## OFF

### 1nc

#### Interpretation: The affirmative may not specify a just government.

#### “A” is an indefinite article that modifies “just government” in the res – means that you have to prove the resolution true in a vacuum, not a particular instance

CCC (“Articles, Determiners, and Quantifiers”, http://grammar.ccc.commnet.edu/grammar/determiners/determiners.htm#articles, Capital Community College Foundation, a nonprofit 501 c-3 organization that supports scholarships, faculty development, and curriculum innovation) LHSLA JC/SJ

The three articles — a, an, the — are a kind of adjective. The is called the definite article because it usually precedes a specific or previously mentioned noun; a and an are called indefinite articles because they are used to refer to something in a less specific manner (an unspecified count noun). These words are also listed among the noun markers or determiners because they are almost invariably followed by a noun (or something else acting as a noun). caution CAUTION! Even after you learn all the principles behind the use of these articles, you will find an abundance of situations where choosing the correct article or choosing whether to use one or not will prove chancy. Icy highways are dangerous. The icy highways are dangerous. And both are correct. The is used with specific nouns. The is required when the noun it refers to represents something that is one of a kind: The moon circles the earth. The is required when the noun it refers to represents something in the abstract: The United States has encouraged the use of the private automobile as opposed to the use of public transit. The is required when the noun it refers to represents something named earlier in the text. (See below..) If you would like help with the distinction between count and non-count nouns, please refer to Count and Non-Count Nouns. We use a before singular count-nouns that begin with consonants (a cow, a barn, a sheep); we use an before singular count-nouns that begin with vowels or vowel-like sounds (an apple, an urban blight, an open door). Words that begin with an h sound often require an a (as in a horse, a history book, a hotel), but if an h-word begins with an actual vowel sound, use an an (as in an hour, an honor). We would say a useful device and a union matter because the u of those words actually sounds like yoo (as opposed, say, to the u of an ugly incident). The same is true of a European and a Euro (because of that consonantal "Yoo" sound). We would say a once-in-a-lifetime experience or a one-time hero because the words once and one begin with a w sound (as if they were spelled wuntz and won). Merriam-Webster's Dictionary says that we can use an before an h- word that begins with an unstressed syllable. Thus, we might say an hisTORical moment, but we would say a HIStory book. Many writers would call that an affectation and prefer that we say a historical, but apparently, this choice is a matter of personal taste. For help on using articles with abbreviations and acronyms (a or an FBI agent?), see the section on Abbreviations. First and subsequent reference: When we first refer to something in written text, we often use an indefinite article to modify it. A newspaper has an obligation to seek out and tell the truth. In a subsequent reference to this newspaper, however, we will use the definite article: There are situations, however, when the newspaper must determine whether the public's safety is jeopardized by knowing the truth. Another example: "I'd like a glass of orange juice, please," John said. "I put the glass of juice on the counter already," Sheila replied. Exception: When a modifier appears between the article and the noun, the subsequent article will continue to be indefinite: "I'd like a big glass of orange juice, please," John said. "I put a big glass of juice on the counter already," Sheila replied. Generic reference: We can refer to something in a generic way by using any of the three articles. We can do the same thing by omitting the article altogether. A beagle makes a great hunting dog and family companion. An airedale is sometimes a rather skittish animal. The golden retriever is a marvelous pet for children. Irish setters are not the highly intelligent animals they used to be. The difference between the generic indefinite pronoun and the normal indefinite pronoun is that the latter refers to any of that class ("I want to buy a beagle, and any old beagle will do.") whereas the former (see beagle sentence) refers to all members of that class

#### The article “a” implies a nonspecific or generic reading of the word “just government”.

Walden 20 Walden University [The Writing Center provides a broad range of writing instruction and editing services for students at Walden University, including writing assistance for undergraduates, graduate students, and doctoral capstone writers], “"A" or "An"” last modified July 14 2020, <https://academicguides.waldenu.edu/writingcenter/grammar/articles> SM

When to Use "A" or "An" "A" and "an" are used with singular countable nouns when the noun is nonspecific or generic. I do not own a car. In this sentence, "car" is a singular countable noun that is not specific. It could be any car. She would like to go to a university that specializes in teaching. "University" is a singular countable noun. Although it begins with a vowel, the first sound of the word is /j/ or “y.” Thus, "a" instead of "an" is used. In this sentence, it is also generic (it could be any university with this specialization, not a specific one). I would like to eat an apple. In this sentence, "apple" is a singular countable noun that is not specific. It could be any apple.

#### “Democracy” is a generic indefinite singular.

Leslie 12 Leslie, Sarah-Jane. “Generics.” In Routledge Handbook of Philosophy of Language, edited by Gillian Russell and Delia Fara, 355–366. Routledge, 2012. <https://www.princeton.edu/~sjleslie/RoutledgeHandbookEntryGenerics.pdf> SM

GENERICS VS. EXISTENTIALS The interpretation of sentences containing bare plurals, indefinite singulars, or definite singulars can be either generic as in (1) respectively or existential/specific as in (2): (1) Tigers are striped A tiger is striped The tiger is striped. (2) Tigers are on the front lawn A tiger is on the front lawn The tiger is on the front lawn. The subjects in (1) are prima facie the same as in (2), yet their interpretations in (1) are intuitively quite different from those in (2). In (2) we are talking about some particular tigers, while in (1) we are saying something about tigers in general. There are some tests that are helpful in distinguishing these two readings. For example, the existential interpretation is upward entailing, meaning that the statement will always remain true if we replace the subject term with a more inclusive term. For example, if it is true that tigers are on the lawn, then it will also be true that animals are on the lawn. This is not so if the sentence is interpreted generically. For example, it is true that tigers are striped, but it does not follow that animals are striped (Lawler 1973 Laca 1990; Krifka et al 1995). Another test concerns whether we can insert an adverb of quantification (in the sense of Lewis 1975) with minimal change of meaning (Krifka et al 1995). For example, inserting “usually” in the sentences in (1) (e.g. “tigers are usually striped”) produces only a small change in meaning, while inserting “usually” in (2) dramatically alters the meaning of the sentence (e.g. “tigers are usually on the front lawn). (For generics such as “mosquitoes carry malaria”, the adverb “sometimes” is perhaps better used than “usually”.)

#### This applies to the res – 1] Upward entailment test – extemp 2] Adverb test – extemp

#### Violation: they spec UK

#### Standards:

#### 1] Precision – the counter-interp justifies them arbitrarily doing away with random words in the resolution which decks negative ground and preparation because the aff is no longer bounded by the resolution. Independent voter for jurisdiction – the judge doesn’t have the jurisdiction to vote aff if there wasn’t a legitimate aff.

#### 2] Limits – there are infinite governments that could be just – explodes limits since there are tons of independent affs plus functionally infinite combinations, all with different advantages in different political situations. Kills neg prep and debatability since there are no DAs that apply to every aff – i.e. laws about the right to strike in the US are different than in New Zealand – means the aff is always more prepared and wins just for speccing.

#### 3] TVA – just read your aff as an advantage under a whole adv, solves your offense

#### Fairness – debate is a competitive activity that requires fairness for objective evaluation. Outweighs – it constrains your ability to evaluate the rest of the flow because they require fair evaluation.

#### Drop the debater – to deter future abuse and set better norms for debate.

#### Competing interps – reasonability is arbitrary and invites judge intervention but we creates a race to the top where we create the best norms for debate.

#### No RVIs – a] illogical, you don’t win for proving that you meet the burden of being fair, logic outweighs since it’s a prerequisite for evaluating any other argument, b] RVIs incentivize baiting theory and prepping it out which leads to maximally abusive practices

#### 1AR theory is dta and reasonability – sandbagging o/w, irresolvable o/w

#### RVI on 1AR theory – time skew o/w

### 1nc

#### Large and influential strikes are low now – their examples are outliers that don’t reflect the general trend

Nelson Lichtenstein Distinguished Professor in the Department of History at UCSB, where he directs the Center for the Study of Work, Labor, and Democracy, 10/28/21 – [“Are We Really Having a Strike Wave?”, https://news.bloomberglaw.com/daily-labor-report/are-we-really-having-a-strike-wave]//bread

