### 1NC—Th

#### Interpretation: The affirmative must, upon the release of tournament pairings, tell the negative what specific affirmative position they will be reading, either 30 minutes before the round or within ten minutes of asking.

#### Violation: They didn’t tell us the Aff.

Graphical user interface, application, Teams

Description automatically generated

#### Net Benefits:

#### 1] Research – disclosure increases research and gets rid of anti-educational arguments because debaters are forced to prepare cases knowing that people will have answers AND people get the opportunity to research answers to disclosed cases. Not telling us the Aff makes focused research impossible because we won’t know where to focus pre round, and don’t have any incentive to go deep and do research if we know they can read any number of possible positions

#### 2] Clash – Disclosure is the best method for increasing clash in debates because it allows debaters to substantively engage positions rather than relying on sketchy tricks to avoid the discussion. It also allows for more specific clash because debaters can see specific arguments disclosed instead of trying to link generic arguments in.

#### 3] Reciprocity --- pairings just came out, and there isn’t much time to prep --- forcing us to split between a bunch of different positions while the Aff knows for sure which they’re reading makes it slanted in their favor by encouraging them to go deep while we can’t

#### Fairness and education are voters – debate’s a game that needs rules to evaluate it and education gives us portable skills for life like research and thinking.

#### Drop the debater – a) they have a 7-6 rebuttal advantage and the 2ar to make args I can’t respond to, b) it deters future abuse and sets a positive norm.

#### Use competing interps – a) reasonability invites arbitrary judge intervention since we don’t know your bs meter, b) collapses to competing interps – we justify 2 brightlines under an offense defense paradigm just like 2 interps.

#### No RVIs – a) illogical – you shouldn’t win for being fair – it’s a litmus test for engaging in substance, b) norming – I can’t concede the counterinterp if I realize I’m wrong which forces me to argue for bad norms and encourages baiting to go for the RVI.

### 1NC – T

#### **Interp – “medicines” treat or cure, whereas vaccines prevent – o/w on specificity since it’s about the COVID vaccine**

Vecchio 7/22 (Christopher Vecchio, [CFA, Senior Strategist,], 7-22-2021, “Delta Variant Concerns Won't Cripple Markets, US Economy“, DailyFX, accessed: 8-9-2021, https://www.dailyfx.com/forex/video/daily\_news\_report/2021/07/22/market-minutes-delta-variant-concerns-wont-cripple-markets-us-economy.html) ajs

Let’s stick to the facts. The COVID-19 vaccines are not medicines, which by definition “treat or cure diseases.” Vaccines “help prevent diseases,” an important distinction. Why does this matter? Because data coming out of some of the world’s developed economies with high adult vaccination rates suggest that the vaccines are working as intended: tail-risks have been reduced, with hospitalizations and deaths falling relative to the recent spike in infections (which have been occurring primarily among the unvaccinated at this point). Put another way, vaccines are like a Kevlar vest for the immune system; while they don’t make you bulletproof, they dramatically increase the odds of surviving an adverse event.

#### Vaccines are medical interventions – not medicines

Elbe 10 (Stefan Elbe, [director of the Centre for Global Health Policy and a professor of international relations at the University of Sussex. He is the author of Strategic Implications of HIV/AIDS, Security and Global Health, and Virus Alert: Security, Governmentality, and the AIDS Pandemic.], 5-3-2010, “Security and Global Health” Polity Press, accessed: 8-9-2021, https://books.google.com/books?id=PKMoMJrSsksC) ajs

Yet here too we must be careful not to overlook other types of medical intervention simultaneously pursued by the 'social' arm of modern medicine at the population level. Vaccines in particular continue to be particularly important medical interventions that repeatedly surface in a variety of different health security delib- erations. Strictly speaking, vaccines are not medicines because they consist of small concentrations of disease-causing microbes (or their derivatives) used to enhance a person's immuno-response to a future infection. As a public health measure, vaccines have therefore also been largely sidelined in the existing medicalization literature. Yet, generally speaking, vaccines too can be considered as medical inter- ventions. That is certainly how the World Health Organization views them, pointing out that 'vaccines are among the most important medical interventions for reducing illness and deaths' available today (WHO 2009a). Whereas pills and other therapies mark the tools of clinical medicine, vaccines play a crucial part in the arsenal of 'social' medicine and public health. Developing and rolling out of new vaccines against a range of current (and future) diseases therefore represents further evidence of how the rise of health security is also encouraging security to be practised through the introduction of new medical interventions in society.

