universes_020205-1.html>)

The irresistible, mind-boggling fantasy comes to just about everyone, sooner or later: What if everything we knew, our whole universe, was just a speck of dust on someone's shoulder? Of course, that's not an idea astronomers take seriously. But many cosmologists are giving serious thought to a more scientific question: Do **other universes exist**? At first glance, you can't help but wonder how anyone could have the chutzpah to ask a question like that. We can barely figure out *this* universe, and now we're wondering about others? Believe it or not, theorists have an answer. And the answer appears to be, Yes. As unimaginable as that sounds, it comes straight out of the theory of quantum mechanics**,** a set of mathematical rules that describe how the universe works on the smallest scales, inside atoms. **Quantum mechanics says that matter and energy can appear spontaneously out of the vacuum of space**, thanks to something called a quantum fluctuation, a sort of hiccup in the energy field thought to pervade the cosmos. Cosmologists say that a quantum fluctuation gave rise to the Big Bang. And the thing about quantum **fluctuations** is that they **can happen anywhere**, any time. And if our universe was born out of a quantum fluctuation, say theorists, then it's possible that **other quantum fluctuations** could have **spawned other universes**. There's a reason some theorists *want* other universes to exist: They believe **it's the only way to explain why our own universe, whose physical laws are just right to allow life, happens to exist.** According to the so-called anthropic principle, there are perhaps an infinite number of universes, each with its own set of physical laws. And one of them happens to be ours. That's much easier to believe, say the anthropic advocates, than a single universe ["fine-tuned" for our existence](http://www.space.com/scienceastronomy/astronomy/accelerating_universe_review_000502.html).

#### If extra-terrestrials do exist, they are either not benevolent or not nearby

**Matheny, 07** (Jason G., Special Advisor – Center for Biosecurity, “Ought We Worry About Human Extinction?”, 12-6, <http://jgmatheny.org/extinctionethics.htm>)

The same can be said of sentient extraterrestrials, who, it might be hoped, exist or will exist. Even if we did not care about preserving terrestrial life, the absence of apparent extraterrestrial signals or colonies should worry us. The **conditions necessary for supporting sentient life** may be **highly restrictive, making** such **life a rare phenomenon** in the galaxy (Mayr, 1995; Ward and Brownlee, 2000). It is possible that humanity is at the leading edge of technology in our region of !space. If so, **we should not assume sentient life elsewhere will develop a civilization capable of space colonization**. Extraterrestrials may be overwhelmed by their own evolutionary hurdles or extinction risks. **If** we are not at the leading edge, and **there are extraterrestrials more advanced** than we are, then **they are probably either not benevolent or not nearby. Otherwise, it is hard to fathom why they haven’t intervened** (overtly or covertly) **in Earth**’s affairs to prevent the mass of suffering on this planet. The **presence of preventable misery here militates against the existence of an advanced, benevolent, and nearby extraterrestrial**, as it militates against the existence of a powerful and benevolent god. If a benevolent, advanced extraterrestrial civilization exists, then it is probably distant. We would waste some fraction of remaining starlight if we waited for them to reach this region of space. **We ought to prevent human extinction**, then, if only to decrease the opportunity costs caused by entropy (Bostrom, 2003).

#### Their predictions are all hype---isomer triggering research is in the context of a dental x-ray experiment that couldn’t be proved after---there’s no threat of extinction from such research because it doesn’t exist---hafnium research is unfunded anyway---answers their isomer, cold fusion, and antimatter experimentation arguments

Weinberger 20**08**, [Sharon Weinberger; June 2008; senior reporter for Wired's national security blog, DANGER ROOM, coauthor of A Nuclear Family Vacation: Travels in the World of Atomic Weaponry, her writing on military science and technology has appeared in Nature, Discover, Slate, Wired, The Washington Post Magazine, and Aviation Week & Space Technology, author of Imaginary Weapons: A Journey Through the Pentagon’s Scientific Underworld, M.A. from the University of Pittsburgh's Graduate School of Public and International Affairs, M.A. in Russian and East European Studies from Yale University; “Scary Things That Don’t Exist: Separating Myth from Reality in Future WMD”; <https://www.stanleyfoundation.org/publications/pab/WeinbergerPAB08.pdf>]//ncp---ezc