Reports of a resurgent union movement and strike wave prompted by the pandemic are premature, argues Nelson Lichtenstein, a history professor at the University of California, Santa Barbara. He notes that about half the percentage of workers are unionized as 40 years ago—10%—when there were almost 20 times as many work stoppages in a year. There’s no doubt that millions of workers have hesitated to return to their old workplaces in a world where the Covid-19 pandemic still lingers. Wages are going up amidst this “labor shortage” and some unions have indeed chosen this season to bargain for better contracts and hit the picket line should employers prove recalcitrant. Things are a lot different today than a decade ago when a paltry government stimulus, mass unemployment, and a slow recovery made workers fear that any strike would just serve as an excuse for the employer to close the factory or import scabs. The current strike wave is not, in fact, very large by historical standards. In 1979 there were 235 work stoppages involving more than 1,000 workers. So far this year **there have been just 12**. There just aren’t that many people enrolled in a trade union, slightly over 10 percent of the working population today, down by half in the years since Ronald Reagan opened the door to contemporary management’s fierce anti-unionism by breaking a strike of air traffic controllers in 1981. A Mood Shift Forty years on, the public mood is much different. Last winter scores of eager young journalists descended upon Bessemer, Alabama to cover the union effort there to organize an Amazon distribution center. And today there is a palpable expectation that the uptick in strikes and organizing efforts will lead to a revival of the American labor movement. That’s not just because so many “essential workers"—from hospital staff to checkout clerks—have generated so much heartfelt support. It’s also because liberals know that something is missing from the body politic, and that something is a labor movement of sufficient strength to not only raise wages at the work site, but wield the kind of political power that once made Midwestern Republicans willing to raise the minimum wage, vote for civil rights laws, and even increase social spending. If West Virginia had the union density today that it did at the start of Joe Manchin’s career, the mountain state would be solidly Democratic and its senior senator far more of an enthusiast for the social programs and tax-the-rich proposals he now scorns. Both liberal pundits and union activists are therefore anxious to conjure up a strike wave out of the new-found militancy on offer. On the picket lines at John Deere, where 10,000 workers are on strike and among the[60,000 studio crew that just averted a strike](https://news.bloomberglaw.com/daily-labor-report/hollywood-studios-reach-new-labor-agreement-avoiding-strike-1), a radical, self-confident spirit has been unleashed. And from President Joe Biden on down, a lot of Democrats are finally saying, “We don’t want just free and fair collective bargaining, a balanced table. We want labor to win!” Employers Raise Wages, Resist Organizing The problem is that employers are not dumb. They have been raising wages all over the place to retain a workforce—you can get $19 an hour just by walking in the door at Amazon, and even Dollar General is paying more than minimum wage. But they resist the actual organization of their workers into a functional union. They deploy all the economic power, legal talent, and law-breaking [necessary to preserve managerial authoritarianism](https://www.engadget.com/amazon-union-labor-relations-settlement-alabama-141059373.html). In Buffalo, N.Y., when workers at four Starbucks made public their effort to win a National Labor Relations Board election, regional managers and “trainers,” all earning many times more than the embattled baristas, [poured into the stores](https://www.nytimes.com/2021/10/18/business/economy/starbucks-union-buffalo.html), intimidating by their very presence. Non-union workers, no matter how aggrieved, do not go on strike. They can quit their job, even walk out together for a shift or two, but in the absence of some independent organization, and that is almost always a trade union, their protest soon dissolves. Virtually every strike in today’s headlines, from that of the agricultural implement workers in Iowa, to the coal miners in Alabama, and the studio crews in Hollywood, are members of unions formed 80 years ago in the Great Depression. It does not matter if the union was once radical or conservative, **organization is essential** to any sustained and potent worker protest. And once the strike is over, that same organization does not fade away. It stays right there in management’s face, policing the contract, mobilizing the workers, lobbying politicians, and preparing for the next contract fight. Strikes Require Workers Who Are Organized So, **we aren’t having a strike wave**. We sorely need one, but that first requires the unionization of millions of new workers. Congress needs to pass the Protecting the Right to Organize Act. But even more important, the reawakening of an insurgent spirit requires much worker and citizen action. So, let’s therefore remember the words of Joe Hill, the radical troubadour, just before he was executed by a firing squad in 1915: “Don’t mourn – Organize!”

#### An unconditional right to strike would encourage workers to utilize extreme strikes, hurting industries across the board.

Ahmed White, University of Colorado Law School, 2018 – [“Its Own Dubious Battle: The Impossible Defense of an Effective Right to Strike”, https://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=2369&context=articles]//bread

As an exercise in statutory construction and administration, Mackay Radio makes no sense; but as a defense of property rights it makes all the sense in the world. One way to see this is to consider what would have happened had the Court decided the matter in a fundamentally different way. If employers were barred from replacing economic strikers, it seems likely that strikes would have proliferated to an extraordinary extent, as workers could at least plausibly have expected to be able to strike under **a broad array of circumstances** and yet be **restored to their jobs no matter the outcome**. But precisely because such a doctrine would have given workers so much power, Congress would almost certainly have stepped in with its own rule, codifying employers’ right to permanently replace striking workers and bringing this to an end. Ultimately, it is difficult to imagine a much more liberal alternative to the Mackay Radio rule surviving for very long—a point that also draws support from labor’s failure to repeal the rule in Congress in the early 1990s.304 A simple exercise in counterfactual speculation bears similar fruit in regard to other, more basic, limitations on the right to strike, including those imposed relative to sit-down strikes, mass picketing, and secondary boycotts. Shrill and self-interested though it was, all the testimony from employers and their allies during the hearings on Taft Hartley or Landrum-Griffin about the perils posed by these tactics, was fundamentally correct. For were workers able to make unfettered use of sit-down strikes, mass picketing, and general strikes and sympathy walkouts, they could have very much challenged the sovereignty of capitalists in and about the workplace, and with this the bedrock institutions and norms of liberal society. As Jim Pope puts it, Charles Evans Hughes’ opinion in Fansteel established the maxim that “the employer could violate the workers’ statutory rights without sacrificing its property rights, while the workers could not violate the employer’s property rights without sacrificing their statutory rights.”305 This is unquestionably true. But equally unquestionable is that neither this court nor any other important arbiter of legal rights in this country was ever prepared to endorse the contrary view that property rights might be sufficiently subordinate to labor rights as to justify the kinds of tactics by which workers could routinely defeat powerful employers on the fields of industrial conflict. Significantly, there is no reason to believe that any of this has changed or is poised to change today. Quite the contrary: In a culture and political system more immersed than ever in the veneration of order and control, mediated by criminal law and police work, by the celebration of property rights, and by a readiness to punish violence, it is all but unthinkable that the courts or the NLRB would deign to give legal sanction to workers to engage in any sustained way in the kinds of tactics that might make going on strike a worthwhile thing to do.

#### Violent and longer strikes hurt the stock market, investors perceive them to be significantly important

John Dinardo and Kevin F. Hallock, 2002 – [“When Unions "Mattered": The Impact of Strikes on Financial Markets, 1925-1937”, \*John Dinardo is Professor of Economics and Pub- lic Policy, University of Michigan, and Kevin F. Hallock is Associate Professor of Economics and of Labor and Industrial Relations, University of Illinois at Urbana- Champaign, https://www.jstor.org/stable/2696206]//bread

Concluding Comments The primary aim of this work has been to investigate the effect of strikes on industry stock prices at a time when unions were rapidly evolving. In contrast to recent work on the subject that has used data from the recent past, we have examined a period of time when changes in the level of unionization were more important. One advantage of this focus is that it is easier to measure the effect of "large changes" than it is to detect small changes in the current era of declining unionization. The time between the World Wars was particularly important in the history of unionization. Unlike most recent strikes, during that earlier period many strikes were an attempt by workers to change the "terms of trade" between workers and employers. Our empirical approach melds two previous literatures: in one, the effects of strikes on industry-wide measures of out- put, such as inventories, are studied, and in the second, a standard "event study" approach is used to examine the relationship between strikes and individual firm stock valuations. We develop a data set with an unusually rich set of characteristics for each of the strikes for the time period 1925-37 and combine this information with stock return data. We use a very parsimonious model that helps provide one consistent interpretation of our results. On a descriptive level, we find that strikes had large negative effects on industry stock valuation. In addition, longer strikes, violent strikes, strikes won by the union, strikes leading to union recognition, industry-wide strikes, and strikes that led to wage in- creases affected industry stock prices more negatively than strikes with other characteristics. We also examine industry stock price movements around the start and the end of the strike. It seems that "news" about the strike was revealed early and, in fact, there is some evidence that investors were able to predict strike outcomes. How- ever, we do find larger reactions to some news that could only be completely revealed at the end of the strike (for example, worker wage changes). The generally asymmetric response of stock prices to wins and losses is consistent with our expectations. Our analysis suggests that financial markets viewed union victories in the interwar period as **very important determinants** of the share of firm profits going to stockholders.

#### Stock market collapse leads to full recession.

Miao et al. 12 (Jianjun Miao† , Pengfei Wang‡ , and Lifang Xu§. †Department of Economics, Boston University ‡Department of Economics, Hong Kong University of Science and Technology, §Department of Economics, Hong Kong University of Science and Technology, “Stock Market Bubbles and Unemployment”, https://pdfs.semanticscholar.org/51ee/14529d89b630638b0ca428e929f56d7f3b48.pdf)