#### Violation – They defend COVID Vaccines.

#### Negate –

#### 1] Limits – expanding the topic to preventative treatment or medical interventions allows anything from surgery to medical devices to education strategies or mosquito repellent to prevent malaria. Destroys core generics like innovation which are exclusive to disease curing – core of the topic is about proprietary information. A big case list with no unifying generics destroy neg prep – disincentivizes in depth topic research and leaves the neg behind.

#### 2] Precision – WHO definitively outweighs on common usage and quals and views vaccines as medical interventions which proves we’re right and consistent with topic lit – debates should mirror international medical consensus.

### 1NC—Case

#### Carbon border tax coming now and key to solving warming.

Kellard 1/28 Neil Kellard [Dean, Professor in Finance, Essex Business School, University of Essex] “Why the EU’s proposed carbon border levy is an important test for global action on climate change” January 28, 2021 <https://theconversation.com/why-the-eus-proposed-carbon-border-levy-is-an-important-test-for-global-action-on-climate-change-154041> SM

In the more than two decades since the Kyoto Protocol was adopted, national policies on climate change have had dangerously and disappointingly little effect on global emissions.

Within the current economic system, perhaps the most ambitious attempt to reduce emissions has been the EU’s emissions trading system (or ETS). In operation since 2005, the ETS covers more than 11,000 heavy-energy-using power stations, factories and airlines, representing around 40% of the EU’s greenhouse gas emissions. The scheme operates via a cap-and-trade principle where an EU-wide cap on emissions means that firms must buy allowances, essentially paying for their polluting activities.

Yet although the ETS has had some success in reducing emissions, finance professor Panayiotis Andreou and I recently showed that the scheme is under-penalising those who pollute the most – primarily because the price of allowances has typically been too low.

The current price of an allowance to emit greenhouse gases is around €33 per tonne, a price already much higher than the average over the life of the ETS. However, to meet EU climate change targets, this price will need to be more like €40 by 2030 and close to €250 in 2050. Given the substantial costs this will impose on EU firms, either to pay for allowances or to invest in low carbon technologies, companies based outside the EU will have a hefty competitive advantage unless they face similar regulatory controls in their own countries.

This is why the European Commission, the EU’s executive branch, plans to present its carbon border levy in June 2021 as part of its Green Deal planning. Frans Timmermans, the first vice-president of the European Commission, recently stressed that:

It’s a matter of survival of our industry. So, if others will not move in the same direction, we will have to protect the European Union against distortion of competition and against the risk of carbon leakage.

Although its details are still undecided, the carbon border levy is expected to charge imports into the EU at an amount related to the emissions trading system price. As commission official Benjamin Angel notes, this could mean setting a carbon amount per product and multiplying it by the ETS price. For example, given production of each tonne of steel typically generates around 1.9 tonnes of CO₂ emissions, if we assume an ETS price of €30 then a firm would pay €57 extra to import it.

Having such a levy in place would send a strong signal to EU firms that potentially expensive investments in environmentally beneficial technologies would not result in undercutting, either by non-EU rivals that enjoy looser regulations, or by firms relocating to outside the EU – the so called “carbon leakage” that Frans Timmermans mentions.

Combining the EU ETS with a border levy is a sensible and workable strategy, providing a long-term context for firms that encourages the reduction of emissions by pricing in the pollution they produce. The benefits of a border levy may also spill over to outside the EU in at least one of two ways. First, and most obviously, non-EU firms that wish to export into Europe will be encouraged to reduce emissions to limit their charge. Secondly, other governments and regulatory authorities will be watching closely to see if the approach is workable and this could see the spread of cap-and-trade agreements more globally.

