## 1NC – Fairness

#### Our interpretation is that the resolution should define the division of affirmative and negative ground and offense. It was *negotiated* and *announced in advance*, providing both sides with a reasonable opportunity to prepare to engage one another’s arguments.

**Resolved denotes a proposal to be enacted by law**   
**Words and Phrases 1964** Permanent Edition   
Definition of the word “resolve,” given by Webster is “**to express an opinion or determination by resolution or vote; as ‘it was resolved by the legislature;**” It is of **similar** force **to the word “enact,”** which is **defined** by Bouvier **as** meaning “**to establish by law**”.

#### Ought means should

Merriam Webster, No Date – Merriam Webster’s Learner’s Dictionary, “ought”, <http://www.learnersdictionary.com/definition/ought>  
ought /ˈɑːt/ verb  
Learner's definition of OUGHT [modal verb] 1 ◊ Ought is almost always followed by to and the infinitive form of a verb. The phrase ought to has the same meaning as should and is used in the same ways, but it is less common and somewhat more formal. The negative forms ought not and oughtn't are often used without a following to. — used to indicate what is expected They ought to be here by now. You ought to be able to read this book. There ought to be a gas station on the way. 2 — used to say or suggest what should be done You ought to get some rest. That leak ought to be fixed. You ought to do your homework.

#### Should requires legal effect

Summers 94 (Justice – Oklahoma Supreme Court, “Kelsey v. Dollarsaver Food Warehouse of Durant”, 1994 OK 123, 11-8, http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn13)

¶4 The legal question to be resolved by the court is whether the word "should"[13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn13) in the May 18 order connotes futurity or may be deemed a ruling *in praesenti*.[14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn14) The answer to this query is not to be divined from rules of grammar;[15](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker3fn15) it must be governed by the age-old practice culture of legal professionals and its immemorial language usage. To determine if the omission (from the critical May 18 entry) of the turgid phrase, "and the same hereby is", (1) makes it an in futuro ruling - i.e., an expression of what the judge will or would do at a later stage - or (2) constitutes an in in praesenti resolution of a disputed law issue, the trial judge's intent must be garnered from the four corners of the entire record. [CONTINUES – TO FOOTNOTE] [13](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn13) "*Should*" not only is used as a "present indicative" synonymous with *ought* but also is the past tense of "shall" with various shades of meaning not always easy to analyze. See 57 C.J. Shall § 9, Judgments § 121 (1932). O. JESPERSEN, GROWTH AND STRUCTURE OF THE ENGLISH LANGUAGE (1984); St. Louis & S.F.R. Co. v. Brown, 45 Okl. 143, 144 P. 1075, 1080-81 (1914). For a more detailed explanation, see the Partridge quotation infra note 15. Certain contexts mandate a construction of the term "should" as more than merely indicating preference or desirability. Brown, supra at 1080-81 (jury instructions stating that jurors "should" reduce the amount of damages in proportion to the amount of contributory negligence of the plaintiff was held to imply an *obligation* *and to be more than advisory*); Carrigan v. California Horse Racing Board, 60 Wash. App. 79, [802 P.2d 813](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=802&box2=P.2D&box3=813) (1990) (one of the Rules of Appellate Procedure requiring that a party "should devote a section of the brief to the request for the fee or expenses" was interpreted to mean that a party is under an *obligation* to include the requested segment); State v. Rack, 318 S.W.2d 211, 215 (Mo. 1958) ("should" would mean the same as "shall" or "must" when used in an instruction to the jury which tells the triers they "should disregard false testimony"). [14](http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=20287#marker2fn14) *In praesenti* means literally "at the present time." BLACK'S LAW DICTIONARY 792 (6th Ed. 1990). In legal parlance the phrase denotes that which in law is *presently* or *immediately effective*, as opposed to something that *will* or *would* become effective *in the future [in futurol*]. See Van Wyck v. Knevals, [106 U.S. 360](http://www.oscn.net/applications/oscn/deliverdocument.asp?box1=106&box2=U.S.&box3=360), 365, 1 S.Ct. 336, 337, 27 L.Ed. 201 (1882).

#### Governments are bodies of power who enforce law in a country, land area, people or organization

Your Dictionary ND[(Your Dictionary, Definitions, grammar tips, word game help and more from 16 authoritative sources) “ Government” https://www.yourdictionary.com/government] SS

The body with the power to make and/or enforce laws to control a country, land area, people or organization.

#### Recognize means to acknowledge legally

Dictionary.com ND [(Dictionary.com, Dictionary.com is an online dictionary whose domain was first registered on May 14, 1995. The content for Dictionary.com is based on the latest version of Random House Unabridged Dictionary, with editors for the site providing new and updated definitions.),”Recognize”, <https://www.dictionary.com/browse/recognize>] SS

to acknowledge formally as entitled to treatment as a political unit:

The United States promptly recognized Israel.

to acknowledge or accept formally a specified factual or legal situation:

to recognize a successful revolutionary regime as the de facto government of the country.

#### Unconditional rights means to surrender limitations on what people are allowed

Reverso Dictionary ND [(Reverso Dictionary, Reverso dictionaries feature millions of words and expressions, including specialized vocabulary, slang terms, neologisms, idiomatic phrases, with their translations and definitions. Translate in English, French, German, Spanish, Italian, Portuguese, Russian, Chinese, Japanese, Arabic, and many other languages or look for a word's definition and synonyms to better understand its meaning. Our dictionaries are enriched with words and idiomatic expressions added by Reverso users and examples of translations in context.)https://mobile-dictionary.reverso.net/en/english-definition/Unconditional+rights] SS

Unconditional rights definition, Unconditional rights meaning | [English dictionary](https://mobile-dictionary.reverso.net/en/english-definition/)

unconditional    
    adj

1  without conditions or limitations; total    
unconditional surrender

2    (Maths)  (of an equality) true for all values of the variable    
(x+1)<rab>x is an unconditional equality

-   unconditionally    adv    
-  unconditionalness, unconditionality    n

[rights activist](https://mobile-dictionary.reverso.net/en/english-definition/rights+activist)  n. an activist fighting for civil rights

[rights](https://mobile-dictionary.reverso.net/en/english-definition/rights)  n. rules concerning what people are owed to or allowed of, according to ethical principles of freedom and applied in society

#### Workers are persons who are employed for wages

Your Dictionary ND[(Your Dictionary, Definitions, grammar tips, word game help and more from 16 authoritative sources) “Worker meaning” https://www.yourdictionary.com/worker] SS

A person, animal, or thing that works; specif., a person who is employed to do physical or mental work for wages, esp. in order to earn a living, as in a trade, industry, business, office, etc. or on a farm, ranch, etc.

#### **Strike means refusal employees under unperformable conditions**

Britannica ND [ (The Editors of Encyclopaedia Britannica, In the absence of those authorities' names, Britannica's editors, who have played a key role in the development and maintenance of such articles, have been designated as the contributor),, <https://www.britannica.com/topic/strike-industrial-relations>] SS

Strike, collective refusal by employees to work under the conditions required by employers. Strikes arise for a number of reasons, though principally in response to economic conditions (defined as an economic strike and meant to improve wages and benefits) or labour practices (intended to improve work conditions). Other strikes can stem from sympathy with other striking unions or from jurisdictional disputes between two unions. Illegal strikes include sit-down strikes, wildcat strikes, and partial strikes (such as slowdowns or sick-ins). Strikes may also be called for purely political reasons (as in the general strike).

#### Vote negative to preserve limits and equitable division of ground – the resolution is the most predictable stasis point for debates, anything outside of that ruins prep and clash by allowing the affirmative to pick any grounds for debate. That greenlights a race away from the core topic controversies that allow for robust contestation, which favors the aff by making neg ground inapplicable, susceptible to the perm, and concessionary. Two additional impacts:

#### Accessibility – Cutting negs to every possible aff wrecks small schools, which has a disparate impact on under-resourced and minority debaters. Counter-interpretations are arbitrary, unpredictable, and don’t solve the world of neg prep because there’s no grounding in the resolution

#### Link turns their education offense – getting to the third and fourth level of tactical engagement is only possible with refined and well-researched positions connected to the resolutional mechanism. Repeated debates over core issues incentivize innovative argument production and improved advocacy based on feedback and nuanced responses from opponents.