This paper provides a theoretical study that links unemployment to the stock market bubbles and crashes. Our theory is based on three observations from the U.S. labor, credit, and stock markets. First, the U.S. stock market has experienced booms and busts and these large swings may not be explained entirely by fundamentals. Shiller (2005) documents extensive evidence on the U.S. stock market behavior and argues that many episodes of stock market booms are attributed to speculative bubbles. Second, the stock market booms and busts are often accompanied by the credit market booms and busts. A boom is often driven by a rapid expansion of credit to the private sector accompanied by rising asset prices. Following the boom phase, asset prices collapse and a credit crunch arises. This leads to a large fall in investment and consumption and an economic recession may follow.1 Third, the stock market and unemployment are highly correlated.2 Figure 1. plots the post-war U.S. monthly data of the price-earnings ratio (the real Standard and Poor’s Composite Stock Price Index divided by the ten-year moving average real earnings on the index) constructed by Robert Shiller and the unemployment rate downloaded from the Bureau of Labor Statistics (BLS).3 This figure shows that, during recessions, the stock price fell and the unemployment rate rose. In particular, during the recent Great Recession, the unemployment rate rose from 5.0 percent at the onset of the recession to a peak of 10.1 percent in October 2009, while the stock market fell by more than 50 percent from October 2007 to March 2009. [Insert Figure 1 Here.] Motivated by the preceding observations, we build a search model with credit constraints, based on Blanchard and Gali (2010). The Blanchard and Gali model is isomorphic to the Diamond-Mortensen-Pissarides (DMP) search and matching model of unemployment (Diamond (1982), Mortensen (1982), and Pissarides (1985)). Our key contribution is to introduce credit constraints in a way similar to Miao and Wang (2011a,b,c, 2012a,b).4 The presence of this type of credit constraints can generate a stock market bubble through a positive feedback loop mechanism. The intuition is the following: When investors have optimistic beliefs about the stock market value of a firm’s assets, the firm wants to borrow more using its assets as collateral. Lenders are willing to lend more in the hope that they can recover more if the firm defaults. Then the firm can finance more investment and hiring spending. This generates higher firm value and justifies investors’ initial optimistic beliefs. Thus, a high stock market value of the firm can be sustained in equilibrium. There is another equilibrium in which no one believes that firm assets have a high value. In this case, the firm cannot borrow more to finance investment and hiring spending. This makes firm value indeed low, justifying initial pessimistic beliefs. We refer to the first type of equilibrium as the bubbly equilibrium and to the second type as the bubbleless equilibrium. Both types can coexist due to self-fulfilling beliefs. In the bubbly equilibrium, firms can hire more workers and hence the market tightness is higher, compared to the bubbleless equilibrium. In addition, in the bubbly equilibrium, an unemployed worker can find a job more easily (i.e., the job-finding rate is higher) and hence the unemployment rate is lower. [Insert Figure 2 Here.] After analyzing these two types of equilibria, we follow Weil (1987), Kocherlakota (2009) and Miao and Wang (2011a,b,c, 2012a,b) and introduce a third type of equilibrium with stochastic bubbles. Agents believe that there is a small probability that the stock market bubble may burst. After the burst of the bubble, it cannot re-emerge by rational expectations. We show that this shift of beliefs can also be self-fulfilling. After the burst of the bubble, the economy enters a recession with a persistent high unemployment rate. The intuition is the following. After the burst of the bubble, the credit constraints tighten, causing firms to reduce investment and hiring. An unemployed worker is then harder to find a job, generating high unemployment. Our model can help explain the high unemployment during the Great Recession. Figures 2 and 3 plot the hires rate and the job-finding rate from the first month of 2001 to the last month of 2011 using the Job Openings and Labor Turnover Survey (JOLTS) data set.5 These figures reveal that both the job-finding rate and the hires rate fell sharply following the stock market crash during the Great Recession. In particular, the hires rate and the job-finding rate fell from 4.4 percent and 0.7, respectively, at the onset of the recession to about 3.1 percent and 0.25, respectively, in the end of the recession.

#### Economic crisis causes nuke war---strong statistical support

Royal 10 – Jedediah Royal, Director of Cooperative Threat Reduction at the U.S. Department of Defense, 2010, “Economic Integration, Economic Signaling and the Problem of Economic Crises,” in Economics of War and Peace: Economic, Legal and Political Perspectives, ed. Goldsmith and Brauer, p. 213-215

Less intuitive is how periods of economic decline may increase the likelihood of external conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defence behaviour of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow.¶ First, on the systemic level, Pollins (2008) advances Modelski and Thompson's (1996) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next. As such, exogenous shocks such as economic crises could usher in a redistribution of relative power (see also Gilpin. 1981) that leads to uncertainty about power balances, increasing the risk of miscalculation (Feaver, 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflict as a rising power may seek to challenge a declining power (Werner. 1999). Separately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown.¶ Second, on a dyadic level, Copeland's (1996, 2000) theory of trade expectations suggests that 'future expectation of trade' is a significant variable in understanding economic conditions and security behaviour of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, if the expectations of future trade decline, particularly for difficult to replace items such as energy resources, the likelihood for conflict increases, as states will be inclined to use force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states.4¶ Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write:¶ The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favour. Moreover, the presence of a recession tends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg & Hess, 2002. p. 89)¶ Economic decline has also been linked with an increase in the likelihood of terrorism (Blomberg, Hess, & Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions.¶ Furthermore, crises generally reduce the popularity of a sitting government. “Diversionary theory" suggests that, when facing unpopularity arising from economic decline, sitting governments have increased incentives to fabricate external military conflicts to create a 'rally around the flag' effect. Wang (1996), DeRouen (1995). and Blomberg, Hess, and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, are statistically linked to an increase in the use of force.¶ In summary, recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels.5 This implied connection between integration, crises and armed conflict has not featured prominently in the economic-security debate and deserves more attention.¶ This observation is not contradictory to other perspectives that link economic interdependence with a decrease in the likelihood of external conflict, such as those mentioned in the first paragraph of this chapter. Those studies tend to focus on dyadic interdependence instead of global interdependence and do not specifically consider the occurrence of and conditions created by economic crises. As such, the view presented here should be considered ancillary to those views.

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#### Counterplan text: A just government ought to recognize a conditional right of workers to strike. The right to strike ought to be conditional upon one’s profession, with all workers except healthcare workers being guaranteed an unconditional right to strike.

#### It’s competitive – a] the CP offers a conditional right, meaning it only applies in some instances, so it’s necessarily competitive and b] the plan defends all workers – 1ar clarification causes shiftiness that means we lose every time since we can’t generate new links in the 2nr.

#### Nurse strikes devastates hospitals

Wright 10 Sarah H. Wright July 2010 "Evidence on the Effects of Nurses' Strikes" <https://www.nber.org/digest/jul10/evidence-effects-nurses-strikes> (Researcher at National Bureau of Economic Research)

U.S. hospitals were excluded from collective bargaining laws for three decades longer than other sectors because of fears **that strikes by nurses might imperil patients' health**. Today, while unionization has been declining in general, it is growing rapidly in hospitals, with the number of unionized workers rising from 679,000 in 1990 to nearly one million in 2008. In Do Strikes Kill? Evidence from New York State (NBER Working Paper No. 15855), co-authors Jonathan Gruber and Samuel Kleiner carefully examine the effects of nursing strikes on patient care and outcomes. The researchers match data on nurses' strikes in New York State from 1984 to 2004 to data on hospital discharges, including information on treatment intensity, patient mortality, and hospital readmission. They conclude that nurses' strikes were **costly to hospital patients**: in-hospital mortality **increased by 19.4 percent** and hospital readmissions **increased by 6.5 percen**t for patients admitted during a strike. Among their sample of 38,228 such patients, an estimated **138 more individuals died than would have without a stri**ke, and 344 more patients were readmitted to the hospital than if there had been no strike. "Hospitals functioning during nurses' strikes **do so at a lower quality of patient care,"** they write. Still, at hospitals experiencing strikes, the measures of treatment intensity -- that is, the length of hospital stay and the number of procedures performed during the patient's stay -- show no significant differences between striking and non-striking periods. Patients appear to receive the same intensity of care during union work stoppages as during normal hospital operations. Thus, the poor outcomes associated with strikes suggest that they might reduce hospital productivity. These poor health outcomes increased for both emergency and non-emergency hospital patients, even as admissions of both groups decreased by about 28 percent at hospitals with strikes. The poor health outcomes were not apparent either before or after the strike in the striking hospitals, suggesting that they are attributable to the strike itself. And, the poor health outcomes do not appear to do be due to different types of patients being admitted during strike periods, because patients admitted during a strike are very similar to those admitted during other periods. Hiring replacement workers apparently does not help: hospitals that hired replacement workers **performed no better** during strikes than those that did not hire substitute employees. In each case, patients with conditions that required intensive nursing were more likely to fare worse in the presence of nurses' strikes.

#### Hospitals are the critical internal link for pandemic preparedness.

Al Thobaity 20, Abdullelah, and Farhan Alshammari. "Nurses on the frontline against the COVID-19 pandemic: an Integrative review." Dubai Medical Journal 3.3 (2020): 87-92. (Associate Professor of Nursing at Taif University)

The majority of infected or symptomatic people seek medical treatment in medical facilities, particularly hospitals, as a high number of cases, especially those in critical condition, will have an impact on hospitals [4]. The concept of hospital resilience in disaster situations is defined as the ability to recover from the damage caused by huge disturbances quickly [2]. The resilience of hospitals to pandemic cases depends on the preparedness of the institutions, and not all hospitals have the same resilience. A lower resilience will affect the **sustainability of the health services**. This also affects healthcare providers such as doctors, nurses, and allied health professionals [5, 6]. Despite the impact on healthcare providers, excellent management of a pandemic depends on the level of **preparedness of healthcare providers, including nurses**. This means that if it was impossible to be ready before a crisis or disaster, responsible people will do all but the impossible to save lives.

#### Independently, profit motive is key to solving pandemics.

Jackson 16 Kerry Jackson 12-19-2016 “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/> (Researcher at the Pacific Research Institute)

“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.