#### Lack of WTO legitimacy is key – the threat of disputes deters action.

Ashurst 7/16 Ashurst [A progressive global law firm] Proposed EU Regulation on CBAM, July 16 2021, <https://www.ashurst.com/en/news-and-insights/legal-updates/proposed-eu-regulation-of-cbam-published/> SM

Next steps for the Commission's proposal

Following publication of the detailed proposal for the CBAM, it will need to go through the ordinary legislative procedure, which involves being reviewed and modified by the European Parliament and the Council. This process will provide Member States with the opportunity to introduce significant changes.

Future developments

While only a proposal, the draft CBAM regulation also contains a reporting and review mechanism. Here, the draft CBAM regulation obliges the Commission to report before the end of the transitional period on the application of the CBAM, with a view to extending the scope of CBAM to indirect emissions and goods other than those listed in Annex I.

How might the proposal be challenged?

The CBAM is controversial outside the EU. Commentators have already started to map out potential challenges to it. In principle, these challenges follow two distinct routes:

that the CBAM breaches international obligations; and/or

that the CBAM breaches EU domestic law.

The main international route would be a WTO challenge by another WTO member government. As the WTO dispute settlement process is a government-to-government process, business would need to either lobby a government to bring a WTO Dispute Settlement Understanding (DSU) case, or, in certain jurisdictions, use formal processes (e.g. section 301 of the U.S. Trade Act of 1974) to stimulate a government to bring a case that it would not otherwise bring.

The obvious candidates are countries such as Brazil, India, Australia, China and Russia, all of which will be affected by the CBAM.

The WTO DSU process is currently functioning poorly since the US has refused to appoint new Appellate Body (AB) members, so the AB cannot function. This may have influenced the EU's decision to publish the draft regulation at this time, and until new AB members are appointed the prospect of the CBAM being held, definitively, to be incompatible with WTO obligations appears slim.

#### Otherwise, countries dispute through the WTO

Brooks 7/21 “Trade experts positive on EU’s CBAM, despite risk of rich nation-poor nation rift”, July 21 2021 Cristina Brooks [Senior Journalist, Climate & Sustainability, IHS Markit] <https://ihsmarkit.com/research-analysis/--trade-experts-positive-on-eus-cbam-despite-risk-of-rich-nati.html> SM

In addition to EU due process, the CBAM will face international challenges. World Trade Organization (WTO) rules were not drafted to accommodate climate change policies, so countries slapped with new charges on exports may challenge the CBAM via a WTO dispute settlement case.

Stephen Woolcock, a lecturer in international political economy at the London School of Economics, told Net-Zero Business Daily there are several ways of challenging the CBAM. "If the EU were to introduce the measure, other countries would challenge this, and you then go through a dispute settlement mechanism. The WTO appellate body, if you like 'the international trade court,' would then rule on whether this is complying with the WTO rules," he said.

However, he said it seems likely countries will discuss it in other forums since the US under the Trump administration blocked appointees to the WTO's appellate body. "So, we don't have a functioning appellate body in the WTO at the moment," said Woolcock.

#### WTO-compliant carbon border measures are practically impossible – even the “domestic taxes” route fails. Prefer our ev – it doesn’t matter if WTO compliance is theoretically possible if it’s not pragmatically possible.

Meyer and Tucker 21 “A Pragmatic Approach to Carbon Border Measures” Timothy Meyer [Professor of Law; Director, International Legal Studies Program at Vanderbilt, J.D. and Ph.D. in jurisprudence and social policy from Berkeley], and Todd N. Tucker [Director of Governance Studies at the Roosevelt Institute, PhD and MPhil from the University of Cambridge] World Trade Review (July 2021), 1–12 <https://www.cambridge.org/core/journals/world-trade-review/article/pragmatic-approach-to-carbon-border-measures/B0D224B3A59E9433D10E74DE6D40A0FD> SM

3. CBMs and the WTO

This variation in domestic authority and the resulting diversity of approaches to decarbonization has two consequences. First, it makes it likely that at least some countries interested in pursuing aggressive domestic decarbonization measures will have difficulty doing so in a way that can easily be married to a CBM that complies with the WTO’s primary rules. Second, it makes it virtually impossible to have a common CBM across countries that complies with those primary rules. The divergence in domestic approaches means that the domestic carbon price – whether explicit or implicit, i.e., calculated from the cost of complying with environmental regulations – will almost surely vary across countries. As a result, barring speedy and successful negotiations, the WTO-consistency of any CBM is likely to hinge on flexibilities, that have not been interpreted in a manner sufficiently deferential to national regulators.