In the summer of 1998, Carl Collins, a professor at the University of Texas at Dallas, conducted an experiment at his lab that, for a brief period in time, seemed to herald a new era in weapons of mass destruction.1 Collins claimed he was able to use low-energy photons from a used dental X-ray machine to accelerate, or “trigger,” the decay of a nuclear isomer of hafnium-178; a result that, if true, could potentially lead to a new generation of weapons based on this highly energetic material. Within months of the 1999 publication of the “dental X-ray experiment,” Collins’ results garnered attention from media, government, and the scientific community, eventually leading to a program sponsored by the Pentagon’s Defense Advanced Research Projects Agency (DARPA) to develop a “hafnium bomb.” There was, at one point, a great deal of enthusiasm about the potential of nuclear isomers, and especially of hafnium, to provide a revolutionary military capability (or conversely, to pose a threat in the hands of an adversary). In speaking about the potential of highenergy-density materials like nuclear isomers to advance from basic science to weapons, the Pentagon’s Militarily Critical Technologies List in 2002 offered this historical lesson: “[W]e should remember that less than 6 years intervened between the first scientific publication (in British Nature, January 1939) characterizing the phenomenon of fission and the first operational use of nuclear weapons in August 1945.” Yet there are many differences between nuclear isomers, the dental X-ray experiment, and nuclear fission. In contrast to fission, in the nearly ten years that have passed since the hafnium results were first reported, independent experimenters have been unable to replicate the dental X-ray results, and scientists have raised a series of unanswered theoretical objections to the original work. Two government-sponsored reviews of nuclear isomers—one by the Institute for Defense Analyses and another by JASON, an independent advisory body—raised scientific and technical objections to the concept of a “hafnium bomb.” Even an internal review sponsored by DARPA to evaluate the original and subsequent experiments expressed grave doubts about their validity. Congress eventually stopped funding the program and, although official interest in the military potential of nuclear isomers continues, active work on a hafnium bomb appears to have ceased.2 In defending its work on the controversial hafnium bomb, DARPA acknowledged the criticism but insisted that the potential for “technological surprise” by a foreign adversary justified the work. At the heart of the hafnium debate, then, was a question of risk; specifically, in spite of the extreme likelihood that the 1998 experiment was flawed, there was a chance that a new type of WMD was possible. How serious was this risk? How much funding (and attention) should the Pentagon give to something that could lead to a new generation of WMD (nevermind that it would cost countries $1 billion a gram to produce the hafnium isomer)? In its initial stage, it was certainly not ridiculous—even over the objections of some scientists—to explore the military applications of hafnium-178. However, there were two inherent problems with the DARPA program. First, DARPA did not try to validate what was already an unlikely experimental result to see if there was any substance to the original claims. That would have meant funding an independent research group to attempt replication of the 1998 results. Not only did DARPA not pursue this route, it funded only those experimental researchers who had been involved in the original work. The second major problem was that the program was narrowly focused on the 1998 dental X-ray experiment to the exclusion of other nuclear isomers and/or other experimental approaches. Even if one believes in the potential of nuclear isomer weapons and its risk as a technological surprise, DARPA’s approach did not seem to be an effective way to mitigate that risk. Nuclear isomers are not the only exotic or farreaching areas of science with potential military applications. Over the past year the Defense Threat Reduction Agency (DTRA) has sponsored a series of meetings on advanced energetics, covering such topics as nuclear isomers, cold fusion (also referred to as “Low Energy Nuclear Reactions”), and antimatter.3 As DTRA’s missionis focused in large part on counterproliferation, it is safe to assume the agency is interested in these areas of science as potential WMD. The goal, as I understand it from those who have participated in these meetings, is to understand if there is enough solid science in any of these three areas to justify even modest government investment. Frankly, I see nothing wrong with the military taking a broad view of such areas of science, be they fringe, frontier, or merely controversial. The Pentagon, in some cases, may not have the luxury of waiting for a scientific consensus before exploring some of these areas. What I would like to ask is this: Are they appropriately gauging the risk these areas of science really pose as WMD? I have briefly discussed nuclear isomers, but how is cold fusion a security concern? There are at least two reasons for the military’s interest: as a new energy source (something that is of increasing interest to the Pentagon, though perhaps not as much to DTRA) and, less likely, as a weapon.4 Though often ridiculed as pseudoscience, cold fusion continues to attract the attention of credible scientists who pursue work in this field and report new results. Is cold fusion too far out on the edge to warrant Pentagon support and attention, or does it belong to a high-risk, high-payoff category of research? As we do not have a “cold fusion program” on the order of the now defunct hafnium isomer program, it may be too soon to ask that question. Basic research, with appropriate peer review and aimed at replicating credible results, is certainly a worthy goal in any field. But it is not clear—at least from the open literature— how cold fusion could pose a future WMD threat.5 In the case of antimatter, the question is whether this area of work could lead to a future generation of weapons. As Keay Davidson of the San Francisco Chronicle has written, the military has conducted at least some exploratory work in this field: “More cataclysmic possible uses include a new generation of super weapons—either pure antimatter bombs or antimatter-triggered nuclear weapons; the former would not emit radioactive fallout. Another possibility is antimatter-powered ‘electromagnetic pulse’ weapons that could fry an enemy’s electric power grid and communications networks, leaving him literally in the dark and unable to operate his society and armed forces.”6 The main problem with the “antimatter bomb,” however, is that there is no feasible way yet to produce—let alone store—antimatter in sufficient quantities to create a weapon. Scientists do not know when—or if—that technology will ever develop. So, in looking at this area, I would hope DTRA is gauging the immediate risks rather than betting on the future. Is it wrong for the military to explore or express interest in these far-out topics? No, but is the Pentagon’s investment appropriate to the risk? Put differently, what are the chances that any of these areas may actually lead to future WMD? At what point does the Pentagon say, “We have invested enough to know the risk is minimal.”