#### New Pandemics are deadlier and faster are coming – COVID is just the beginning

Antonelli 20 Ashley Fuoco Antonelli 5-15-2020 <https://www.advisory.com/daily-briefing/2020/05/15/weekly-line> "Weekly line: Why deadly disease outbreaks could become more common—even after Covid-19" (Associate Editor — American Health Line)

While the new coronavirus pandemic suddenly took the world by storm, the truth is public health experts for years have warned that a virus similar to the new coronavirus would cause the next pandemic—and they say **deadly infectious disease outbreaks could become more common**. Infectious disease experts are always on the lookout for the next pandemic, and in a report published two years ago, researchers from the Johns Hopkins Bloomberg School of Public Health **predicted that the pathogen most likely to cause the next pandemic would be a virus similar to the common cold**. Specifically, the researchers predicted that the pathogen at fault for the next pandemic would be: A microbe for which people have not yet **developed immunities**, meaning that a large portion of the human population would be susceptible to infection; Contagious during the so-called "incubation period"—the time when people are infected with a pathogen but are not yet showing symptoms of the infection or are showing only mild symptoms; and Resistant to any known prevention or treatment methods. The researchers also concluded that such a pathogen would have a "low but significant" fatality rate, meaning the pathogen wouldn't kill human hosts fast enough to inhibit its spread. As **Amesh Adalja**—a senior scholar at the Johns Hopkins Center for Health Security, who led the report—told Live Science's Rachael Rettner at the time, "**It just has to make a lot of people sick" to disrupt society**. The researchers said RNA viruses—which include the common cold, influenza, and severe acute respiratory syndrome (or SARS, which is caused by a type of coronavirus)—fit that bill. And even though we had a good bit of experience dealing with common RNA viruses like the flu, Adalja at the time told Rettner that there were "a whole host of viral families that get very little attention when it comes to pandemic preparedness." Not even two years later, the new coronavirus, which causes Covid-19, emerged and quickly spread throughout the world, reaching pandemic status in just a few months. To date, officials have reported more than 4.4 million cases of Covid-19 and 302,160 deaths tied to the new coronavirus globally. In the United States, the number of reported Covid-19 cases has reached more than 1.4 million and the number of reported deaths tied to the new coronavirus has risen to nearly 86,000 in just over three months. Although public health experts had warned about the likelihood of a respiratory-borne RNA virus causing the next global pandemic, many say the world was largely unprepared to handle this type of infectious disease outbreak. And as concerning as that revelation may be on its own, **perhaps even more worrisome is that public health experts predict life-threatening infectious disease outbreaks are likely to become more common—meaning we could be susceptible to another pandemic in the future**. Why experts think deadly infectious disease outbreaks could become more common As the Los Angeles Times's Joshua Emerson Smith notes, infectious disease experts for more than ten years now have noted that "[o]utbreaks of dangerous new diseases with the potential to become pandemics have been on the rise—from HIV to swine flu to SARS to Ebola." For instance, a report published in Nature in 2008 found that **the number of emerging infectious disease events that occurred in the 1990s was more than three times higher than it was in the 1940s**. Many experts believe the recent increase in infectious disease outbreaks is tied to human behaviors that disrupt the environment, "such as **deforestation and poaching**," which have led "to increased contact between highly mobile, urbanized human populations and wild animals," Emerson Smith writes. In the 2008 report, for example, researchers noted that about 60% of 355 emerging infectious disease events that occurred over a 50-year period could be largely linked to wild animals, livestock, and, to a lesser extent, pets. Now, researchers believe the new coronavirus first jumped to humans from animals at a wildlife market in Wuhan, China. Along those same lines, some experts have argued that global climate change has driven an increase in infectious diseases—and could continue to do so. A federally mandated report released by the U.S. Global Change Research Program in 2018 warned that warmer temperatures could expand the geographic range covered by disease-carrying insects and pests, which could result in more Americans being exposed to ticks carrying Lyme disease and mosquitos carrying the dengue, West Nile, and Zika viruses. And experts now say continued warming in global temperatures, deforestation, and other environmentally disruptive behaviors have broadened that risk by bringing more people into contact with disease-carrying animals. Further, experts note that infectious diseases today are able to spread much faster and farther than they could decades ago because of increasing globalization and travel. While some have suggested the Covid-19 pandemic could stifle that trend, others argue globalization is likely to continue—meaning so could infectious diseases' far spread.

## Case

### Adv1

#### Low climate strikes now – people don’t have an incentive to go on strikes. No piece of ev says that the plan would encourage more people to strike.

#### Most people don’t think climate effects them esp since climate denialism is high, means that there’s no way for a large climate strike to happen

#### Climate strikes are ineffective – lack of leverage and free riding problem

Dolsak and Prakash, 2019 – [Nives Dolsak and Aseem Prakash, authors at Forbes who write on climate issues, “Climate Strikes: What They Accomplish And How They Could Have More Impact”, https://www.forbes.com/sites/prakashdolsak/2019/09/14/climate-strikes-what-they-accomplish-and-how-they-could-have-more-impact/?sh=d5802395eeda]//bread

On September 20th and September 27th, climate strikes are planned across 117 countries. These events are the brainchild of Greta Thunberg, who states that “we are striking to disrupt the system.” Greta started striking last year. She skipped her school every day (later, every Friday) and stood in front of the Swedish Parliament holding a placard (Skolstrejk för Klimatet) that demanded action on climate change. Greta’s Friday protests have spread across countries in the form of the #FridaysForFuture movement. The September 2019 climate strikes seek to “sound the alarm and show our politicians that business, as usual, is no longer an option.” While students will be at the forefront, the organizers want everyone to participate by walking out of their “homes, their offices, their farms, their factories.” Strikes and collective action The word "strike" is a tricky one. As we see it, a strike is more than a mass protest because, in addition to expressing a public sentiment, it disrupts everyday life. It is this disruption that imposes economic and political costs on firms and policymakers. If so, while the September events aim to disrupt the system, they are more like mass protests. While strikes and protests build solidarity among their supporters, they are susceptible to collective action problems. This is because the goals that strikers pursue tend to create non-excludable benefits. That is, benefits such as climate protection can be enjoyed by both strikers and non-strikers. Thus, large participation in climate strikes will reveal that in spite of free-riding problems, a large number of people have a strong preference for climate action. But strikers must have the leverage to accomplish their goals Strikers represent the demand for climate action. But who will supply these policies and what leverage do strikers have over these policymakers? This is where climate strikes could run into a problem. Strikers have leverage when their absence from work disrupts activities that are valuable to policymakers. If railway workers go on strike, trains cannot run and the public is upset. When airline pilots go on strike, people cannot fly, and airlines lose revenue. By some accounts, the 48-hour strike of British Airways pilots (regarding a pay dispute) in September 2019 will cost the company about £100 million. What leverage do the climate strikers have? Assuming most of the strikers are students, what costs might their strikes impose on the actors that need to change their climate policies (namely, governments and fossil fuel firms)? Student strikes probably do not disrupt the government or fossil fuel firms. The main bearer of these costs are the conscientious teachers who need to figure out how they are going to make up for the lost teaching time. Will the strikers target the swing voters in swing states? Even though climate strikes will not likely impose huge costs on firms or policymakers, they will reveal public preferences on the subject of climate change. And if policymakers care about the public sentiment, they will supply appropriate policies. Here again, the issue of leverage is important. Not all publics have equal leverage with policymakers. At least in the US, national-level climate policies will get enacted if policymakers see them appealing to swing voters, especially in swing states. Are climate strikes focused on these constituencies? We should track how widespread these strikes are in Purple states and in semi-urban and rural areas. Climate strikes in Seattle, San Francisco, Los Angeles, New York, and Boston probably accomplish little in flipping climate policy preferences of actors who are blocking national-level policy change. The policy elites of Blue states and coastal cities need no persuasion because they already want aggressive climate policy.

#### Only US-China climate cooperation can meaningfully combat global warming – the UK isn’t significant enough to solve climate

**Shuo 21** - Li Shuo is a Senior Climate and Energy Policy Officer at Greenpeace China

Rhett A. Butler interviewing Li Shuo, “An Interview with Li Shuo,” Mongabay, September 2, 2021, <https://news.mongabay.com/2021/09/there-is-no-climate-solution-without-china-and-america-says-li-shuo/> // sam :)