3.1 The GATT’s Primary Rules

The GATT, the WTO’s chief agreement governing trade in goods, contains three main sets of primary obligations: 1) limits on tariffs; 2) a prohibition on import or export restrictions other than tariffs; and 3) a prohibition on discrimination against imports, a category that contains many permutations.40 The most blunt forms of a CBM will violate one of the first two sets of rules. A ban on imports from countries with weak climate laws would run afoul of the prohibition on import restrictions. A simple tariff on carbon-intensive products would violate a country’s tariff bindings.41

What is left are domestic taxes, either assessed on imported products behind the border or ‘charge[s on imports] equivalent to an internal tax’, 42 and regulations. At first glance, this looks quite promising. In recent years, prominent trade lawyers have argued that a non-discriminatory carbon tax, one applicable to both imports and domestic products, would be consistent with WTO rules.43 Just as a domestic sales tax or VAT can be assessed on imports consistent with WTO rules, a country with a domestic carbon tax could apply a charge to imports either ‘equivalent’ to the domestic tax (if the import charge was viewed as a tariff) or not ‘in excess of’ the domestic tax (if viewed as an internal tax). Similarly, product standards, such as energy efficiency standards, could be applied in a nondiscriminatory fashion to both imports and domestic products. Both President Biden’s Build Back Better initiative and the EU’s Green Deal are likely to feature new regulations of this kind.

In theory, then, nondiscriminatory taxes and regulations offer a path to WTO-consistent border measures. In reality, this path is more likely a mirage for many countries. As we have explained above, neither a US-wide nor an EU-wide carbon tax is politically feasible. Moreover, as Hillman notes, for any number of reasons governments might prefer taxes (or regulations) on production or the use of inputs, such as taxes on the generation of energy or the use of fossil fuels, to taxes on products.44 Under WTO rules, only taxes on products (so-called indirect taxes) can be adjusted at the border via nondiscriminatory measures. Deciding whether taxes on production processes or inputs are really taxes on products raises a host of novel questions under WTO law.45

Even if a CBM qualifies for analysis under nondiscrimination rules, its fate is uncertain at best. The WTO’s nondiscrimination rules require that an internal tax on imports be similar to or not in excess of the tax on ‘like’ domestic products, while regulations must offer imports treatment ‘no less favorable’ than that afforded ‘like’ domestic products.46 In various cases over the years, WTO members and panels have urged that either the standard for ‘likeness’ or the standard of treatment take into account regulatory purpose of a measure when that purpose is unrelated to national origin.47 Unfortunately, though, the Appellate Body (AB) declined to adopt such an ‘aim and effect’ test or anything similar. Instead, the current test for ‘like’ products focuses on the commercial relationship between products.48 Otherwise identical products – such as cement, steel, or chemicals – that differ only in the amount of carbon emitted during the production process would probably be found ‘like’ under this test.

The standard of treatment applicable to regulations covering products determined to be ‘like’ has a similar commercial flavor. The AB has said that a measure that disrupts the ‘equality of competitive opportunities’ among like products accords less favorable treatment, even if the distinction among products has nothing to do with national origin and has a legitimate regulatory basis.49 Because the entire purpose of a CBM is to disadvantage otherwise identical products based on how much carbon is emitted during production, some scholars have argued that a CBM will almost certainly run afoul of GATT nondiscrimination rules.50

These core issues present a challenge even to an ideally designed CBM. Government measures are, however, rarely designed on the basis of ideals alone. Instead, they typically include exceptions, variances, or differential treatment designed to ensure sufficient political support for the measure. While a comprehensive examination of all the ways a CBM might violate WTO rules is beyond the scope of this article, suffice it to say that a whole host of more technical, but not less weighty, issues present ripe targets for potential challengers: whether to adjust the price of imports, or also exports; whether to apply the CBM to all countries, or whether to exempt developing countries; whether to apply the CBM to only direct emissions for a given product, or also the indirect emissions that went into making it; and whether to calculate embedded emissions on a shipment-by-shipment level (or more distantly from the widget itself, such as on the basis of country averages).