#### Prefer our impact: they’ve skewed the game which necessarily comes first because it makes evaluating the aff impossible. The role of individual debate rounds on broader subject formation is white noise – *can you remember what happened in doubles of the Loyola tournament your junior year?* – individual rounds don’t affect our subjectivity, so fairness is the only impact your ballot can resolve. You should presume all their truth claims false because they have not been properly tested

#### They can’t get offense: we don’t exclude them, only persuade you that our methodology is best. Every debate requires a winner and loser, so voting negative doesn’t reject them from debate, it just says they should make a better argument next time.

## 1NC – Extra T

#### Interpretation: Debaters may not garner offense from extra-topical planks of the plan.

#### Violation: the aff fiats a “perspective of an Earth Centered Conscientization”

#### Net benefits:

#### First, Limits – Their interpretation justifies a near infinite amount of affirmatives. Each extra-topical plank changes the nature of the affirmative and requires starkly different case negs. There are also no predictable parameters to dictate what plank will be added.

#### Limits are best for education:

1. **Iterative content mastery: debaters learn best from successive strategic iterations of argument production. Engaging in debates about the same core issues challenges students to innovate based on feedback.**
2. **Prep: nuanced research requires a stasis point. A large caselist results in shallow debates and pushes argumentation to the fringes. This prevents rigorous argument testing.**

#### Second, Ground – Extra topicality allows the aff to construct Frankenstein affs with planks that circumvent core negative arguments and artificially inflate solvency. Empirically proven in this debate – their plan is designed to avoid solvency deficits about

**Ground is vital to produce fair debates – it ensures both sides have valuable and defensible ideas to forward.**

**Vote on fairness it’s axiomatically necessary to determine the better debater.**

**Vote on education it’s the reason schools fund debate.**

**Use competing interpretations – it deters future abuse by creating consistent norms that debaters can be held to in the future.**

**Drop the debater - dropping the arg is severance, it shifts the debate in the 1ar, mooting 7 minutes of offense.**

## 1NC

**The standard is maximizing expected wellbeing**

**First, pleasure and pain are intrinsically valuable. People consistently regard pleasure and pain as good reasons for action, despite the fact that pleasure doesn’t seem to be instrumentally valuable for anything.**

**Moen 16** [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

Let us start by observing, empirically, that a widely shared judgment about intrinsic value and disvalue is that pleasure is intrinsically valuable and pain is intrinsically disvaluable. On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues**.** This inclusion makes intuitive sense, moreover, for there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have. “Pleasure” and “pain” are here understood inclusively, as encompassing anything hedonically positive and anything hedonically negative.2 The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values**.** If you tell me that you are heading for the convenience store, I might ask: “What for?” This is a reasonable question, for when you go to the convenience store you usually do so, not merely for the sake of going to the convenience store, but for the sake of achieving something further that you deem to be valuable**.** You might answer, for example: “To buy soda.” This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: “What is buying the soda good for?” This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: “Well, I want it for the pleasure of drinking it.” If I then proceed by asking “But what is the pleasure of drinking the soda good for?” the discussion is likely to reach an awkward end. The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good.3 As Aristotle observes**:** “We never ask [a man] what his end is in being pleased, because we assume that pleasure is choice worthy in itself.”4 Presumably, a similar story can be told in the case of pains, for if someone says “This is painful!” we never respond by asking: “And why is that a problem?” We take for granted that if something is painful, we have a sufficient explanation of why it is bad. If we are onto something in our everyday reasoning about values, it seems that pleasure and pain are both places where we reach the end of the line in matters of value.

**Moreover, *only* pleasure and pain are intrinsically valuable. All other values can be explained with reference to pleasure; Occam’s razor requires us to treat these as instrumentally valuable.**

**Moen 16** [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

I think several things should be said in response to Moore’s challenge to hedonists. First, **I do not think the burden of proof lies on hedonists to explain why the additional values are not intrinsic values. If someone claims that X is intrinsically valuable, this is a substantive, positive claim, and it lies on him or her to explain why we should believe that X is in fact intrinsically valuable.** Possibly, this could be done through thought experiments analogous to those employed in the previous section. Second, **there is something peculiar about the list of additional intrinsic values** that counts in hedonism’s favor**: the listed values have a strong tendency to be well explained as things that help promote pleasure and avert pain.** To go through Frankena’s list, life and consciousness are necessary presuppositions for pleasure; activity, health, and strength bring about pleasure; and happiness, beatitude, and contentment are regarded by Frankena himself as “pleasures and satisfactions.” The same is arguably true of beauty, harmony, and “proportion in objects contemplated,” and also of affection, friendship, harmony, and proportion in life, experiences of achievement, adventure and novelty, self-expression, good reputation, honor and esteem. Other things on Frankena’s list, such as understanding, **wisdom, freedom, peace, and security, although they are perhaps not themselves pleasurable, are important means to achieve a happy life, and as such, they are things that hedonists would value highly.** **Morally good dispositions and virtues, cooperation, and just distribution of goods and evils, moreover, are things that, on a collective level, contribute a happy society, and thus the traits that would be promoted and cultivated if this were something sought after.** To a very large extent, the intrinsic values suggested by pluralists tend to be hedonic instrumental values. Indeed, pluralists’ suggested intrinsic values all point toward pleasure, for while the other values are reasonably explainable as a means toward pleasure, pleasure itself is not reasonably explainable as a means toward the other values. Some have noticed this. Moore himself, for example, writes that though his pluralistic theory of intrinsic value is opposed to hedonism, its application would, in practice, look very much like hedonism’s: “Hedonists,” he writes “do, in general, recommend a course of conduct which is very similar to that which I should recommend.”24 Ross writes that “[i]t is quite certain that by promoting virtue and knowledge we shall inevitably produce much more pleasant consciousness. These are, by general agreement, among the surest sources of happiness for their possessors.”25 Roger Crisp observes that “those goods cited by non-hedonists are goods we often, indeed usually, enjoy.”26 What Moore and Ross do not seem to notice is that their observations give rise to two reasons to reject pluralism and endorse hedonism. The first reason is that if **the suggested non-hedonic intrinsic values are potentially explainable by appeal to just pleasure and pain** (which, following my argument in the previous chapter, we should accept as intrinsically valuable and disvaluable), **then—by appeal to Occam’s razor—we have at least a pro tanto reason to resist the introduction of any further intrinsic values and disvalues. It is ontologically more costly to posit a plurality of intrinsic values and disvalues, so in case all values admit of explanation by reference to a single intrinsic value and a single intrinsic disvalue, we have reason to reject more complicated accounts.** **The fact that suggested non-hedonic intrinsic values tend to be hedonistic instrumental values does not, however, count in favor of hedonism solely in virtue of being most elegantly explained by hedonism; it also does so in virtue of creating an explanatory challenge for pluralists.** The challenge can be phrased as the following question: **If the non-hedonic values suggested by pluralists are truly intrinsic values in their own right, then why do they tend to point toward pleasure and away from pain?**27

**Moral uncertainty means preventing extinction should be our highest priority.  
Bostrom 12** [Nick Bostrom. Faculty of Philosophy & Oxford Martin School University of Oxford. “Existential Risk Prevention as Global Priority.” Global Policy (2012)]  
These reflections on **moral uncertainty suggest** an alternative, complementary way of looking at existential risk; they also suggest a new way of thinking about the ideal of sustainability. Let me elaborate.¶ **Our present understanding of axiology might** well **be confused. We may not** nowknow — at least not in concrete detail — what outcomes would count as a big win for humanity; we might not even yet **be able to imagine the best ends** of our journey. **If we are** indeedprofoundly **uncertain** about our ultimate aims,then we should recognize that **there is a great** option **value in preserving** — and ideally improving — **our ability to recognize value and** to **steer the future accordingly. Ensuring** that **there will be a future** version of **humanity** with great powers and a propensity to use them wisely **is** plausibly **the best way** available to us **to increase the probability that the future will contain** a lot of **value.** To do this, we must prevent any existential catastrophe.