Mongabay: What inspired your interest in the environment? And how did your career path unfold? Li Shuo: I grew up watching Discovery Channel and National Geographic. My interest really started from these documentary films. As a city boy from Beijing, sadly there’s not much easy access to nature, but these films brought me far. I was in awe of nature. In college, I studied international relations and law. I always wanted to combine my academic interest with my interest in nature. So in 2011, when Greenpeace was looking for someone to cover the UN climate negotiations and China’s environmental politics, I thought that’s the dream job. I jumped on board fresh out of college. The next ten years proved to be a rewarding journey. I had the privilege of being on the frontline of international climate diplomacy and witnessing its ups and downs. In the meanwhile, the 2010s is a dynamic period for China’s domestic environmental politics. We started with the airpocalypse and huge environmental deficits. To be at the center of these challenges and work towards their improvements is what makes me proud. Mongabay: What is Greenpeace’s focus in China? And how does Greenpeace engage with the government? Li Shuo: Greenpeace is one of the largest NGOs in China. We started our presence here 16 years ago and have more than 80 colleagues now in our Beijing office. We work on almost all the pressing environmental challenges in China. Climate change, air and water pollution, forest, ocean are some of our priority areas over the last decade. Policy advocacy is a big part of our job. For that, we need to engage regularly with the government. A big part of how we do it in China is actually not too different from elsewhere, but it certainly requires more time and effort. It is an art and craft to build trust, and trust is the most essential ingredient in our business – it is what brings the other side closer to you, a state that even if others disagree they respect where you come from. Mongabay: In a recent presentation you mentioned that opposition to transitioning away from fossil fuels is emerging in China. Is this akin to the sort of campaigns and lobbying we’ve seen for the past few decades in the U.S.? And how powerful is this movement? Li Shuo: If one sees through the different ways that politics manifests itself in different countries, the core is not that different. There are industries that will lose out in the low carbon transition in the U.S. and they create political resistance. There are similar forces in China. They may not employ exactly the same tactics of the Koch brothers, but what they want to achieve is essentially the same. The Chinese industrial opposition is actually a sign that the country’s effort of decarbonization is steering into deep water, that the interests of certain industrial groups are being touched. So in a way, it represents progress. The question that needs to be solved is how to balance divergent interests. In the west, there is the “just transition” discussion. In its own ways, China is getting to that discussion too. It can learn from the experience elsewhere and contribute back. Mongabay: In March, bilateral talks between China and the United States took place. The conversation was reportedly frosty and it does not appear that there was much progress on climate. Do you see climate as an area of potential collaboration, where the two superpowers put aside their differences to address what could be a very significant threat to both? Li Shuo: There is no climate solution without the G2 rolling towards the same direction. That’s certainly not what we saw during the Trump administration. With the Biden administration, the U.S. and China are rhetorically both for climate action, but my concern is what they are doing in practice is still a far cry from what’s needed to keep 1.5C in sight. Both countries have put relatively strong targets on paper. The U.S. wants to cut 50-52% emissions by 2030. China wants to achieve carbon neutrality before 2060. But neither side has so far put concrete policies behind these goals. The climate will not be fooled by big targets if they remain only on paper. As for US-China climate cooperation, people need to recognize that the bilateral relationship has changed significantly in recent years. That will limit the space for working together. I believe the minimum that needs to be secured is “engagement”. This means no matter how the relationship unfolds, Beijing and Washington will keep the line of communication open for climate change and separate it from the toxic bilateral dynamics. Leaders on both sides need to understand a simple idea, that unlike other issues on the bilateral agenda, climate change is an issue that they could truly not decouple with each other. The U.S. can do all it can to reduce emissions. It won’t solve the problem as long as China doesn’t comply, and vice versa.

### Adv2

#### Democracy will catastrophically delay action on climate change---authoritarianism is necessary to ensure rapid state-led transformation

Mann & Wainwright ’18 (Geoff, teaches political economy and economic geography at Simon Fraser University, where he directs the Centre for Global Political Economy, Joel *Climate Leviathan: A Political Theory of Our Planetary Future*, pp. 38-40, ME)

Relative to the institutional means currently available to capitalist liberal democracy and its sorry attempts at “consensus,” this trajectory has some distinct advantages with respect to atmospheric carbon concentration, notably in terms of the capacity to coordinate massive political-economic reconfiguration quickly and comprehensively. In light of our earlier question—how can we possibly realize the necessary emissions reductions?—it is this feature of Climate Mao that most recommends it. As the climate justice movement struggles to be heard, most campaigns in the global North are premised on an unspoken faith in a lop-sided, elite-biased, liberal proceduralism doomed to failure given the scale and scope of the changes required. If climate science is even half-right in its forecasts, the liberal model of democracy is at best too slow, at worst a devastating distraction. Climate Mao reflects the demand for rapid, revolutionary, state-led transformation today. Indeed, calls for variations on just such a regime abound on the Left. Mike Davis and Giovanni Arrighi have more or less sided with Climate Mao, sketching it as an alternative to capitalist Climate Leviathan.35 We might even interpret the renewal of enthusiasm for Maoist theory (including Alain Badiou’s version) as part of the prevailing crisis of ecological-political imagination.36 Minqi Li’s is arguably the best developed of this line of thought, and like Arrighi he locates the fulcrum of global climate history in China, arguing that Climate Mao offers the only way forward: [U]nless China takes serious and meaningful actions to fulfill its obligation of emissions reduction, there is little hope that global climate stabilization can be achieved. However, it is very unlikely that the [present] Chinese government will voluntarily take the necessary actions to reduce emissions. The sharp fall of economic growth that would be required is something that the Chinese government will not accept and cannot afford politically. Does this mean that humanity is doomed? That depends on the political struggle within China and in the world as a whole.37 Taking inspiration from Mao, Li says a new revolution in the Chinese revolution—a re-energization of the Maoist political tradition—could transform China and save humanity from doom. He does not claim this is likely; one need only consider China’s massive highway expansions, accelerated automobile consumption, and subsidized urban sprawl.38 But he is right that if an anticapitalist, planetary sovereign is to emerge that could change the world’s climate trajectory, it is most likely to emerge in China.

### Climate !

#### Double bind – ether no impact – warming doesn’t cause extinction and various factors check.

Farquhar et al. 17 (Sebastian Farquhar; John Halstead; Owen Cotton-Barratt; Stefan Schubert; Haydn Belfield; Andrew Snyder-Beattie, Doctoral Student @ Oxford University; climate activist; Research Scholars Programme Director @ Oxford University; Post-doc @ Oxford University’s Department of Experimental Psychology; Academic Project Manager @ the Centre for the Study of Existential Risk; Director of Research @ Oxford University’s Future of Humanity Institute, "Existential Risk Diplomacy and Governance," GLOBAL PRIORITIES PROJECT 2017, 2017, https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf, Date Accessed: 7-10-2019, SB).

1.1.2 Extreme climate change and geoengineering The most likely levels of global warming are very unlikely to cause human extinction.15 The existential risks of climate change instead stem from tail risk climate change – the low probability of extreme levels of warming – and interaction with other sources of risk. It is impossible to say with confidence at what point global warming would become severe enough to pose an existential threat. Research has suggested that warming of 11-12°C would render most of the planet uninhabitable,16 and would completely devastate agriculture.17 This would pose an extreme threat to human civilisation as we know it.18 Warming of around 7°C or more could potentially produce conflict and instability on such a scale that the indirect effects could be an existential risk, although it is extremely uncertain how likely such scenarios are.19 Moreover, the timescales over which such changes might happen could mean that humanity is able to adapt enough to avoid extinction in even very extreme scenarios. The probability of these levels of warming depends on eventual greenhouse gas concentrations. According to some experts, unless strong action is taken soon by major emitters, it is likely that we will pursue a medium-high emissions pathway.20 If we do, the chance of extreme warming is highly uncertain but appears non-negligible. Current concentrations of greenhouse gases are higher than they have been for hundreds of thousands of years,21 which means that there are significant unknown unknowns about how the climate system will respond. Particularly concerning is the risk of positive feedback loops, such as the release of vast amounts of methane from melting of the arctic permafrost, which would cause rapid and disastrous warming.22 The economists Gernot Wagner and Martin Weitzman have used IPCC figures (which do not include modelling of feedback loops such as those from melting permafrost) to estimate that if we continue to pursue a medium-high emissions pathway, the probability of eventual warming of 6°C is around 10%,23 and of 10°C is around 3%.24 These estimates are of course highly uncertain. It is likely that the world will take action against climate change once it begins to impose large costs on human society, long before there is warming of 10°C. Unfortunately, there is significant inertia in the climate system: there is a 25 to 50 year lag between CO2 emissions and eventual warming,25 and it is expected that 40% of the peak concentration of CO2 will remain in the atmosphere 1,000 years after the peak is reached.26 Consequently, it is impossible to reduce temperatures quickly by reducing CO2 emissions. If the world does start to face costly warming, the international community will therefore face strong incentives to find other ways to reduce global temperatures. The only known way to reduce global temperatures quickly and cheaply is a form of climate engineering called Solar Radiation Management (SRM), which involves cooling the Earth by reflecting sunlight back into space.27 The most researched form of SRM involves injecting aerosols into the stratosphere.28 Most of the evidence so far suggests that ideal SRM deployment programmes would reduce overall damages relative to an un-engineered greenhouse world.29

#### OR Warming inevitable.

**McKibben, 16**—Schumann Distinguished Scholar at Middlebury College (Bill, “Recalculating the Climate Math,” https://newrepublic.com/article/136987/recalculating-climate-math, dml) [ableist metaphor modifications denoted by brackets]