The EU’s latest proposal illustrates some of these problems. First, the European CBM would provide importers a credit for any carbon price paid in their home market. It would not, however, give them credit for the cost of complying with decarbonization regulations in their home market.51 Two firms that pay equivalent carbon costs – one via an explicit carbon pricing mechanism and the second an implicit price via regulation – are thus treated differently. This is discriminatory, while failing to reward what the European Commission states as the goal of its CBM: global decarbonization.52 Both the GATT’s primary nondiscrimination rules, as well as the nondiscrimination rule applicable to the GATT’s general exceptions via the chapeau of article XX, would likely require the EU to take account of the implicit price of carbon in all countries if it does so for one. Doing so would create a significant administrative burden, with no guarantee that any ostensibly neutral formula to evaluate the implicit price of carbon across countries will ultimately hold up under review.53 Second, EU producers will benefit from the ability to trade emissions permits in private markets, and pay spot prices daily for doing so, while importers will be forced to buy permits from government at averages of past prices.54 Finally, the details on how verification of emissions will work, and how those procedures compare to the procedures that apply to domestic manufacturers, creates another possible basis for a discrimination complaint.

All of these difficulties apply to any single nation’s CBM. A common CBM presents an additional wrinkle. To be consistent with the WTO’s primary rules, countries imposing a common CBM would likely have to impose similar carbon costs on domestic producers. For example, the EU’s proposal requires importers to purchase permits for the amount of carbon emitted during the production of a product, with the price of the permits tied to the price of such a permit under the ETS. Under WTO rules, the United States could not impose a carbon tariff in the same amount as the EU’s price of a permit unless the cost of carbon in the United States were at least as high as the cost of carbon in the EU. Charging a higher tariff than the United States charges on its own domestic products would amount to discrimination. And while this difficulty could in principle be solved by setting the CBM equal to the lowest price charged in any member country, such an approach has several disadvantages. For example, determining those prices in countries, like the United States, that do not have an explicit carbon pricing system is possible but difficult. Worse, a lowest common denominator approach would reduce the environmental effectiveness of the system as a whole. As a result, a common carbon tariff is likely to leave at least some members exposed to claims that the common CBM is more stringent than their domestic decarbonization measures.

#### The aff causes the WTO to attract jurisdiction which trades off with the efficacy and legitimacy of regional trade agreements.

Kwak and Marceau 16 “Overlaps and Conflicts of Jurisdiction between the World Trade Organization and Regional Trade Agreements,” Kyung Kwak [Kyung Kwak is an associate of a law firm, Ashurst, in Brussel] and Gabrielle Marceau [Gabrielle Marceau, Ph.D., is counsellor in the Légal Affairs Division of the Secretariat to the World Trade Organization] Published online by Cambridge University Press: 09 March 2016 <https://www.cambridge.org/core/journals/canadian-yearbook-of-international-law-annuaire-canadien-de-droit-international/article/abs/overlaps-and-conflicts-of-jurisdiction-between-the-world-trade-organization-and-regional-trade-agreements/6C0C9CA77BED3390A38226F9E01EB44D> SM

The relationship between the dispute settlement mechanism of the World Trade Organization (WTO) and that of regional trade agreements (RTAs) demonstrates the difficulties surrounding the issues of overlaps/conflicts of Jurisdiction and of hierarchy of norms in international law.1 Jurisdiction is often defined in terms of either legislative or judicial Jurisdiction — that is, the authority to legislate or to adjudicate on a matter. Jurisdiction may be analyzed from horizontal points of view (the allocation of Jurisdiction among states or among international organizations) and from a vertical point of view (the allocation of jurisdiction between states and international organizations) . 2

This article addresses the issue of horizontal allocation of judicial jurisdiction between RTAs and the WTO, as expressed in the dispute settlement provisions of each treaty. The choice of a dispute settlement forum is often an expression of the importance that states give to the System of norms that may be enforced by the related dispute settlement mechanism. For instance, if the same states — which are parties to two treaties A and B that contain similar obligations — provide that priority or exclusivity is given to the dispute settlement mechanism of A over that of B, it may be that the states are expressing their choice to favour the enforcement of treaty A over treaty B.