**Reducing the risk of extinction is always priority number one.   
Bostrom 12** [Faculty of Philosophy and Oxford Martin School, University of Oxford.], Existential Risk Prevention as Global Priority.  Forthcoming book (Global Policy). MP. http://www.existenti...org/concept.pdfEven if we use the most conservative of these estimates, which entirely ignores the   possibility of space colonization and software minds, **we find that the expected loss of an existential   catastrophe is greater than the value of 10^16 human lives**.  **This implies that the expected value of   reducing existential risk by a mere one millionth of one percentage point is at least a hundred times the   value of a million human lives.**  The more technologically comprehensive estimate of 10  54 humanbrain-emulation subjective life-years (or 10  52  lives of ordinary length) makes the same point even   more starkly.  Even if we give this allegedly lower bound on the cumulative output potential of a   technologically mature civilization a mere 1% chance of being correct, we find that the expected   value of reducing existential risk by a mere one billionth of one billionth of one percentage point is worth   a hundred billion times as much as a billion human lives. **One might consequently argue that even the tiniest reduction of existential risk has an   expected value greater than that of the definite provision of any ordinary good, such as the direct   benefit of saving 1 billion lives.**  And, further, that the absolute value of the indirect effect of saving 1  billion lives on the total cumulative amount of existential riskâ€”positive or negativeâ€”is almost   certainly larger than the positive value of the direct benefit of such an action.

## 1NC – CP

#### CP Text - The Federative Republic of Brazil ought to:

#### recognize an unconditional right of non-Trucker workers to strike.

#### make striking by all Trucker workers a federal crime and implement penalties modelled after New York City Taylor Law including two-for-one fines, lifetime bans from federal jobs, and jail time.

#### Trucker Strikes obliterate Food Security and turns the Economy.

Woody 18 Katherine Woody 7-3-2018 "Economic Impact of the Brazilian Trucker Strike" <https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Economic%20Impact%20of%20the%20Brazilian%20Trucker%20Strike_Brasilia_Brazil_7-3-2018.pdf> (Agricultural Attaché at US Foreign Agriculture Service)//Elmer