The future of humanity depends on math. And the numbers in a **new study** released Thursday are the **most ominous yet**. Those numbers spell out, in simple arithmetic, how much of the fossil fuel in the world’s existing coal mines and oil wells we can burn if we want to prevent global warming from cooking the planet. In other words, if our goal is to keep the Earth’s temperature from rising more than two degrees Celsius—the upper limit identified by the nations of the world—how much more new digging and drilling can we do? Here’s the answer: **zero**. That’s right: If we’re serious about preventing catastrophic warming, the new study shows, we can’t dig any new coal mines, drill any new fields, build any more pipelines. Not a single one. We’re done expanding the fossil fuel frontier. Our only hope is a swift, managed decline in the production of all carbon-based energy from the fields we’ve already put in production. The new numbers are startling. Only four years ago, I wrote an essay called “Global Warming’s Terrifying New Math.” In the piece, I drew on research from a London-based think tank, the Carbon Tracker Initiative. The research showed that the untapped reserves of coal, oil, and gas identified by the world’s fossil fuel industry contained five times more carbon than we can burn if we want to keep from raising the planet’s temperature by more than two degrees Celsius. That is, if energy companies eventually dug up and burned everything they’d laid claim to, the planet would cook five times over. That math kicked off a widespread campaign of divestment from fossil fuel stocks by universities, churches, and foundations. And it’s since become the conventional wisdom: Many central bankers and world leaders now agree that we need to keep the bulk of fossil fuel reserves underground. But the new new math is **even more explosive**. It draws on a report by Oil Change International, a Washington-based think tank, using data from the Norwegian energy consultants Rystad. For a fee—$54,000 in this case—Rystad will sell anyone its numbers on the world’s existing fossil fuel sources. Most of the customers are oil companies, investment banks, and government agencies. But OCI wanted the numbers for a different reason: to figure out how close to the edge of catastrophe we’ve already come. Scientists say that to have even a two-thirds chance of staying below a global increase of two degrees Celsius, we can release **800** gigatons more CO2 into the atmosphere. But the Rystad data shows coal mines and oil and gas wells **currently in operation** worldwide contain **942** gigatons worth of CO2. So the math problem is simple, and it goes like this: 942 > 800 “What we found is that if you burn up all the carbon that’s in the **currently operating fields and mines**, you’re **already above two degrees**,” says Stephen Kretzmann, OCI’s executive director. It’s not that if we keep eating like this for a **few more decades** we’ll be ~~morbidly obese~~ [doomed]. It’s that if we eat **what’s already in the refrigerator** we’ll be ~~morbidly obese~~ [doomed]. What’s worse, the definition of “morbid” has changed in the past four years. Two degrees Celsius used to be the red line. But scientists now believe the upper limit is **much lower**. We’ve already raised the world’s temperature by one degree—enough to **melt almost half the ice** in the Arctic, **kill off huge swaths of the world’s coral**, and **unleash lethal floods** and **drought**. July and August tied for the hottest months ever recorded on our planet, and scientists think they were almost certainly the hottest in the history of human civilization. Places like Basra, Iraq—on the edge of what scholars think was the Biblical Garden of Eden—hit 129 degrees Fahrenheit this year, approaching the point where humans **can’t survive outdoors**. So last year, when the world’s leaders met in Paris, they set a new number: Every effort, they said, would be made to keep the global temperature rise to less than 1.5 degrees. And to have even a 50–50 chance of meeting that goal, we can only release about 353 gigatons more CO2. So let’s do the math again: 942 > 353

#### Warming won’t affect the environment and will be slow

Hart 15 (Michael, he’s the Simon Reisman chair at the Norman Paterson School of International Affairs at Carleton University in Ottawa, former Fulbright-Woodrow Wilson Center Visiting Research, he was also a Scholar-in-Residence in the School of International Service and a Senior Fellow in the Center for North American Studies at American University in Washington, a former official in Canada’s Department of Foreign Affairs and International Trade, where he specialized in trade policy and trade negotiations, MA from the University of Toronto and is the author, editor, or co-editor of more than a dozen books, “Hubris: The Troubling Science, Economics, and Politics of Climate Change”, google books)

As already noted, the IPCC scenarios themselves are wildly alarmist, not only on the basic science but also on the underlying economic assumptions, which in turn drive the alarmist impacts. The result cannot withstand critical analysis. Economists Ian Castles and David Henderson, for example, show the extent to which the analysis is driven by the desire to reach predetermined outcomes.50 Other economists have similarly wondered what purpose was served by pursuing such unrealistic scenarios. It is hard to credit the defense put forward by Mike Hulme, one of the creators of the scenarios, that the IPCC is not engaged in forecasting the future but in creating “plausible” story lines of what might happen under various scenarios.51 Each scare scenario is based on linear projections without any reference to technological developments or adaptation. If, on a similar linear basis, our Victorian ancestors in the UK, worried about rapid urbanization and population growth in London, had made similar projections, they would have pointed to the looming crisis arising from reliance on horse-drawn carriages and omnibuses; they would have concluded that by the middle of the 20th century, London would be knee-deep in horse manure, and all of the southern counties would be required to grow the oats and hay to feed and bed the required number of horses. Technology progressed and London adapted. Why should the rest of humanity not be able to do likewise in the face of a trivial rise in temperature over the course of more than a century? The work on physical impacts is equally over the top. All the scenarios assume only negative impacts, ignore the reality of adaptation, and attribute any and all things bad to global warming. Assuming the GHG theory to be correct means that its impact would be most evident at night and during the winter in reducing atmospheric heat loss to outer space.52 It would have greater impact in increasing minimum temperatures than in increasing maximum temperatures. Secondary studies, however, generally ignore this facet of the hypothesis. The IPCC believes that a warmer world will harm human health due, for example, to increased disease, malnutrition, heat-waves, floods, storms, and cardiovascular incidents. As already noted there is no basis for the claim about severe-weather-related threats or malnutrition. The claim about heat-related deaths gained a boost during the summer of 2003 because of the tragedy of some 15,000 alleged heat-related deaths in France as elderly people stayed behind in city apartments without air conditioning while their children enjoyed the heat at the sea shore during the August vacation. Epidemiological studies of so-called "excess" deaths resulting from heat waves are abused to get the desired results. Similar studies of the impact of cold spells show that they are far more lethal than heat waves and that it is much easier to adapt to heat than to cold.53 More fundamentally, this, like most of the alarmist literature, ignores the basics of the AGW hypothesis: the world will not see an exponential increase in summer, daytime heat (and thus more heat waves), but a decrease in night-time and winter cooling, particularly at higher latitudes and altitudes. Based on the AGW hypothesis, Canada, China, Korea, Northern Europe, Australia, New Zealand, South Africa, Chile, and Argentina will see warmer winters and warmer nights. There are clear benefits to such a development, even if there may also be problems, but the AGW industry tends to ignore the positive aspects of their alarmist scenarios. The feared spread of malaria, a much repeated claim, is largely unrelated to climate. Malaria’s worst recorded outbreak was in Siberia long before there was any discussion of AGW. Similarly, the building of the Rideau Canal in Ottawa in the 1820s was severely hampered by outbreaks of malaria due to the proximity of mosquito-infested wetlands in the area. Malaria remains widespread in tropical countries today in part because of the UN’s lengthy embargo on the use of DDT, the legacy of an earlier alarmist disaster. Temperature is but one factor, and a minor one at that, in the multiple factors that affect the rise or decline in the presence of disease-spreading mosquitoes. Wealthier western countries have pursued public health strategies that have reduced the incidence of the dis- ease in their countries. Entomologist Paul Reiter, widely recognized as the leading specialist on malaria vectors and a contributor to some of the early work of the IPCC, was aghast to learn how his careful and systematic analysis of the potential impacts had been twisted in ways that he could not endorse. In a recent paper, he concludes: “Simplistic reasoning on the future prevalence of malaria is ill-founded; malaria is not limited by climate in most temperate regions, nor in the tropics, and in nearly all cases, ’new' malaria at high altitudes is well below the maximum altitudinal limits for transmission. Future changes in climate may alter the prevalence and incidence of the disease, but obsessive emphasis on ’global warming' as a dominant parameter is indefensible; the principal determinants are linked to ecological and societal change, politics and economics.”54 Catastrophic species loss similarly has little foundation in past experience.55 Even if the GHG hypothesis were to be correct, its impact would be slow, providing significant scope and opportunity for adaptation, including by ﬂora and fauna. One of the more irresponsible claims was made by a group of UK modelers who fed wildly improbable scenarios and data into their computers and produced the much-touted claim of massive species loss by the end of the century. There are literally thousands of websites devoted to spreading alarm about species loss and biodiversity. Global warming is but one of many claimed human threats to the planet’s biodiversity. The claims, fortunately, are largely hype, based on computer models and the estimate by Harvard naturalist Edward O. Wilson that 27,000 to 100,000 species are lost annually - a figure he advanced purely hypothetically but which has become one of the most persistent of environmental urban myths. The fact is that scientists have no idea of the extent of the world's ﬂora and fauna, with estimates ranging from five million to 100 million species, and that there are no reliable data about the rate of loss. By some estimates, 95 per cent of the species that ever existed have been lost over the eons, most before humans became major players in altering their environment. A much more credible estimate of recent species loss comes from a surprising source, the UN Environmental Program. It reports that known species loss is slowing reaching its lowest level in 500 years **in the last three decades of the 20th century, with some 20 reported extinctions despite increasing pressure on the biosphere from growing human population and industrialization.57 The alarmist community has also introduced the scientifically unknown concept of "locally extinct,” often meaning little more than that** a species of plant or animal has responded to adverse conditions by moving to more hospitable circumstances**, e.g., birds or butterflies becoming more numerous north of their range and disappearing at its extreme southern extent. Idso et al. conclude: “Many** species have shown the ability toadapt rapidly to changes in climate**.** Claims that global warming threatens **large numbers of species with** extinctiontypically rest on **a false definition of extinction (the loss of a particular population rather than en- tire species) and** speculation rather than real-world evidence**.** The world’s species have proven very resilient**,** having survived past natural climate cycles that involved much greater warming and higher C02 concentrations than exist today or are likely to exist in the coming centuries?“

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#### CO2 boosts plant performance and prevents mass starvation—avoids extinction

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(S. Fred, Robert M. and Craig, “Climate Change Reconsidered,” 2011 Interim Report of the Nongovernmental Panel on Climate Change)

Regarding the first of these requirements, Tilman et al. note that in many parts of the world the historical rate of increase in crop yields is declining, as the genetic ceiling for maximal yield potential is being approached. This observation, in their words, ―highlights the need for efforts to steadily increase the yield potential ceiling.