#### Sub-quantum bombs are different than isomer bombs and aren’t being developed – isomer bombs are just gamma radiation which nuclear weapons produce – if you’re right you read an extinction claim for us

Bekkum 4 – Gary S. Bekkum, Founder of Spacetime Threat Assessment Report Research, Founder of STARstream Research, Futurist, “American Military is Pursuing New Types of Exotic Weapons”, Pravda, 8-30, http://www.starstreamresearch.com/dark\_matters.htm

Recently the British science news journal "New Scientist" revealed that the American military is pursuing new types of exotic bombs - including a new class of isomeric gamma ray weapons. Unlike conventional atomic and hydrogen bombs, the new weapons would trigger the release of energy by absorbing radiation, and respond by re-emitting a far more powerful radiation. In this new category of gamma-ray weapons, a nuclear isomer absorbs x-rays and re-emits higher frequency gamma rays. The emitted gamma radiation has been reported to release 60 times the energy of the x-rays that trigger the effect.

The discovery of this isomer triggering is fairly recent, and was first reported in a 1999 paper by an international group of scientists. Although this controversial development has remained fairly obscure, it has not been hidden from the public.

Beyond the visible part of defense research is an immense underground of secret projects considered so sensitive that their very existence is denied.

These so-called "black budget programs" are deliberately kept from the public eye and from most political leaders. CNN recently reported that in the United States the black budget projects for 2004 are being funded at a level of more than 20 billion dollars per year.

In the summer of 2000 I contacted Nick Cook, the former aviation editor and aerospace consultant to Jane's Defence Weekly, the international military affairs journal. Cook had been investigating black budget super-secret research into exotic physics for advanced propulsion technologies.

I had been monitoring electronic discussions between various American and Russian scientists theorizing about rectifying the quantum vacuum for advanced space drive. Several groups of scientists, partitioned into various research organizations, were exploring what NASA calls "Breakthrough Propulsion Physics" - exotic technologies for advanced space travel to traverse the vast distances between stars. Partly inspired by the pulp science fiction stories of their youth, and partly by recent reports of multiple radar tracking tapes of unidentified objects performing impossible maneuvers in the sky, these scientists were on a quest to uncover the most likely new physics for star travel. The NASA program was run by Marc Millis, financed under the Advanced Space Transportation Program Office (ASTP). Joe Firmage, then the 28-year-old Silicon Valley CEO of the three billion dollar Internet firm US Web, began to fund research in parallel with NASA.

Firmage hired a NASA Ames nano-technology scientist, Creon Levit, to run the "International Space Sciences Organization", a move which apparently alarmed the management at NASA. The San Francisco based Hearst Examiner reported that NASA's Office of Inspector General assigned Special Agent Keith Tate to investigate whether any proprietary NASA technology might have been leaking into the private sector.

Cook was intrigued when I pointed out the apparent connections between various private investors, defense contractors, NASA, INSCOM (American military intelligence), and the CIA. While researching exotic propulsion technologies Cook had heard rumors of a new kind of weapon, a "sub-quantum atomic bomb", being whispered about in what he called the "dark halls" of defense research.

Sub-quantum physics is a controversial re-interpretation of quantum theory, based on so-called pilot wave theories, where an information field controls quantum particles. The late Professor David Bohm showed that the predictions of ordinary quantum mechanics could be recast into a pilot wave information theory. Recently Anthony Valentini of the Perimeter Institute has suggested that ordinary quantum theory may be a special case of pilot wave theories, leaving open the possibility of new and exotic non-quantum technologies.