Report Highlights: On May 21, 2018, hundreds of thousands of **Brazil’s** nearly 2 million **truck drivers began** an 11-day **strike** to protest high diesel prices, a move that **slowed Brazil’s economy**, **crippled** **transportation-dependent industries**, and **caused** estimated **losses of US$ 1.75 billion to Brazil’s agricultural sector**. **A month after** Brazil’s longest trucker strike (and one of the country’s most effective strikes in history), **transportation and logistics challenges still persist** **for Brazil’s exporters**, as shipments of Brazilian commodities are still delayed, **supply chains are still experiencing bottlenecks**, and debate and **uncertainty about** Brazil’s transportation **policies and prices continue to plague the agricultural sector** Background On May 21, 2018, hundreds of thousands of Brazil’s nearly 2 million truck drivers began an 11-day strike to protest high diesel prices, a move that slowed Brazil’s economy, crippled transportation-dependent industries, and caused estimated losses of US$ 1.75 billion to Brazil’s agricultural sector. Truck drivers parked their rigs along roads across the country, refusing to make deliveries of cargo and creating roadblocks on more than half of Brazil’s 500 busiest highways. Within a few days, the **effects** of the strike were **widespread** and painful, as gas stations ran out of fuel, drivers waited for hours in lines for what small fuel supplies remained, **supermarket shelves began to empty** and some **stores rationed perishable products**, and airports began cancelling flights as fuel supplies dwindled. Virtually **all segments of Brazil’s agricultural sector were affected in some way**, but livestock and poultry operations were particularly hard hit by feed delivery disruptions, idled slaughterhouses, export stoppages, and ultimately the culling of tens of millions of animals. A month after Brazil’s longest trucker strike (and one of the country’s most effective strikes in history), transportation and logistics challenges still persist for Brazil’s exporters, as shipments of Brazilian commodities are still delayed, supply chains are still experiencing bottlenecks, and debate and uncertainty about Brazil’s transportation policies and prices continue to plague the agricultural sector. The truckers’ rebellion was particularly painful for Brazil because the country lacks extensive rail and waterway infrastructure to transport goods, instead relying on trucks to carry more than 90 percent of all freight (excluding crude oil and iron ore). Additionally, Brazil’s limited road infrastructure meant that it was easy for striking truckers to create massive bottlenecks by setting up roadblocks along major roads, many of which are only one lane in each direction. Unlike the United States, where many **agricultural goods** are transported to export terminals by railways or river barges, Brazil’s farmers are **dependent on trucks** to move their goods within the domestic market and to ports for sale to the international market. The effects of the strike were wide-ranging, especially as gas stations ran out of fuel, supermarket shelves began to empty of fresh foods, and ports ran low on commodities to load for export. At the Port of Paranagua in the state of Paraná, one of the main soybean routes was interrupted. At the beginning of the strike, authorities warned that the blockage obstructed the arrival of a thousand soybean trucks per day in the terminal. According to the Sao Paulo State Supermarket Association (APAS), Brazilian retailers lost R$1.3 billion due to shortages of perishable items. In Sao Paulo alone, supermarkets losses were estimated at R$400 million. Causes The strike was spurred by rapidly rising fuel prices (diesel prices were up 43 percent since July 2017), combined with the effects of the Brazil real continuing to weaken against the U.S. dollar. Last year, Brazil’s state-controlled oil company, Petrobras, changed its pricing policies allow daily fluctuations of fuel prices pegged to the international oil market and scrapped subsidies that had kept domestic fuel prices lower. Most Brazilian truck drivers are largely self-employed and daily increases in fuel costs had begun to cut deeply into their incomes. Brazilian citizens of all economic classes supported the truck drivers, and by the eighth day of the strike, 87 percent of the population approved of the strike and sympathized with what many saw as another example of the injustice of government taxes, according to one public opinion poll by Brazilian firm Datafolha. However, the same firm on June 11 published results of a separate opinion poll that showed that 69 percent of Brazilians thought the trucker strike was harmful for the Brazilian economy. The survey also showed that Brazilians want more control of gas and fuel prices. Even before the strike, high fuel prices were affecting the competitiveness of Brazilian agricultural exports. Brazil’s transportation lobby, the National Confederation of Transport, estimated that before the strike Brazilian diesel prices were about 15 higher than in the United States, and argued that diesel fuel in Brazil was more expensive than in similarly developed countries such as Mexico and Russia. Roughly half of the Brazilian fuel price paid by consumers goes to government taxes. A study by the College of Agriculture at the University of Sao Paulo (ESALQ) found that farmers were paying an average of 9.05 reals (US$ 2.42) more per ton than early 2017 to transport oilseeds and grains from Mato Grosso to the Port of Santos in Sao Paulo. ESALQ estimated that in 2017, the cost to move Brazilian agricultural goods around the country reached 120 billion reals, with 87.5 percent going to transportation costs. Diesel prices at the pump in the major agriculture-producing states of Mato Grosso, Sao Paulo, and Paraná increased by 13-15 percent between January 2017 and May 2018, according to the ESALQ study. Resolution As the strike dragged on Brazilian President Michel Temer authorized intervention by military and federal police to clear roadblocks and begin escorting some trucks to their destinations, especially rigs carrying fuel to airports and other strategic locations. Desperate to jumpstart the country’s economy, Brazilian officials met with the leaders of several trucker unions, but a deal with union leaders to temporarily cut fuel prices was rejected by large numbers of independent truckers, who used social media apps to coordinate their response and garner public support for the continued strike. On the ninth day of the strike, the Brazilian government agreed to reduce diesel prices by 0.46 reals per liter, hold prices stable for 60 days, reduce tolls for large trucks, and suspend or eliminate some taxes in an effort to coax drivers back to the roads. The measures largely worked, with most truckers returning to the road and deliveries of food, fuel, and medicine beginning to flow again, albeit at a slower, more unreliable pace. Still, the concessions reportedly cost the Brazilian government 9.5 billion reals (US$ 2.48 billion) and contributed to the resignation of the Petrobras CEO. Market analysts have revised upward Brazil’s budget deficit for the year, now estimated at R$151 billion (US$ 40 billion), up more than R$12.5 billion (US$ 3.3 billion) from the previous month’s estimate due to the increased cost of fuel subsidies agreed to under negotiations to end the strike. Effects Although goods of all kinds, including agricultural products, started flowing again by the beginning of June, the strike left lasting scars on the Brazilian economy. Forecasters are estimating total losses of between US$ 25-30 billion to Brazil’s economy as a result of the strike. Brazil’s National Confederation of Agriculture and Livestock (CNA) estimated losses to the agricultural sector due to the trucker strike at 6.6 billion reals (about US$ 1.75 billion). CNA also estimated that it **could take** Brazilian agricultural producers 6 months to **a year to recover fully** from the effects of the strike. Brazil’s central bank released its June report and **cut** **projected** 2018 **GDP** growth **to 1.6 percent**. One of the Brazilian government’s concessions to end the strike, a minimum freight rate guaranteed to truckers, is continuing to wreak havoc on the agricultural industry. The policy, which was implemented by presidential decree on May 30, was immediately criticized by a number of transportation-dependent industries, chief among them agriculture. CNA argued that the policy is unconstitutional and completely **upends** **logistics for agricultural producers**, many of whom have already concluded marketing contracts for 2018 crops. CNA reports that **soy and corn** producers and traders are already **paying** an **additional** R$ 500 million (US**$ 132 million**) for transportation **every day,** for a total of more than R$ 10 billion (US$ 2.65 billion) so far. Analysis by CNA forecasts that the policy is increasing freight rates by approximately 50-150 percent throughout the country, with Brazil’s powerhouse agricultural region in the interior of the country being hit the hardest. CNA and other players in the agricultural sector have challenged the measure in court through more than 50 lawsuits. Brazilian Supreme Court Justice Luiz Fux has been trying to mediate a solution satisfactory to both the transportation sector and the agricultural and industrial sectors dependent on those services. In the meantime, he suspended the pending lawsuits and left in effect the minimum freight rate table published on May 30 by the National Agency for Terrestrial Transportation (ANTT). President Temer has said he will abide by the court’s decision, truck drivers have threatened to strike again if the minimum price policy is invalidated. ANTT has publically estimated that judicial proceedings will continue through at least early August. Count Justice Fux confirmed that a new round of negotiations on this topic is scheduled for August 27, after the Supreme Court recess. The Brazilian Ministry of Agriculture (MAPA) has warned that the lack of certainty over truck freight rates has hindered transportation of commodities to the ports and subsequently caused shipping delays. Nearly two weeks after the end of the strike, MAPA Minister Blairo Maggi told reporters, “There are a lot of products waiting for transportation. We should be moving 450,000 tons of goods to ports every day, but we are not.” He also noted that the situation has affected forward sales of agricultural commodities since traders cannot accurate price the contracts without knowing how much will need to be spent on transportation. CNA argues that since the policy went into effect, **productivity of Brazil’s agricultural sector has slowed by half**, as producers have slowed the volume of shipments they are sending to ports while they wait for a resolution. Meanwhile, the number of ships waiting to load at Brazilian ports has continued to grow. According to shipping agency Williams, the number of ships berthed and loading in mid-June was about 40 percent lower than the same period last year, while the ship line-ups had grown to be about 60 percent larger than 2017, with as many as 70 ships waiting, according to some industry sources. CNA estimated that the shipping delays have cost about R$ 135 million (US$ 36 million) in demurrage charges for ships that have been delayed in loading at Brazilian ports. Moreover, the problems created by continued uncertainty about the policy are expected to worsen as Brazil’s second-crop corn harvest progresses. Brazil’s second-crop corn is currently less than 10 percent harvested, but limited silo capacity in the country means that commodities must generally start flowing to the ports as it comes out of the ground. With a record soybean crop this year and slow delivery to the ports in June, Brazilian corn will be forced to compete with soy for transportation and storage capacity, and freight rates are expected to rise as more Brazilian corn comes onto the market. Impact on the Agricultural Sector Livestock Swine and Poultry: The most significant losses from the strike were born by the chicken and pork production sector. Shortages of fuel and animal feed affected farms and feedlots, while slaughterhouses idled their production lines when transportation to the ports was cut off and refrigerated warehouses filled to capacity. Analysts estimated a loss of R$4 billion (US$ 1.05 billion) in exports, with 120,000 metric tons of chicken and pork meat not exported because of the strike. The Brazilian Association of Animal Protein reported that the strike caused the closure of 137 poultry plants and 30 swine slaughterhouses, forcing 220,000 industry workers to go on temporary leave. As feed rations ran low, some poultry operations were only feeding birds once every 48 hours, considered starvation rations, according to MAPA Minister Maggi. Particularly worrisome for the world’s largest exporter of chicken was the fact that poultry operations were forced to cull an estimated 70 million birds (about 7 percent of Brazil’s flock of 1 billion birds), bringing the level of chicks on breeder farms down to their lowest levels in a decade. Minister Maggi called on President Temer during the strike to ensure security forces were escorting trucks of feed rations to poultry farms. By mid-June, all affected processing plants had resumed operations, according to the Brazilian Association of Animal Protein. However, the disruption in supply was expected to cause a spike in Brazilian chicken prices as the sector could take more than 2 months to fully recover. Wholesale prices for frozen chicken in Brazil were up more than 40 percent. Moreover, Rabobank revised downward their forecast of the Brazilian poultry sector to an estimated 3 percent decline for the year (down from a forecasted 2-percent expansion). Cattle: The trucker strike came at a very unfortunate time for the beef sector. With the beginning of winter in Brazil, cattle on pasture begin to lose weight and needed to be sent to slaughter, but the strike forced the closure of virtually all of Brazil’s more than 100 cattle slaughterhouses. Most of the losses in the beef industry occurred not through the mortality of animals on farm, but rather through estimated lost exports of R$ 620 million (US$ 164 million). More than 40,000 metric tons of beef were unable to reach ports, and the domestic market saw an uncalculated amount of beef spoiled on the road as an estimated 3,750 refrigerated trucks sat idle during the strike, according to meatpacking trade association ABIEC. The industry calculates total losses to the sector could reach R$ 8 billion (US$ 2.1 billion). ABIEC noted that 90 percent of animal protein production was interrupted. On a positive note for beef producers, some analysts expect beef prices to rise in response to lower chicken meat volumes. Dairy Dairy producers across Brazil were severely affected by the transportation paralysis, with news media depicting dire scenes of the disposal of hundreds of millions of liters of milk by farmers who could not store their perishable products. The discarded milk alone was valued at more than R$ 1 billion (US$ 260 million). Milk supply in Brazil is expected to decline 9 percent year over year in the second quarter of 2018 as a consequence of the strike. Moreover, production will take a while to recover and will likely drop 6 percent year-over-year in the third quarter. Market analysts evaluate that milk prices paid to producers are expected to peak in the third quarter of 2018. Following 12 months of low profitability, farmers and processors were forced at a particularly difficult time to absorb the losses caused by the May strike. **Grains** and **Oilseeds** When the strike began in late May, Brazil’s soybean harvest was nearly finished and the harvest for second-crop “safrinha” corn was just beginning. The largest producing area for both of these crops is Brazil’s center-west region in the interior of the country, located very far from points of export in Brazil’s southeast and north arc regions. Loading at some of Brazil’s largest **soybean**-exporting ports, including Santos, Paranagua, Rio Grande, and Santarem, ground to a halt during the strike, as on-port stocks emptied and roadblocks kept trucks from delivering commodities for export. Most export terminals ran out of soybeans for shipment about 8 days into the strike, with soybeans reportedly arriving to the Port of Paranagua in Paraná state on the afternoon of the tenth day when trucks were able to reach the port complex for the first time since the strike had begun. Trucks reportedly unloaded more than 40,000 tons of soybeans at the port in the first 24 hours after the strike concluded. The Port of Santos, Latin America’s largest port, was also idled when trucks could no longer make deliveries. Cargo transported by rail were unaffected by the strike, but this makes up only a small portion of exports from the Port of Santos. Brazil’s soybean crushers association, ABIOVE, reported that all 63 of Brazil’s soy-crushing facilities came to a standstill during the strike due to a lack of supplies. The Mato Grosso Institute for Agricultural Economics (IMEA) reported that the corn harvest stalled out as fuel supplies in the state ran low. The aftermath of the strike and uncertainty about the minimum freight rate have stifled forward sales for soybeans, with traders complaining that they are unable to accurately set prices for futures contracts without a reliable estimate of transportation costs. As of late June, some of the country’s largest grain traders have virtually stopped buying soybeans and **corn** for export, even though IMEA reported that about one-third of Mato Grosso’s safrinha corn is still unsold. Grain and oilseed traders are also reportedly delaying picking up commodities from farmers’ storage facilities while they angle to avoid paying rapidly rising freight rates and wait to see what happens to the government’s minimum transportation price policy. This could be a major problem for a country whose agricultural producers have a lack of on-farm storage and will be faced with tough decisions of where to place safrinha corn. Brazil’s National Association of Cereal Exporters estimated that as of mid-June, about 10 million tons of soybeans were paralyzed in the interior of the country while more than 50 vessels were waiting to be loaded at ports. CNA reported that exports of at least 6.8 million tons of soybeans and soybean meal have been delayed due to surging freight prices under the government’s minimum price policy. Meanwhile, the number of trucks arriving at the Port of Santos was down more than 20 percent from a month earlier, despite abundant soybean supplies in the country ready for export. At the Port of Paranagua, truck volume was down more than 10 percent and while the port has been receiving enough soybean volume to load waiting vessels, it has not been able to begin rebuilding its 1.5 million metric tons of on-port stocks, which were completely depleted during the 11-day strike. This makes the port particularly vulnerable if there is a second truck driver strike if the government’s minimum freight rate policy is rescinded. The backlog of ships at Brazil’s ports are not merely waiting to load commodities for export; they are waiting to unload cargoes of agricultural inputs, especially fertilizer needed by Brazil’s farmers for the wheat planting currently underway, as well as preparing fields for soybean planting, which will commence in a few months. CNA estimated that about 35 ships are currently lined up and waiting to unload fertilizer at Brazilian ports, more than half at the Port of Paranagua in the state of Paraná in southern Brazil. According to Brazil’s Fertilizer Blenders Association, 60 percent of fertilizer deliveries have been delayed as a result of the backlog. Sugarcane and Ethanol The strike began just as the harvest kicked off in the world’s largest sugarcane-growing regions, Brazil’s center-south. Progress on the sugarcane harvest slowed as fuel supplies dwindled and at least 220 sugar mills were forced to close, according to trade group Forum National Sucroenergetico. Meanwhile, UNICA, Brazil’s Sugar Growers Association, reported that 150 sugar mills closed in the state of Sao Paulo alone, where 60 percent of Brazil’s sugar and ethanol production occurs. The state of Sao Paulo produces about 150,000 tons of sugar and 100 million liters of ethanol daily, and the sugar industry in that state suffered losses in revenue of about US$ 48 million daily during the strike. The disruption caused international sugar futures to rise as sugar exports were unable to reach the ports. Once fuel supplies began flowing again, harvest and crushing operations were able to quickly get back up to speed. Losses in the sector are calculated at R$ 740 million (US$ 196 million). However, this calculation does not include lost/delayed sales of ethanol stored at the mills for exports or use in the domestic market, as no data of this type has been released. Brazil is the world’s largest exporter of sugar, with more than 20 million tons exported in the previous season. Coffee Brazil is the world’s largest coffee grower and exporter, and the trucker strike hit just as the country’s main Arabica harvest was commencing, which caused international Arabica futures prices to increase by about 2 percent. According to Brazil’s Coffee Exporters Council (CeCafe), the strike affected issuance of export certificates and delayed shipments, but CeCafe noted that most sales were already concluded and overall exports for the season are expected to remain at roughly the same levels estimated before the strike. According to the Brazilian Coffee Industry Association, coffee producers lost an estimated R$ 70 million (US$ 18.5 million) per day during the protests, while CeCafe estimated export losses and extra port costs of R$ 560 million (US$ 148 million). Seafood Brazil’s seafood industry was affected by a disruption of deliveries between producers and processing centers, according to trade group Peixe BR. The state of Paraná is Brazil’s largest producer of fish, raising more than 100,000 tons of tilapia last year, while the state of Sao Paulo has seen rapid growth of the industry, producing more than 65,000 tons of tilapia last year. These two states’ aquaculture sectors were the hardest hit, according to Peixe BR. At one point during the strike, a large, multi-commodity agricultural cooperative in southern Brazil, was forced to halt tilapia processing operations when truck drivers blocked roadways and cut off supplies for processing, as well as the route for distributing the final product. Fruits and Vegetables As a result of the strike, many of Brazil’s wholesale markets saw supplies of fresh products dwindle and spoilage of other products in cases where usual customers were unable to make routine purchases. The Sao Paulo Warehouse Company (CEAGESP), Latin America’s largest and the world’s third-largest wholesale market, reported losses of nearly R$ 100 million (US$ 26 million) of fruits, vegetables, and nuts, including imported products. During a normal day, CEAGESP would normally see about 1,800- 2,000 trucks come and go from the market with fresh and perishable products. However, during the strike this was reduced to less than 100 trucks per day. In addition to losses of perishable products, the prices of remaining products sored because CEAGESP prices serve as a reference for states in Brazil. Supermarkets The Brazilian Supermarket Association (ABRAS) reported total losses of R$ 2.7 billion (US$ 712 million) due to the truckers strike. In addition to losses with fresh, frozen, and perishable products, ABRAS reported shortages of other consumer goods that could not be delivered to stores. According to the Sao Paulo State Supermarket Association, in Sao Paulo alone supermarkets losses reached R$ 400 million (US$ 105 million).