‖ With respect to the second requirement, they indicate, ―without the use of synthetic fertilizers, world food production could not have increased at the rate it did [in the past] and more natural ecosystems would have been converted to agriculture.‖ Hence, they state the solution ―will require significant increases in nutrient use efficiency, that is, in cereal production per unit of added nitrogen, phosphorus,‖ and so forth. Finally, as to the third requirement, Tilman et al. remind us ―water is regionally scarce,‖ and ―many countries in a band from China through India and Pakistan, and the Middle East to North Africa either currently or will soon fail to have adequate water to maintain per capita food production from irrigated land.‖ Increasing crop water use efficiency, therefore, is also a must. Although the impending biological crisis and several important elements of its potential solution are thus well defined, Tilman et al. (2001) noted ―even the best available technologies, fully deployed, cannot prevent many of the forecasted problems.‖ This was also the conclusion of Idso and Idso (2000), who stated that although ―expected advances in agricultural technology and expertise will significantly increase the food production potential of many countries and regions,‖ these advances ―will not increase production fast enough to meet the demands of the even faster-growing human population of the planet.‖ Fortunately, we have a powerful ally in the ongoing rise in the air‘s CO2 content that can provide what we can‘t. Since atmospheric CO2 is the basic ―food of essentially all plants, the more of it there is in the air, the bigger and better they grow. For a nominal doubling of the air‘s CO2 concentration, for example, the productivity of Earth‘s herbaceous plants rises by 30 to 50 percent (Kimball, 1983; Idso and Idso, 1994), and the productivity of its woody plants rises by 50 to 80 percent or more (Saxe et al. 1998; Idso and Kimball, 2001). Hence, as the air‘s CO2 content continues to rise, the land use efficiency of the planet will rise right along with it. In addition, atmospheric CO2 enrichment typically increases plant nutrient use efficiency and plant water use efficiency. Thus, with respect to all three of the major needs identified by Tilman et al. (2002), increases in the air‘s CO2 content pay huge dividends, helping to increase agricultural output without the taking of new land and water from nature. Many other researchers have broached this subject. In a paper recently published in the Annual Review of Plant Biology, three scientists associated with the Institute of Genomic Biology at the University of Illinois at Urbana-Champaign (USA) write that meeting the global increase in agricultural demand during this century ―is predicted to require a doubling of global production,‖ but ―the world has limited capacity to sustainably expand cropland,‖ and this capacity is actually ―shrinking in many developed countries.‖ Thus, Zhu et al. (2010) state, ―meeting future increases in demand will have to come from a near doubling of productivity on a land area basis,‖ and they conclude ―a large contribution will have to come from improved photosynthetic conversion efficiency,‖ estimating ―at least a 50% improvement will be required to double global production.‖ The researchers‘ reason for focusing on photosynthetic conversion efficiency derives from the experimentally observed facts that increases in the atmosphere‘s CO2 concentration increase the photosynthetic rates of nearly all plants, and those rate increases generally lead to equivalent—or only slightly smaller—increases in plant productivity on a land area basis. That provides a solid foundation for their enthusiasm in this regard. In their review of the matter, however, they examine the prospects for boosting photosynthetic conversion efficiency in an entirely different way: genetically, without increasing the air‘s CO2 content. ―Improving photosynthetic conversion efficiency will require,‖ the three scientists state, ―a full suite of tools including breeding, gene transfer, and synthetic biology in bringing about the designed alteration to photosynthesis.‖ For some of these ―near-term‖ endeavors, they indicate ―implementation is limited by technical issues that can be overcome by sufficient investment,‖ meaning they can ―be bought.‖ But several ―mid-term‖ goals could take 20 years or more to achieve; and they state ―even when these improvements are achieved, it may take an additional 10–20 years to bring such innovations to farms in commercial cultivars at adequate scale.‖ And if that is not bad enough, they say of still longer-term goals that ―too little of the science has been undertaken to identify what needs to be altered to effect an increase in yield,‖ while in some cases they acknowledge that what they envision may not even be possible, as in developing a form of RuBisCO that exhibits a significant decrease in oxygenation activity, or in designing C3 crops to utilize the C4 form of photosynthetic metabolism. Clearly, we do not have the time to gamble on our ability to accomplish what needs to be done in order to forestall massive human starvation of global dimensions within the current century. Therefore—in addition to trying what Zhu et al. suggest—we must rely on the ―tested and true: the CO2-induced stimulation of plant photosynthesis and crop yield production. And all we need to do in this regard is to refrain from interfering with the natural evolution of the Industrial Revolution, which is destined to be carried for some time yet on the backs of fossil-fuel-driven enterprises that can provide the atmosphere with the extra carbon dioxide that will be needed to provide the extra increase in crop growth that may mean the difference between global food sufficiency and human starvation on a massive scale a mere few decades from now. Another take on the matter has been provided by Hanjra and Qureshi (2010). They begin their treatment of the subject by quoting Benjamin Franklin‘s well-known homily, ―When the well is dry, we know the worth of water,‖ and they write we ―must not lose sight of surging water scarcity.‖ Noting ―population and income growth will increase the demand for food and water,‖ they contend ―irrigation will be the first sector to lose water, as water competition by non-agricultural uses increases and water scarcity intensifies.‖ As ―increasing water scarcity will have implications for food security, hunger, poverty, and ecosystem health and services,‖ they report ―feeding the 2050 population will require some 12,400 km3 of water, up from 6800 km3 used today.‖ This huge increase, they continue, ―will leave a water gap of about 3300 km3 even after improving efficiency in irrigated agriculture, improving water management, and upgrading of rainfed agriculture,‖ as per the findings of de Fraiture et al. (2007), Molden (2007), and Molden et al. (2010). This water deficiency, according to Hanjra and Qureshi, ―will lead to a food gap unless concerted actions are taken today.‖ Some of the measures they propose are to conserve water and energy resources, develop and adopt climate-resilient crop varieties, modernize irrigation, shore up domestic food supplies, reengage in agriculture for further development, and reform the global food and trade markets. To achieve these goals, they write, ―unprecedented global cooperation is required,‖ which by the looks of today‘s world is an exceedingly remote possibility. What, then, can we do to defuse the ticking time-bomb of this looming food and water crisis? One option is to do nothing: don‘t mess with the normal, unforced evolution of civilization‘s means of acquiring energy. This is because on top of everything else we may try to do to conserve both land and freshwater resources, we will still fall short of what is needed to be achieved unless the air‘s CO2 content rises significantly and thereby boosts the water use efficiency of Earth‘s crop plants and that of the plants that provide food and habitat for what could be called ―wild nature,‖ enabling both sets of plants to produce more biomass per unit of water used. To ensure this happens, we will need all of the CO2 that will be produced by the burning of fossil fuels, until other forms of energy truly become more cost-efficient than coal, gas, and oil. In fact, these other energy sources will have to become much more cost-efficient before fossil fuels are phased out, because the positive externality of the CO2-induced increase in plant water use efficiency provided by the steady rise in the atmosphere‘s CO2 concentration due to the burning of fossil fuels will be providing a most important service in helping us feed and sustain our own species without totally decimating what yet remains of wild nature. In yet another paper to address this important issue—this one published in the Journal of Proteome Research—Sarkar et al. (2010) write, ―increasing population and unsustainable exploitation of nature and natural resources have made ‗food security‘ a burning issue in the 21st century,‖ echoing the sentiments expressed by Farrell (2009), who noted ―the alarming increase in biofuel production, the projected demand for livestock products, and the estimated food to feed the additional 700 million people who will arrive here by 2016, will have unprecedented consequences,‖ among which are likely to be that ―arable land, the environment, water supply and sustainability of the agricultural system will all be affected,‖ and not in a positive way. Furthermore, when the human population of the globe reaches 8.7–11.3 billion by the year 2050 (Bengtsson et al., 2006), the situation will become truly intolerable, unless something is done, far in advance of that date, to mitigate the situation dramatically. Thus, as Sarkar et al. suggest, ―a normal approach for any nation/region is to strengthen its agricultural production for meeting future demands and provide food security.‖ But a major difficulty, which could spoil mankind‘s ability to do so, is the ongoing rise in the atmosphere‘s ozone concentration. This is the subject of Sarkar et al.‘s new paper. In a study designed to elucidate the many ways in which ozone (O3) is harmful to plants, the eight researchers grew two high-yielding cultivars (Sonalika and HUW 510) of wheat (Triticum aestivum L.) outdoors at the Agriculture Research Farm of India‘s Banaras Hindu University. This was done within open-top chambers maintained at the ambient O3 concentration and at elevated O3 concentrations of 25 percent and 50 percent above ambient during the peak O3 period of the day (10:00 to 15:00 hours local time) for a total of 50 days, during which time they measured numerous responses of the plants to the two levels of ozone enrichment. Sarkar et al. determined, among several other things, that the moderate increases in the air‘s O3 concentration resulted in higher foliar injury, a reduction in photosynthetic efficiency, induced inhibition in photochemical efficacy of photosystem II, lowered concentrations of photosynthetic pigments and proteins, and what they describe as ―drastic reductions‖ in RuBisCO large and small subunits, while noting major leaf photosynthetic proteins and important energy metabolism proteins were also ―drastically reduced.‖ Discussing the results, the scientists from India, Japan, and Nepal remark that anthropogenic activities have made ozone a ―major environmental pollutant of our time,‖ while noting some are predicting it to be an even ―greater problem for the future.‖ Adding this dilemma to the problem of feeding the world over the next few decades and beyond makes humanity‘s future look incredibly bleak. Thus, Sarkar et al. suggest we focus on ―engineering crops for future high O3,‖ concentrating on maintaining ―effective stomatal conductance of plants which can avoid O3 entry but not hamper their productivity.‖ We agree. But not knowing to what extent we will be successful in this endeavor, we also need to do something we know will work: allowing the air‘s CO2 content to rise, unimpeded by the misguided efforts of those who would curtail anthropogenic CO2 emissions in the guise of fighting what they claim is anthropogenic-induced global warming. This contention is largely theoretical and wholly unproven, but we know, as a result of literally hundreds, if not thousands, of real-world experiments, that atmospheric CO2 enrichment increases both the productivity and water-use efficiency of nearly all plants, and that it often more than compensates for the negative effects of O3 pollution. Introducing another review of food security studies pertinent to the challenge of feeding 9 billion people just four decades from now, Godfray et al. (2010) note ―more than one in seven people today still do not have access to sufficient protein and energy from their diet and even more suffer some form of micronutrient malnourishment,‖ citing the FAO (2009). Although ―increases in production will have an important part to play‖ in correcting this problem and keeping it from worsening in the future, mankind ―will be constrained by the finite resources provided by the earth‘s lands, oceans and atmosphere,‖ This set of difficulties they describe at the end of their review as constituting a ―perfect storm.‖ In considering ways to mitigate these problems, the first question they ask is: ―How can more food be produced sustainably?‖ They state the primary solution to food shortages of the past was ―to bring more land into agriculture and to exploit new fish stocks,‖ but they note there is precious little remaining of either of these pristine resources. Thus, they conclude ―the most likely scenario is that more food will need to be produced from the same or less land.‖ As they suggest, ―we must avoid the temptation to sacrifice further the earth‘s already hugely depleted biodiversity for easy gains in food production, not only because biodiversity provides many of the public goods upon which mankind relies, but also because we do not have the right to deprive future generations of its economic and cultural benefits.‖ And, we might add, because we should be enlightened enough to realize we have a moral responsibility to drive no more species to extinction than we already have sent to that sorry state. So how can these diverse requirements all be met simultaneously? A clue comes from Godfray et al.‘s statement that ―greater water and nutrient use efficiency, as well as tolerance of abiotic stress, are likely to become of increasing importance.‖ And what is there that can bring about these changes in mankind‘s crops? You guessed it: carbon dioxide. Rising concentrations of atmospheric CO2 increase the photosynthetic prowess of essentially all of the Earth‘s plants, while generally reducing the rate at which they transfer water from the soil to the air. In addition, more CO2 in the air tends to enhance the efficiency with which plants utilize nutrients in constructing their tissues and producing the edible portions that we and all of Earth‘s animals depend upon for our very existence. Focusing on the water scarcity aspect of the food shortage problem, Kummu et al. (2010) write, ―due to the rapidly increasing population and water use per capita in many areas of the world, around one third of the world‘s population currently lives under physical water scarcity (e.g. Vorosmarty et al., 2000; Alcamo et al., 2003; Oki and Kanae, 2006).‖ But despite the large number of water scarcity studies conducted over the years, ―no global assessment is available of how this trend has evolved over the past several centuries to millennia.‖ Thus they conducted a study covering AD 0 to 2005. This analysis was carried out for ten different time slices, defined as those times at which the human population of the globe was approximately double the population of the previous time slice. Global population data for these analyses were derived from the 5‘ latitude x 5‘ longitude-resolution global HYDE dataset of Klein Goldewijk (2005) and Klein Goldewijk et al. (2010), while evaluation of water resources availability over the same period was based on monthly temperature and precipitation output from the climate model ECBilt-CLIO-VECODE, as calculated by Renssen et al. (2005). After completing these assessments, the four researchers found ―moderate water shortage first appeared around 1800, but it commenced in earnest from about 1900, when 9% of the world population experienced water shortage, of which 2% was under chronic water shortage (<1000 m3/capita/year).‖ Thereafter, from 1960 onwards, they write, ―water shortage increased extremely rapidly, with the proportion of global population living under chronic water shortage increasing from 9% (280 million people) in 1960 to 35% (2300 million) in 2005.‖ And currently, they continue, ―the most widespread water shortage is in South Asia, where 91% of the population experiences some form of water shortage,‖ while ―the most severe shortage is in North Africa and the Middle East, where 77% and 52% of the total population lives under extreme water shortage (<500 m3/capita/year), respectively.‖ To alleviate these freshwater shortages, Kummu et al. state measures generally have been taken to increase water availability, such as building dams and extracting groundwater. But they note ―there are already several regions in which such measures are no longer sufficient, as there is simply not enough water available in some regions.‖ In addition, they observe, ―this problem is expected to increase in the future due to increasing population pressure (e.g. United Nations, 2009), higher welfare (e.g. Grubler et al., 2007) [and] production of water intensive biofuels (e.g. Varis, 2007, Berndes, 2008).‖ Hence, they conclude there will be an increasing need for many nonstructural measures, the first and foremost of which they indicate to be ―increasing the efficiency of water use.‖ This characteristic of nearly all of Earth‘s plants is almost universally promoted by atmospheric CO2 enrichment.