Some French, Serbian and Ukrainian physicists have been working on new theories of extended electrons and solitons, so perhaps a sub-quantum bomb is not entirely out of the question.

Even if the rumors of a sub-quantum bomb are pure fantasy, there is no question that mainstream physicists seriously contemplate a phase transition in the quantum vacuum as a real possibility. The quantum vacuum defies common sense, because empty space in quantum field theory is actually filled with virtual particles. These virtual particles appear and disappear far too quickly to be detected directly, but their existence has been confirmed by experiments that demonstrate their influence on ordinary matter.

"Such research should be forbidden!"

In the early 1970's Soviet physicists were concerned that the vacuum of our universe was only one possible state of empty space. The fundamental state of empty space is called the "true vacuum". Our universe was thought to reside in a "false vacuum", protected from the true vacuum by "the wall of our world". A change from one vacuum state to another is known as a phase transition. This is analogous to the transition between frozen and liquid water. Lev Okun, a Russian physicist and historian recalls Andrei Sakharov, the father of the Soviet hydrogen bomb, expressing his concern about research into the phase transitions of the vacuum. If the wall between vacuum states was to be breached, calculations showed that an unstoppable expanding bubble would continue to grow until it destroyed our entire universe! Sakharov declared that "Such research should be forbidden!"

According to Okun, Sakharov feared that an experiment might accidentally trigger a vacuum phase transition.

#### Identifying and responding to extreme and involuntary suffering is illuminates innate compassion through empathy and harmony

White 11 — Richard White (associate professor of philosophy Creighton University), 2011, “Levinas, the Philosophy of Suffering, and the Ethics of Compassion,” The Heythrop Journal, 53.1)