#### The Counterplan shuts down Trucker Strikes.

Bauernschuster et Al 17, Stefan, Timo Hener, and Helmut Rainer. "When labor disputes bring cities to a standstill: The impact of public transit strikes on traffic, accidents, air pollution, and health." American Economic Journal: Economic Policy 9.1 (2017): 1-37. (Faculty of Business Administration and Economics, University of Passau, Innstra)//Elmer

New York City's **Taylor Law,** which was put into effect **in response to a transit strike** in 1966, represents an example of a particularly draconian measure. Under Section 210, the law **prohibits** any **strike or** other concerted **stoppage** 01 worn or slowdown by public employees (Division of Local Government Services 2009). Instead, it prescribes binding arbitration by a state agency to resolve bargaining deadlocks between unions and employers. **Violations** against the prohibition on strikes are **punishable with hefty penalties**. The fine for an individual worker is **twice** the striking employee's **salary** **for each** **day** the strike lasts. In addition, union leaders face **imprisonment**. Since its inception in 1967, the Taylor Law has generated a lot of controversy. To proponents, it was **successful in averting several potential transit strikes** that would have imposed significant costs on the city and its inhabitants (OECD 2007). Indeed, New York City has only seen two transit strikes over the past four decades—in 1980 and in 2005. In both cases, harsh monetary penalties were imposed on workers and unions. The 2005 transit strike additionally led to the imprisonment of a union leader, and saw the Transport Workers Union (TWU) filing a formal complaint with the ILO. Since then, the ILO has urged the United States government to restore the right of transit workers to strike, arguing that they do not provide essential services justifying a strike ban (Committee on Freedom of Association 2011, 775). So far, the Taylor Law has not been amended in this direction.

#### Brazil key to Global Food Supply

Moreira 21 Assis Moreira 7-5-2021 "Brazil to remain world leader in food supply, OECD and FAO say" <https://valorinternational.globo.com/agribusiness/news/2021/07/05/brazil-to-remain-world-leader-in-food-supply-oecd-and-fao-say.ghtml> (Geneva Correspondent on Agribusiness)//Elmer

**Brazil** will **continue** to increase its **role as a major global food supplier**, including in products such as beef and even with a slower pace of growth in demand from China. These projections are **in the report on agricultural outlook** 2021-2030 released Monday by the Food and Agriculture Organization of the United Nations (FAO) and the Organization for Economic Cooperation and Development (OECD). China will continue to have enormous influence on agricultural markets. The Chinese deficit in agricultural trade has grown to $86 billion in 2020 from $2.6 billion in 2000. For the next ten years, Beijing will continue to expand imports, but at a slower pace due to lower population growth, saturation in consumption of some commodities, and efficiency gains in its own production. In addition, the Chinese market will pose tougher competition as trade tensions with the United States ease. The report predicts that China could once again become the main market for U.S. agricultural exports. In this scenario, **abundant land and water** will **make Brazil the dominant producer**, and Latin America as a whole **will see** its **agricultural production grow by 14%** over the next ten years. The **net value of the region’s exports is expected to expand by 31%** — just over half the rate achieved between 2011 and 2020. By 2030, the region will continue to grow its share of global markets for key commodities. It may have 63% of world soybean exports, 56% of sugar exports, 44% of fish, 42% of beef exports, and 33% of chicken shipments.