#### Causes food wars and extinction

Brown, 9 – founder of the Worldwatch Institute and the Earth Policy Institute

(Lester R, “Can Food Shortages Bring Down Civilization?” Scientific American, May)

The biggest threat to global stability is the potential for food crises in poor countries to cause government collapse. Those crises are brought on by ever worsening environmental degradation

One of the toughest things for people to do is to anticipate sudden change. Typically we project the future by extrapolating from trends in the past. Much of the time this approach works well. But sometimes it fails spectacularly, and people are simply blindsided by events such as today's economic crisis.

For most of us, the idea that civilization itself could disintegrate probably seems preposterous. Who would not find it hard to think seriously about such a complete departure from what we expect of ordinary life? What evidence could make us heed a warning so dire--and how would we go about responding to it? We are so inured to a long list of highly unlikely catastrophes that we are virtually programmed to dismiss them all with a wave of the hand: Sure, our civilization might devolve into chaos--and Earth might collide with an asteroid, too! For many years I have studied global agricultural, population, environmental and economic trends and their interactions. The combined effects of those trends and the political tensions they generate point to the breakdown of governments and societies. Yet I, too, have resisted the idea that food shortages could bring down not only individual governments but also our global civilization.

I can no longer ignore that risk. Our continuing failure to deal with the environmental declines that are undermining the world food economy--most important, falling water tables, eroding soils and rising temperatures--forces me to conclude that such a collapse is possible. The Problem of Failed States   Even a cursory look at the vital signs of our current world order lends unwelcome support to my conclusion. And those of us in the environmental field are well into our third decade of charting trends of environmental decline without seeing any significant effort to reverse a single one. In six of the past nine years world grain production has fallen short of consumption, forcing a steady drawdown in stocks. When the 2008 harvest began, world carryover stocks of grain (the amount in the bin when the new harvest begins) were at 62 days of consumption, a near record low. In response, world grain prices in the spring and summer of last year climbed to the highest level ever.As demand for food rises faster than supplies are growing, the resulting food-price inflation puts severe stress on the governments of countries already teetering on the edge of chaos. Unable to buy grain or grow their own, hungry people take to the streets. Indeed, even before the steep climb in grain prices in 2008, the number of failing states was expanding [see sidebar at left]. Many of their problem's stem from a failure to slow the growth of their populations. But if the food situation continues to deteriorate, entire nations will break down at an ever increasing rate. We have entered a new era in geopolitics. In the 20th century the main threat to international security was superpower conflict; today it is failing states. It is not the concentration of power but its absence that puts us at risk.States fail when national governments can no longer provide personal security, food security and basic social services such as education and health care. They often lose control of part or all of their territory. When governments lose their monopoly on power, law and order begin to disintegrate. After a point, countries can become so dangerous that food relief workers are no longer safe and their programs are halted; in Somalia and Afghanistan, deteriorating conditions have already put such programs in jeopardy.Failing states are of international concern because they are a source of terrorists, drugs, weapons and refugees, threatening political stability everywhere. Somalia, number one on the 2008 list of failing states, has become a base for piracy. Iraq, number five, is a hotbed for terrorist training. Afghanistan, number seven, is the world's leading supplier of heroin. Following the massive genocide of 1994 in Rwanda, refugees from that troubled state, thousands of armed soldiers among them, helped to destabilize neighboring Democratic Republic of the Congo (number six).Our global civilization depends on a functioning network of politically healthy nation-states to control the spread of infectious disease, to manage the international monetary system, to control international terrorism and to reach scores of other common goals. If the system for controlling infectious diseases--such as polio, SARS or avian flu--breaks down, humanity will be in trouble. Once states fail, no one assumes responsibility for their debt to outside lenders. If enough states disintegrate, their fall will threaten the stability of global civilization itself.