Levinas fails to recognize that what is properly meaningful is not so much the suffering itself but our response to that suffering. For example, if my suffering leads me to commit suicide, then in what sense can it be considered meaningful? And if my awareness of the suffering of another becomes so overwhelming it paralyzes action, does it really have an issue or a point? Suffering is neither ‘meaningful’ nor ‘meaningless’ in itself. What determines the significance of suffering is the response of the one who suffers. This may be the original victim – someone like Elie Wiesel who lost his family in the Holocaust, but who sought to live a life devoted to justice; or it could be the spectator who suffers in sorrow when she contemplates these events and who may feel compelled to respond. In this respect, my suffering, the suffering of the other, and my suffering for the suffering of the other all remain quite ‘open’ in terms of their ultimate meaning. 4). Finally, then, the third question asks what should the proper response to suffering be? Of course, I should turn aside from my own self-involvement in order to help, and the refusal to help is wrong. But this does not say enough, and we must now consider another perspective. According to ordinary moral understanding, there is a difference between the one who deliberately inflicts suffering on another and the one who doesn't prevent that suffering from happening; they are both at fault, but there is a moral distinction between the perpetrator and the bystander. There are also others who are not involved in any way, and therefore innocent, at least in this case. According to Levinas, however, I am always already responsible for the suffering of the Other; and he frequently emphasizes this point: I am in reality responsible for the other even when he or she commits crimes, even when others commit crimes. This is for me the essence of the Jewish conscience. But I also think that it is the essence of the human conscience. All men are responsible for one another, and ‘I more than anyone else’. One of the most important things for me is that asymmetry and that formula: All men are responsible for each other and I more than anyone else. It is Dostoyevsky's formula which, as you see, I quote again.[46] For Levinas there is apparently no distinction between the three ethical levels – of perpetrator, bystander and innocent – at the original moment of ethical encounter. Regardless of whether I caused the suffering of another or had nothing at all to do with it, I am still ‘infinitely’ responsible for the other person. But this is problematic, and it ignores the obvious distinction between compassion and remorse. As Steven Tudor puts it: In the case of compassion, the self stands as witness to the Other's suffering, while in the case of remorse, the self stands as responsible for the Other's suffering, that is, as having wronged the Other. In both compassion and remorse, however, the self is in some way “claimed in response to” the Other: the compassionate witness to suffering is “called upon” to respond to what she sees, while the remorseful person is obligated to answer for what he did.[47] For Levinas, the only proper response to suffering is remorse or guilt, even to the point of self-abnegation and self-loathing. Of course, it may be argued that Levinas's discussion of responsibility is at a higher ‘transcendental’ level and has no bearing on the variety of ethical responses that exist in the everyday world. But to have any relevance at all, there must be a relationship of analogy between the two levels so that our everyday responses will be shaped by the description of their ultimate ground. Eagleton complains: ‘The very act that constitutes me as a subject also places me at a distance from my own being. Before the Other I am always in the wrong, always a guilty innocent’.[48] Thus, even though he refers to compassion, Levinas's ethics is essentially deontological or Kantian, insofar as it is based on responsibility and duty, rather than empathy with the feelings of those whom we take to be sentient like ourselves. For Levinas, ethics is severe and the traumatic relation to the other seems to rely entirely on duty rather than love. And even though Levinas discusses my suffering for the suffering of the other as the origin of the ethical, he does not have compassion in mind as this is typically understood. There are other accounts of compassion in which I overcome the sense of an absolute separation between myself and others by going out of myself towards the Other, putting aside my own concerns, and bearing witness to her suffering as something that brings me sorrow. Such compassion implies the desire to help the other person which may or may not be acted on; but the very recognition of someone else's suffering is itself a beneficial act. As Elaine Scarry comments, even in extreme physical suffering, An act of human contact and concern, whether occurring here or in private contexts of sympathy, provides the hurt person with worldly self-extension … By holding that world in place, or by giving the pain a place in the world, sympathy lessens the power of sickness and pain, counteracts the force with which a person in great pain or sickness can be swallowed alive by the body.[49] In this way, sympathy or compassion works to overcome the isolation that suffering imposes. In Buddhist practice, compassion requires feeling for the suffering of others. It is responsiveness to misery which includes not only the particular sorrows that others experience, but also the underlying reality of suffering which is grasped as the permanent condition of human existence. Compassion allows us to experience our affinity and our connection with all creatures; and the more committed and involved with others we become, the less preoccupied we are with our own selfish desires. As we cultivate our sense of compassion, the concerns and anxieties that characterize our everyday existence fall away, and we become more open to other people and the rhythm of life itself. Such compassion involves an overall attentiveness and availability to the other person. According to Buddhist teaching, it should be unconditional, undifferentiated and universal in scope; and it would certainly include compassion toward oneself. For Buddhists, compassion is one of the most important virtues that should be enhanced because it affirms the underlying reality of our connection with all sentient beings; while at the same time, hatred and cruelty must be diminished, since they are the opposite of compassion. According to the Dalai Lama: When we enhance our sensitivity toward others' suffering through deliberately opening ourselves up to it, it is believed that we can gradually extend our compassion to the point where the individual feels so moved by even the subtlest suffering of others that they come to have an overwhelming sense of responsibility towards those others. This causes the one who is compassionate to dedicate themselves entirely to helping others overcome both their suffering and the causes of their suffering.[50] In the Mahayana tradition of Buddhism, such a focus on compassion inspires the ideal of the Bodhisattva, or the saint who refuses Nirvana until all other creatures have been released from their suffering. Thus, instead of emphasizing the opposition and distinction between self and other – in terms of radical alterity which is finally irreducible to conceptual thought – this account of compassion calls upon us to see the other person as someone who is basically like ourselves, who has the same capacity for suffering and joy. There is no absolute difference between myself and the other person, for there is nothing that separates me from the affliction of the other that cannot be destroyed by a change of circumstances. Through compassion I affirm my sense of belonging to the human community insofar as I show my care for another person; while at the same time, the one who is afflicted and isolated by suffering is brought back into the community by the respect and acknowledgement she is shown. There is an obvious reason why this version of compassion, though briefly sketched, is preferable to the Levinasian view: It explains our connection to the other as one whom we care for – for even though she is an ‘other’, she is also someone with whom we share a common humanity and sentience. But without the recognition of any kind of connection between us – if the other is absolutely other and if it is in some sense inappropriate to put myself in her place – then it is unclear how I could ever be concerned about her wellbeing or feel responsibility for her. I do not feel the same obligation to rocks as I do to humans, but this is because I have a sense of a ‘shared humanity’ which leads me to care for others in the first place. 5). In the past, philosophers have sometimes ignored suffering by denying its significance or its wrongness. One way of doing this is through theodicy which seeks to justify suffering as the will of God (or from the secular perspective, as part of the march of history.) This takes attention away from the reality of suffering by framing it within an optimistic narrative, making suffering something that actually belongs to the good. Likewise, stoicism diminishes the problem of suffering by making it subject to the projected mastery of the self. This implies that suffering is not a reality since it is rather a perspective on reality that can change if we change our attitude towards it. In his brilliant phenomenological descriptions, Levinas shows how suffering tends to undermine all significance and meaning. Levinas recovers the problem of suffering and his opposition to theodicy in all its forms is well considered. The problem with Levinas's account emerges once we step back from his specific discussion of what suffering is, to consider the place of suffering in his overall account of ethical philosophy. As we have seen, it is not the meaning of suffering that is really at issue – depending on the context suffering can be meaningful or quite pointless; but the response to suffering is what matters. At the end of this paper, we focussed on the response of compassion; but compassion as it is typically understood is not a central part of Levinas's ethical framework. Levinas himself comments, ‘for me the suffering of compassion, suffering because the other suffers, is only one aspect of a relationship that is much more complex and much more complete at the same time: that of responsibility for the other’.[51] Against Levinasian compassion, which involves suffering and self-laceration, we considered another version of compassion which loosely follows the Buddhist model. The latter involves feeling for the other in her distress, and presupposes the recognition of our common humanity. We must learn to cultivate this attitude, for we can be moved by the other person because she suffers like we do, and because we all share a common fate.