#### Food insecurity spurs conflict and on face kills millions of innocents.

FDI 12 (Future Directions International, a Research institute providing strategic analysis of Australia’s global interests; citing Lindsay Falvery, PhD in Agricultural Science and former  Professor at the University of Melbourne’s Institute of Land and Environment, “Food and Water Insecurity: International Conflict Triggers and Potential Conflict Points,” <http://www.futuredirections.org.au/workshop-papers/537-international-conflict-triggers-and-potential-conflict-points-resulting-from-food-and-water-insecurity.html)//Elmer>

There is a growing appreciation that the conflicts in the next century will most likely be fought over a lack of resources.¶ Yet, in a sense, this is not new. Researchers point to the French and Russian revolutions as conflicts induced by a lack of food. More recently, Germany’s World War Two efforts are said to have been inspired, at least in part, by its perceived need to gain access to more food. Yet the general sense among those that attended FDI’s recent workshops, was that the scale of the problem in the future could be significantly greater as a result of population pressures, changing weather, urbanisation, migration, loss of arable land and other farm inputs, and increased affluence in the developing world.¶ In his book, Small Farmers Secure Food, Lindsay Falvey, a participant in FDI’s March 2012 workshop on the issue of food and conflict, clearly expresses the problem and why countries across the globe are starting to take note. .¶ He writes (p.36), “…if people are hungry, especially in cities, the state is not stable – riots, violence, breakdown of law and order and migration result.”¶ “Hunger feeds anarchy.”¶ This view is also shared by Julian Cribb, who in his book, The Coming Famine, writes that if “large regions of the world run short of food, land or water in the decades that lie ahead, then wholesale, bloody wars are liable to follow.” ¶ He continues: “An increasingly credible scenario for World War 3 is not so much a confrontation of super powers and their allies, as a festering, self-perpetuating chain of resource conflicts.” He also says: “The wars of the 21st Century are less likely to be global conflicts with sharply defined sides and huge armies, than a scrappy mass of failed states, rebellions, civil strife, insurgencies, terrorism and genocides, sparked by bloody competition over dwindling resources.”¶ As another workshop participant put it, people do not go to war to kill; they go to war over resources, either to protect or to gain the resources for themselves.¶ Another observed that hunger results in passivity not conflict. Conflict is over resources, not because people are going hungry.¶ A study by the International Peace Research Institute indicates that where food security is an issue, it is more likely to result in some form of conflict. Darfur, Rwanda, Eritrea and the Balkans experienced such wars. Governments, especially in developed countries, are increasingly aware of this phenomenon.¶ The UK Ministry of Defence, the CIA, the US Center for Strategic and International Studies and the Oslo Peace Research Institute, all identify famine as a potential trigger for conflicts and possibly even nuclear war.

## Case

#### ROB is to vote for the better debater – anything else is arbitrary, self–serving, and impact justified – they haven’t justified how debate shapes subject formation – it doesn’t – the role of individual debate rounds is white noise – *can you remember what happened round () of () your senior year?*

#### Growth is sustainable and inevitable – unparalleled data proves tech solves, but transition doesn’t.

Bailey ’16 (Ronald; 12/16/16; B.A. in Philosophy and B.A. Economics from the University of Virginia, member of the Society of Environmental Journalists and the American Society for Bioethics and Humanities, citing a compilation of interdisciplinary research; Reason, “Is Economic Growth Environmentally Sustainable?” <http://reason.com/archives/2016/12/16/is-economic-growth-environmentally-sust1)>

Is economic growth environmentally sustainable? No, say a group of prominent ecological economists led by the Australian hydrologist James Ward. In a new PLoS ONE article—"Is Decoupling GDP Growth from Environmental Impact Possible?"—they offer an analysis inspired by the 1972 neo-Malthusian classic The Limits to Growth. They even suggest that The Limits to Growth's projections with regard to population, food production, pollution, and the depletion of nonrenewable resources are still on track. In other words, they think we're still heading for a collapse. I think **they're wrong**. But they're wrong in an instructive way. The authors describe two types of "decoupling," relative and absolute. Relative decoupling means that economic growth increases faster than rates of growth in material and energy **consumption** and **environmental impact**. Between 1990 and 2012, for example, China's **GDP rose 20-fold** while its energy use increased by a factor of four and its material use by a factor of five. Basically this entails increases in efficiency that result in using fewer resources to produce more value. Absolute decoupling is what happens when continued economic growth actually **lessens resource use** and impacts on the natural environment, that is, creating more value while using less stuff. Essentially humanity becomes richer while withdrawing from nature. To demonstrate that continued economic growth is unsustainable, the authors recycle the hoary I=PAT model devised in 1972 by the Stanford entomologist and population alarmist Paul Ehrlich and the Harvard environmental policy professor (and chief Obama science adviser) John Holdren. Human Impact on the environment is supposed to equal to Population x Affluence/consumption x Technology. All of these are presumed to intensify and worsen humanity's impact on the natural world. In Ward and company's updated version of I=PAT, the sustainability of economic growth largely depends on Technology trends. Absolute decoupling from resource consumption or pollutant emissions requires technological intensity of use and emissions to decrease by at least the same annual percentage as the economy is growing. For example, if the economy is growing at three percent per year, technological intensity must reduce 20-fold over 100 years to maintain steady levels of resource consumption or emissions. If technological intensity is faster then resource use and emissions will decline over time, which would result in greater wealth creation with ever lessening resource consumption and environmental spillovers. Once they've set up their I=PAT analysis, Ward and his colleagues assert that "for non-substitutable resources such as land, water, raw materials and energy, we argue that whilst efficiency gains may be possible, there are minimum requirements for these resources that are ultimately governed by physical realities." Among the "physical realities" they mention are limits on plant photosynthesis, the conversion efficiencies of plants into meat, the amount of water needed to grow crops, that all supposedly determine the amount of agricultural land required to feed humanity. They also cite "the upper limits to energy and material efficiencies govern minimum resource throughput required for economic production." To illustrate the operation of their version of the I=PAT equation, they apply it to a recent study that projected it would be possible for Australia's economy to grow 7-fold while simultaneously reducing resource and energy use and lowering environmental pressures through 2050. They **crank the notion** that there are nonsubstitutable physical limits on material and energy resources through their equations until 2100, and they find that eventually consumption of both rise at the same rate as economic growth. QED: Economic growth is unsustainable. Or as they report, "Permanent decoupling (absolute or relative) is impossible for essential, non-substitutable resources because the efficiency gains are ultimately governed by physical limits." **Malthus wins again!** Or does he? GDP growth—increases in the monetary value of all finished goods and services—is a crude measure for improvements in human well-being. Nevertheless, rising incomes (GDP per capita) correlate with lots of good things that nearly everybody wants, including access to more and better **food**, longer and **healthier lives**, more educational **opportunities**, and greater scope for life choices. Ward and his colleagues are clearly right that there is only so much physical stuff on the Earth, but even they know that wealth is not created simply by using more stuff. Where they go wrong (as so many Malthusians do) is by implicitly assuming that there are limits to human creativity. Interestingly, Ward and his colleagues, like Malthus before them, focus on the supposed limits to **agricultural productivity**. For example, they cite the limits to photosynthesis, which will limit the amount of food that humanity can produce. But as they acknowledge, human population may not continue to increase. In fact, **global fertility rates** have been **decelerating** for many decades now, and demographer Wolfgang Lutz calculates that world population will peak after the middle of this century and begin falling. Since the number of mouths to feed will stabilize and people can eat only so much, it is unlikely that the **biophysical limits** of agriculture on Earth will be exceeded. But it gets even better. Agricultural **productivity is improving**. Consider the biophysical limit on photosynthesis cited by the study. In fact, researchers are already making progress on installing more efficient C-4 photosynthesis into rice and wheat, which would **boost yields by** as much as **50 percent**. British researchers just announced that they had figured out how to boost photosynthetic efficiency to create a super-wheat would increase yields by 20 percent. In a 2015 article for the Breakthrough Journal, "The Return of Nature: How Technology Liberates the Environment," Jesse H. Ausubel of Rockefeller University reviews how humanity is **already decoupling** in many ways from the natural world. "A series of 'decouplings' is occurring, so that our economy no longer advances in tandem with exploitation of land, forests, water, and minerals," he writes. "American use of almost everything except information **seems to be peaking**." He notes that agricultural applications of fertilizer and water in the U.S. peaked in the 1980s while yields continued to increase. Thanks to increasing agricultural productivity, humanity is already at **"peak farmland"**; as a result, "an area the size of India or of the United States east of the Mississippi could be released globally from agriculture over the next 50 years or so." Ward is worried about biophysical limits on water use. But as Ausubel notes, U.S. **water use has peaked** and has declined **below the level of 1970**. What about meat? Ausubel notes the **greater efficiency** with which chickens and cultivated fish turn grains and plant matter into meat. In any event, the future of farming is not fields but factories. Innovators are already seeking to replace the entire dairy industry with milk, yogurt, and cheeses made by genetically modified bacteria grown in tanks. Others are figuring how to culture meat in vat. Ausubel also notes that many countries have already been through or are about to enter the "forest transition," in which forests begin to expand. Roger Sedjo, a forest economist at Resources of the Future, has projected that by the middle of this century most of world's **industrial wood** will be produced from planted forests covering a remarkably small land area, perhaps **only 5 to 10 percent** of the extent of today's global forest. Shrinking farms and ranches and expanding forests will do a lot toward turning around the alarming global reduction in wildlife. How about unsubstitutable stuff? Are we running out of that? Ausubel notes that the U.S. has apparently already achieved **absolute decoupling**—call it peak stuff—for a lot of materials, including plastics, paper, timber, phosphate, aluminum, steel, and copper. And he reports relative decoupling for **53** other **commodities**, all of which are likely heading toward absolute decoupling. Additive manufacturing is also known as 3-D printing, in which machines build up new items one layer at a time. The Advanced Manufacturing Office suggested that additive manufacturing can reduce material needs and costs by up to **90 percent**. And instead of the replacement of worn-out items, their material can **simply be recycled** through a printer to return it to good-as-new condition using only 2 to 25 percent of the energy required to make new parts. 3-D printing on demand will also eliminate storage and inventory costs, and will significantly cut transportation costs. Nanomanufacturing—building atom-by-atom—will likely engender a **fourth industrial revolution** by spurring exponential economic growth while reducing human demands for material resources. Ward and company project that Australians will be using 250 percent more energy by 2100. Is there an upper limit to energy production that implies unsustainability? In their analysis, the ecological economists apparently assume that energy supplies are limited. Why this is not clear, unless their model **implicitly assumes** a growing **consumption** of fossil fuels (and even then, the world is not close to running out of those). But there is a source of energy that, for all practical purposes, is limitless and has few deleterious environmental effects: **nuclear power**. If demand for primary energy were to double by 2050, a back-of-the-envelope calculation finds that the **entire world's energy needs** could be supplied by 6,000 conventional nuclear power plants. The deployment of fast reactors would supply "renewable" energy for thousands of years. The development of thorium reactors could also supply **thousands of years** of energy. And both could do so without harming the environment. (Waste heat at that scale would not be much of a problem.) Such power sources are in any relevant sense "decoupled" from the natural world, since their fuel cycles produce **little pollution**. Recall that GDP measures the monetary value of all finished goods and services. Finished goods will become a shrinking part of the world's economy as more people gain access to food, clothing, housing, transportation, and so forth. Already, services account for 80 percent of U.S. GDP and 80 percent of civilian employment. Instead of stuff, people will want to spend time creating and enjoying themselves. As technological progress enables economic growth, people will consume more pixels and less petroleum, more massages and less mortar, more handicrafts and less hardwood. Ultimately, Ward and his colleagues make the **same mistake as Malthus** and the Limits to Growth folks: They **extrapolate trends** without taking adequate account of human **ingenuity**. Will it be possible to grow the economy 7-fold over this century while reducing resource consumption and restoring the natural world? Yes.

#### Capitalism solves environmental crisis - industrial development, technological advances, and any alternative fails

Zitelmann 20 [(Dr. Rainer, a historian and sociologist. He is also a world-renowned author, successful businessman and real estate investor. Zitelmann has written a total of 24 books and has a doctorate in political science and sociology) “‘System Change Not Climate Change’: Capitalism And Environmental Destruction” Forbes, 7/13/2020] BC

The Price Of Growth—Destruction Of The Environment?

But isn’t there a price for this growth: environment devastation? Of course, nobody would deny that industrialization causes environmental problems. But the assertion that growth automatically leads to ever accelerating environmental degradation is simply false. Yale University’s Environmental Performance Index (EPI) uses 16 indicators to rank countries on environmental health, air quality, water, biodiversity, natural resources and pollution. These indicators have been selected to reflect both the current baseline and the dynamics of national ecosystems. One of the Index’s most striking findings is that there is a strong correlation between a state’s wealth and its environmental performance. Most developed capitalist countries achieve high environmental standards. Those countries with the worst EPI scores, such as Ethiopia, Mali, Mauritania, Chad and Niger, are all poor. They have both low investment capacity for infrastructure, including water and sanitation, and tend to have weak environmental regulatory authorities.

Contrary to prevailing perceptions, industrial development and technological advances have contributed significantly to relieving the burden on the environment. Both Indur Goklany in his book The Improving State of the World and Steven Pinker in chapter ten (“The Environment”) of his book Enlightenment Now demonstrate that we are not only living longer, healthier lives in unprecedented prosperity, but we are also doing so on a comparatively clean planet.

Researchers have confirmed that economic freedom—in other words, more capitalism—leads to higher, not lower, environmental quality.

Every year, the Heritage Foundation compiles its Index of Economic Freedom, which analyzes individual levels of economic freedom, and thus capitalism, in countries around the world. The Heritage Foundation’s researchers also measure the correlation between each country’s environmental performance and its economic freedom. The results couldn’t be clearer: the world’s most economically free countries achieve the highest environmental performance rankings with an average score of 76.1, followed by the countries that are “mostly free,” which score an average of 69.5. In stark contrast, the economically “repressed” and “mostly unfree” countries all score less than 50 for environmental performance.

Is Government The Best Solution To Environmental Problems?

Anti-capitalists frequently claim that central government is the best solution to environmental problems. And there is no doubt that state regulations to safeguard the environment are important. But state regulations, cited by anti-capitalists as a panacea for environmental issues, often achieve the opposite of what they were intended to do. Hardly any other country in the world touts its green credentials as much as Germany. According to even the most conservative estimates, Germany’s so-called “energy transition” is set to cost a total of almost €500 billion by 2025.

But the results of this massive investment is sobering, as an analysis by McKinsey reveals, “Germany is set to miss several key energy transition targets for the year 2020, and the country’s high power supply security is at risk unless new generation capacity and grid infrastructure are built in time for the coal and nuclear exit and electrification of transportation networks is accelerated.”

For decades, environmentalists in Germany focused on shutting down nuclear power plants. However, the phasing out of nuclear power has left Germany in a poor position in terms of CO2 emissions compared to other countries. It is not without good reason that Germany’s energy policy has been described as the dumbest in the world.

The latest generation of nuclear power plants are much safer than their predecessors. Despite what environmentalists might claim, impartial calculations have confirmed that it is impossible to meet the world’s energy needs from solar and wind power alone. Enlightened environmentalists are therefore now calling for nuclear power to be rightfully included in the fight against climate change. And yet, this is precisely what is being prevented in Germany by politicians—not capitalism. This example, just one of many, shows that government environmental policy is often ineffective. In some instances, it even achieves the opposite of what it was originally intended to, i.e. it exacerbates existing environmental problems.

It is also wrong to think that capitalism necessarily leads to ever greater waste of limited natural resources. Just take the smartphone for example, one of the most environmentally friendly of capitalism’s many achievements. With just one small device, a whole plethora of devices that used to consume resources in the past, such as the telephone, camera, calculator, navigation system, dictation machine, alarm clock, flashlight and many others, have been replaced. Smartphones also help to reduce the consumption of paper as many people choose not to take notes on paper and, for example, use their iPhone instead of a calendar to enter appointments.

Those who call for “system change” instead of “climate change” do not usually say which system they would prefer. All they are really sure of is that any new system should not be based on free market economics and that the state should play the decisive role. The simple fact is that socialism has failed in every country every time it has been tried—and socialism has damaged the environment more than any capitalist system. Murray Feshbach documents examples of the environmental destruction wrought by socialism in his book Ecological Disaster. Cleaning Up the Hidden Legacy of the Soviet Regime. As the book progresses through chapters such as “A Nuclear Plague,” “Dying Lakes, Rivers, and Inland Seas” and “Pollution of the Air and Land,” it becomes clear that this non-capitalist system was responsible for the greatest environmental destruction in history. Anti-capitalists may well reply that they do not want a system like the Soviet Union. And yet, they cannot name a single real-world system—at any time in the history of mankind—that provides better environmental solutions than capitalism.