#### Voting affirmative is an act of care for the world — it’s not Earth-centric and doesn’t deny the intrinsic value of non-human life— but, the fate of humanity is an important consideration can incorporate the perspective of their scholarship

Myers 13 — Ella Myers (Assistant Professor of Political Science and Gender Studies at the University of Utah), 2013, “Worldly Ethics: Democratic Politics and Care for the World,” pages 126-130

If caring for the world means caring for the world as humans’ collective home and caring for the world as a mediating force between human beings, is this ethos susceptible to the charge of anthropocentrism? Does it imply that the world is for humans and humans alone? If so, does this ethics too readily tolerate or even promote harm to nonhuman elements of the world? Although “anthropocentrism” carries multiple meanings, most relevant here is the term’s reference to a myopic outlook focused on human interests at the expense of all other possible interests.60 The worry lies with a sort of “human chauvinism,” “speciesism,” or egocentrism that shows insufficient concern for nonhumans.61 In particular, critics of anthropocentrism object to the tendency to ascribe only instrumental, not intrinsic, value to nonhumans, which in turn supports a dominating stance toward nonhuman life. Is the ethos of care for the world—refined to mean care for the world as home and as in- between—guilty of promoting such anthropocentrism? Since both normative ends discussed above direct attention to human beings’ relation to the world, this is surely a legitimate question. Yet the ethos developed here does not reflect an anthropocentric outlook, if by that is meant a view that licenses exploitation of nonhuman elements of the world on the grounds that human interests, whatever they may be, trump all others.62 At the same time, however, the ethos of care for the world does not, as the notions of home and in- between attest, disavow concern for the fates of human beings in particular. What is at stake, then, is the possibility of enlightened anthropocentrism, of transformed selfinterest that heeds the insights of coexistentialism. Coexistentialism refers to an ecological perspective that takes the interconnectedness of all worldly entities, humans and nonhumans, organic and inorganic matter, as its starting point (see chapter 3). Latour’s and Bennett’s work helped reveal the interdependent webs of relation that characterize what I call world but that are obscured by traditional dichotomies between human agents, who are exalted, and inert matter, which is denigrated. Coexistentialism locates human beings within this worldly “mesh” rather than above it.63 Such an ecological awareness challenges fantasies of mastery by reminding people of the extent to which they are affected by the doings of nonhumans. Our understandings of human well- being and self- interest are susceptible to transformation by the coexistentialist perspective. The choice is not between the domineering, shortsighted pursuit of human interests, on the one hand, and the rejection of self- interest

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altogether, on the other. Indeed, the recognition of deep interconnectedness can shape and nurture “new self- interest,” as Bennett suggests.64 Although Vibrant Matter aims to question conventional human/nonhuman hierarchies, the book, Bennett explains, is motivated by a self- interested “concern for human survival and happiness.”65 In place of “fantasies of conquest and consumption” Bennett encourages a chastened form of self- interest. It is in people’s own interest, she argues, to understand the ways in which nonhumans and humans are bound to one another, generating effects in parliament rather than in isolation from one another. The purpose of the coexistentialist view is not to reject self- interest as hopelessly chauvinistic or destructive but to foster “new self- interest” that is guided by an ecological sensibility. Bennett’s reimagined self- interest resonates with notions of enlightened, weak, or broad anthropocentrism in the field of environmental ethics, which emerged originally as a challenge to anthropocentrism and the tendency to assign only instrumental value to nonhuman entities. Indeed, the enterprise of environmental ethics was initially defined as an attempt to develop a thoroughly nonanthropocentric worldview that renders nonhumans morally considerable. A strand of recent environmental thought, however, is concerned not with forgoing anthropocentrism altogether, a project it questions on both metaphysical and practical grounds, but with transforming the understanding of human interest so that it is enlightened. This broad form of anthropocentrism does not accept dominant economistic notions of human well- being but instead redefines well- being to include a fuller range of values, for example, aesthetic and spiritual, that reflect and further an ecological sensibility. Andrew Light and Bryan Norton advocate this approach from a pragmatist- pluralist perspective. Light argues that if contemporary environmental ethicists wish to take on environmental problems in policy contexts, this is best accomplished not by attempting to “overcome” human interests but by “redirecting them toward environmental concerns.”67 He contends that if we are concerned with the “moral motivation of humans to respond to environmental issues,” focusing on reconstructing the sense of what is in our own interest is more likely to succeed than an attempt to reject anthropocentrism wholesale.68 Light’s pragmatic approach counsels that in many situations anthropocentric values are best suited to motivate nonenvironmentalists. For example, studies show that concern for future human generations is a highly significant value that encourages efforts to protect nonhuman entities.69 In other situations, “nonanthropocentric claims will be more appealing.” Light writes that “what appeals best is an empirical question,” and he links this pragmatic outlook to a “pluralist ethic” that accepts a range of arguments, anthropocentric and nonanthropocentric and involving instrumental and intrinsic values claims, against doing harm to ecosystems.70 Philosophical purity matters less than ethico- political resonance. Where does this leave the democratic ethos I advance here? Care for the world is a way of caring for human beings; it is neither neutral nor disinterested. It is an ethos meant to generate benefits for people. But these benefits are linked to self- interest properly understood, that is, they are born of the coexistentialist insight. Caring for the world involves not owning, ruling, or enjoying dominion over but collaboratively tending to the world, an entity that is bigger, richer, and more varied and lively than human life alone. Such care should be guided by awareness of the webs of relation that link human beings across borders and time not only to one another, but also to other “vibrant matter” as well. Such awareness does not, however, require that one attempt (in vain?) to thoroughly equalize one’s concern for humans with concern for nonhumans. Genuinely ecologically minded self- interest is enough to aspire to.

# 1AR

## T — Private Sector

#### ‘Substantially increase’ means “to make greater by a considerable amount”.

Court of Appeals of Michigan 15 (TALBOT, C.J., and MURPHY and GLEICHER, JJ—judges. Decision in PEOPLE of the State of Michigan, Plaintiff–Appellee, v. Kristopher Kyle McCHESTER, Defendant–Appellant. Docket No. 318145. Decided: May 05, 2015, <https://caselaw.findlaw.com/mi-court-of-appeals/1699887.html> , date accessed 7/17/21)

The defendant in Hardy challenged the scoring of 50 points under OV 7, which in that case pertained to whether the perpetrator engaged in “ ‘conduct designed to substantially increase the fear and anxiety a victim suffered during the offense.’ “ Id. at 434, quoting MCL 777.37(1)(a). The Court began by reviewing the definitions of the relevant statutory terms. “Designed,” the Court explained, “means ‘to intend for a definite purpose.’ “ Id. (citation omitted). The Court next considered the term “substantially increase.” Citing a dictionary, the Court described the word “substantial” as designating an “ ‘ample or considerable amount, quantity, size, etc.” ’ Id. (citation omitted). “To ‘increase,’ “ the Court continued, “means ‘to make greater, as in number, size, strength, or quality; augment.’ “ Id . at 440–441 (citation omitted). With these definitions in hand, the Supreme Court summarized: “it is proper to assess points under OV 7 for conduct that was intended to make a victim's fear or anxiety greater by a considerable amount.” Id. at 441 (emphasis added).

## CP — Proto- something or another idk

#### 1 ⁠— skew ⁠— answers their defense, outweighs because the 2AC’s key to aff offense, and the block

<<AT: Decision Making: forces the 1NC to make tactical choices, while the 2AC must pick offense>>

<<AT: Not Affirming Rez: conditionality wrecks the ability to prove the resolution sufficient>>

<<AT: Skews: they aren’t inevitable because the neg must defend the status quo, provide ev for DAs, and research case; aff offense and choice is the only equalizer>>

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How does conditionality differ from kicking other arguments?

Whereas the negative can unilaterally remove a conditional advocacy from the debate round, they cannot do the same for non-advocacies. When negative debaters “kick” out of most arguments, they are required the explain why those positions no longer have any meaningful impact or importance in the round and why the judge need not consider them when making a decision. The most common way for negatives to accomplish this requirement is to strategically concede arguments that are made by their opponents.