#### Key to solve disease.

Jackson ‘16 (Kerry, Pacific Research Institute; 12/19/16; Free Market Policies Needed To Incentivize Creation Of New Life-Saving Treatments; https://www.pacificresearch.org/article/free-market-policies-needed-to-incentivize-creation-of-new-life-saving-treatments/)

“Our strongest antibiotics don’t work and patients are left with potentially untreatable infections,” Director Dr. Tom Frieden said when the CDC issued its warning. He asked doctors, hospitals and public health officials to “work together” to “stop these infections from spreading.” The 2014 Report to the President expressed a similar concern: “The evolution of antibiotic resistance is now occurring at an alarming rate and is outpacing the development of new countermeasures capable of thwarting infections in humans. This situation threatens patient care, economic growth, public health, agriculture, economic security and national security.” For those thinking this sort of thing shouldn’t be happening when medical science is more advanced than can almost be conceived, be assured that it is. And unless there are public policy interventions, it’s likely to get worse. “More and more microorganisms will continue to gain resistance to the current drug therapies because (antimicrobial resistance, or AMR) is basic evolution,” Wayne Winegarden writes in the Pacific Research Institute’s newly-released report “Incenting the Development of Antimicrobial Medicines to Address the Problem of Drug-Resistant Infections.” The International Federation of Pharmaceutical Manufacturers says the problem is caused by “a dearth of new antibiotic medicines.” At the same time that there’s been an increase in AMR, there has been “a sharp decline in the development of new antibiotic medicines.” The group reports that only two new classes of antibiotics have been discovered in the last three decades compared to 11 in the previous 50 years. The answers to many medical problems are still not within reach of researchers. But the hazards of AMR can be diminished. Winegarden suggests we begin with public health campaigns that encourage handwashing, which he calls a highly effective and low-cost way to reduce the spread of infection. He further recommends policy that would address the problem of antibiotic overuse and greater use of vaccines to cut the incidents of infection. But Winegarden’s primary concern is establishing the correct incentives for developing new antimicrobial medicines that would be effective against AMR microorganisms. He’s specifically referring to policies “based on a thorough understanding of the disincentives that are currently inhibiting their development.” “These disincentives are well-recognized,” he writes. “Despite the medical need, and despite the generally strong return on investment for many other drug classes, the return on investment for developing new antimicrobial medicines (particularly antibiotics) is too low.” Producing a new drug is a grinding and expensive endeavor. It can take 10 to 15 years to develop a single prescription drug that is introduced to the market, and a company can spend as much as $5.5 billion on research and development for each medication that is eventually approved and prescribed. Less than 2 percent of all projects launched to create new drugs succeed. This is not an environment in which pharmaceutical companies can get too amped up about pursuing new treatments. Yet new drug approvals increased over the last decade. Don’t look for a surge of antimicrobial drugs in that pipeline, though. Winegarden says that particular drug class is among several that “face unique impediments” that serve as disincentives for innovation. To overcome the steep hill that impedes the development of new AMR drugs, lawmakers must implement policies that unleash the incentives of the free market. Policymakers also should look at the 1983 federal Orphan Drug Act and its market-oriented reforms that increased the number of drugs developed to treat rare diseases. More than 400 have been introduced to the market since the law was enacted, compared to fewer than 10 in the 1970s. Put another way, government needs to remove its anchors from the process and let the market do what it does so well. In this case, that’s restoring patients’ health, enriching innovative companies that create jobs, and inspiring biotech start-ups such as the group of Stanford undergraduates that has been capitalized to develop new antibiotics. If the proper incentives are in place, the needed treatments will follow.

#### Disease causes extinction -- climate change and genomic mutation irreversibly alter ecosystem equilibrium which leads to the emergence of new pathogens

Supriya 4/19 [(Lakshmi Ph.D., worked as part of the R&D group in diverse industries starting with semiconductor packaging at Intel, Arizona, where she developed a new elastomeric thermal solution, which has now been commercialized and is used in the core i3 and i5 processors. From there she went on to work at two startups, one managing the microfluidics chip manufacturing lab at a biotechnology company and the other developing polymer formulations for oil extraction from oil sands. She also worked at Saint Gobain North America, developing various material solutions for photovoltaics and processing techniques and new applications for fluoropolymers. Most recently, she managed the Indian R&D team of Enthone (now part of MacDermid) developing electroplating technologies for precious metals. She has been a freelance science journalist and science writer since 2016 and has written for publications such as The Wire, Science, and New Scientist.) “Humans versus viruses - Can we avoid extinction in near future?” News Medical, 4/19/2021. https://www.news-medical.net/news/20210419/Humans-versus-viruses-Can-we-avoid-extinction-in-near-future.aspx] BC

Expert argues that human-caused changes to the environment can lead to the emergence of pathogens, not only from outside but also from our own microbiome, which can pave the way for large-scale destruction of humans and even our extinction.

Whenever there is a change in any system, it will cause other changes to reach a balance or equilibrium, generally at a point different from the original balance. Although this principle was originally posited by the French chemist Henry Le Chatelier for chemical reactions, this theory can be applied to almost anything else.

In an essay published on the online server Preprints\*, Eleftherios P. Diamandis of the University of Toronto and the Mount Sinai Hospital, Toronto, argues that changes caused by humans, to the climate, and everything around us will lead to changes that may have a dramatic impact on human life. Because our ecosystems are so complex, we don’t know how our actions will affect us in the long run, so humans generally disregard them.

Changing our environment

Everything around us is changing, from living organisms to the climate, water, and soil. Some estimates say about half the organisms that existed 50 years ago have already become extinct, and about 80% of the species may become extinct in the future.

As the debate on global warming continues, according to data, the last six years have been the warmest on record. Global warming is melting ice, and sea levels have been increasing. The changing climate is causing more and more wildfires, which are leading to other related damage. At the same time, increased flooding is causing large-scale devastation.

One question that arises is how much environmental damage have humans already done? A recent study compared the natural biomass on Earth to the mass produced by humans and found humans produce a mass equal to their weight every week. This human-made mass is mainly for buildings, roads, and plastic products.

In the early 1900s, human-made mass was about 3% of the global biomass. Today both are about equal. Projections say by 2040, the human-made mass will be triple that of Earth’s biomass. But, slowing down human activity that causes such production may be difficult, given it is considered part of our growth as a civilization.

Emerging pathogens

Although we are made up of human cells, we have almost ten times that of bacteria just in our guts and more on our skin. These microbes not only affect locally but also affect the entire body. There is a balance between the good and bad bacteria, and any change in the environment may cause this balance to shift, especially on the skin, the consequences of which are unknown.

Although most bacteria on and inside of us are harmless, gut bacteria can also have viruses. If viruses don’t kill the bacteria immediately, they can incorporate into the bacterial genome and stay latent for a long time until reactivation by environmental factors, when they can become pathogenic. They can also escape from the gut and enter other organs or the bloodstream. Bacteria can then use these viruses to kill other bacteria or help them evolve to more virulent strains.

An example of the evolution of pathogens is the cause of the current pandemic, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Several mutations are now known that make the virus more infectious and resistant to immune responses, and strengthening its to enter cells via surface receptors.

The brain

There is evidence that the SARS-CoV-2 can also affect the brain. The virus may enter the brain via the olfactory tract or through the angiotensin-converting enzyme 2 (ACE2) pathway. Viruses can also affect our senses, such as a loss of smell and taste, and there could be other so far unkown neurological effects. The loss of smell seen in COVID-19 could be a new viral syndrome specific to this disease.

Many books and movies have described pandemics caused by pathogens that wipe out large populations and cause severe diseases. In the essay, the author provides a hypothetical scenario where a gut bacteria suddenly starts producing viral proteins. Some virions spread through the body and get transmitted through the human population. After a few months, the virus started causing blindness, and within a year, large populations lost their vision.

Pandemics can cause other diseases that can threaten humanity’s entire existence. The COVID-19 pandemic brought this possibility to the forefront. If we continue disturbing the equilibrium between us and the environment, we don’t know what the consequences may be and the next pandemic could lead us to extinction.