For example, when kicking topicality the negative team typically begins by extending the affirmative “we meet” and conceding that the affirmative plan is topical. By doing so, the negative has explained that the position should no longer influence the judge’s decision because the affirmative burden of topicality has been satisfied. Similarly, when kicking out of a disadvantage the negative team will often extend “no-link” or “no-impact” arguments made by their opponents, thereby demonstrating to the judge that the position is no longer relevant in the context of the round because it either does not interact with the plan or does not result in an impact. In each case, the negative must be careful: although they have sought to explain why the issue is unimportant, the affirmative is free to revisit the position and to explain why it remains relevant. This is particularly true if the negative mishandled or inadequately addressed an affirmative response. For example, if the negative dropped a series of affirmative turns on the disadvantage, a critique of topicality, or reverse voting issues on topicality, the affirmative can revisit each of the positions and explain why those arguments still merit consideration from the judge.9 As such, the affirmative can influence the negative’s behavior by making a large number of offensive arguments against a position while declining to make defensive claims. In this case, the negative must address the affirmative side’s offensive arguments and cannot quickly extend affirmative defense in order to “kick out” of the issue. Thus, the affirmative can act strategically to prevent the negative from quickly collapsing in the block.

The same strategic tool is not available against conditional advocacies. When the negative kicks a conditional advocacy, they unilaterally declare that the position has been removed from the round along with all associated arguments. Furthermore, they claim that the position cannot be evaluated or revisited by their opponents. The negative need not explain their rationale for kicking the advocacy, nor are they required to respond to their opponents’ answers against the position before removing it from the round. As a result, the affirmative lacks the capability to influence the negative’s strategy by issuing purely offensive answers. Conditionality therefore allows the negative a unique method of collapsing quickly to specific arguments in the block and of gaining an unimpeachable time-tradeoff relative to the affirmative. Additional ways in which conditionality provides a relative strategic advantage to the negative are addressed in the following sections.

#### Good debaters won’t get stuck with bad positions

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Second, negative teams often lament that conditionality forces them to defend an advocacy for the entire round, even after it has been proven undesirable. However, we argue that strategically presenting and then defending arguments is central to debate. The complaint offered here would be nonsensical in all other debate contexts. If the negative read a disadvantage or impact scenario that ultimately proved useful to their opponents, the negative could not ask the judge to disregard the argument merely because it was no longer beneficial to their side. Rather, debaters should take care when they select arguments prior to the LOC and should consider in advance how the debate round may play out. Teams can avoid being tied to “undesirable” advocacies by selecting their strategy more carefully during prep time. Debaters who regularly find themselves “trapped” defending counterplans or kritiks that the affirmative has proven undesirable are often teams that exercise minimal discretion when selecting which advocacies to read. Strategic debaters will eschew positions that are unlikely to be decided in their favor. As such, they need not rely on conditionality to protect themselves.

#### Thinking

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Those who support conditionality also allege that the technique promotes strategic thinking for the negative side. However, conditionality actually reduces strategic thinking for the negative because teams are no longer required to answer arguments that they are losing. In a world without conditionality, negative teams must select their opening strategy carefully, by weighing the likelihood that opponents will successfully respond to each position that is introduced. They must also choose carefully when selecting which positions to pursue in the block and estimating how long it will take to answer affirmative arguments and kick out of each unwanted position. Conditionality reduces the strategic calculus by allowing negatives to collapse directly to whichever argument or position that the affirmative team mishandled. The requirement to exhibit foresight and carefully consider the utility of arguments before presenting them in the round is substantially reduced in a world of conditional advocacies. Only when debaters are held accountable for their arguments during debate rounds do they begin to understand the strengths and weaknesses inherent to their own positions and learn to defend their claims against opposing viewpoints.15

#### Turns Real world ⁠AND skews/contradictions turn it

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\*raison d’être: the most important reason or purpose for someone or something’s existence

Second, proponents of conditionality claim that it is the most realistic approach to policymaking and that it facilitates a search for the best policy option. These claims, however, draw an inappropriate analogy. Realistic policymaking is a skill to be admired, but it should not be emulated at all costs. Various rules directly inhibit competitive debaters from searching for the best policy option when doing so would jeopardize overall fairness in the round. For example, allowing the affirmative team to shift its plan midway through the debate would allow the affirmative to identify a more desirable policy option, but this process is not allowed because it would be highly abusive to the negative side. Indeed, even the resolution itself impedes the affirmative’s search for the “best policy” by limiting the range of available plans to a narrow set of topical proposals. Rules and norms that limit a search for the best policy are particularly widespread in parliamentary debate. One need only look to factors such as limited pre-round prep time, lack of printed materials in-round, changing topics, and even an early belief in the importance of value and metaphor debates as evidence that a search for optimal policy is not the activity’s raison d’être.16