In the case of RTAs, the situation is further complicated because the General Agreement on Tariffs and Trade (GATT)3 authorizes WTO members to form regional trade agreements. The WTO jurisprudence has made it clear that members have a "right" to form preferential trade agreements. This right is however conditional. In the context of an RTA, Article XXIV may justify a measure that is inconsistent with certain other GATT provisions. However, in a case involving the formation of a customs union, this RTA "defence" is available only when two conditions are fulfilled. First, the party claiming the benefit of this defence must demonstrate that the measure at issue is introduced upon the formation of a customs union that fully meets the requirements of sub-paragraphs 8 (a) and 5 (a) of Article XXIV. Second, this party must demonstrate that the formation of the customs union would be prevented if it were not allowed to introduce the measure at issue. Again, both of these conditions must be met to have the benefit of the defence under Article XXIV of GATT.4

Many RTAs include (substantive) rights and obligations that are parallel to those of the Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement).5 Generally, these RTAs may provide for their own dispute settlement mechanism, which makes it possible for the states to resort to different but parallel dispute settlement mechanisms for parallel or even similar obligations. This situation is not unique as states are often bound by multiple treaties, and the dispute settlement Systems of these treaties operate in a parallel manner.6 At the same time, the WTO dispute settlement System claims to be compulsory and exclusive. Article 23 of the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU)7 mandates exclusive jurisdiction in favour of the DSU for WTO violations. By simply alleging that a measure affects or impairs its trade benefits, a WTO member is entitled to trigger the quasi-automatic, rapid, and powerful WTO dispute settlement mechanism, excluding thereby the competence of any other mechanism to examine WTO law violations. The challenging member does not need to prove any specific economic or legal interest nor provide any evidence of the trade impact of the challenged measure in order to initiale the DSU mechanism.8 The WTO will thus often "attract" jurisdiction over disputes with (potential) trade effects even if such disputes could also be handled in fora other than that of the WTO.

OVERLAPS OF JURISDICTION BETWEEN RTAs AND THE WTO

Overlaps of jurisdiction in dispute settlement can be defined as situations where the same dispute or related aspects of the same dispute could be brought to two distinct institutions or two different dispute settlement Systems. Under certain circumstances, this occurrence may lead to difficulties relating to "forum-shopping," whereby disputing entities would have a choice between two adjudicating bodies or between two different jurisdictions for the same facts. When the dispute settlement mechanisms of two agreements are triggered in parallel or in sequence, there are problems on two levels: first, the two tribunals may claim final jurisdiction (supremacy) over the matter and, second, they may reach different, or even opposite, results.9

Various types of overlaps of jurisdiction may occur. For the purpose of the present discussion, an overlap of jurisdiction occurs: ( i ) when two fora claim to have exclusive jurisdiction over the matter; (2) when one forum claims to have exclusive jurisdiction and the other one offers jurisdiction, on a permissive basis, for dealing with the same matter or a related one; or (3) when the dispute settlement mechanisms of two different fora are available (on a non-mandatory basis) to examine the same or similar matters. Conflicts are possible in any of these three situations. All of the RTAs examined in Table i at the end of this article have dispute settlement mechanisms with jurisdiction that may potentially overlap with that of the WTO Agreement.

#### Regional trade integration is key to the African economy.

Gammadigbe 21 IMF Working Paper Strategy, Policy, & Review “Is Regional Trade Integration a Growth and Convergence Engine in Africa?” Prepared by Vigninou Gammadigbe [Research Fellow at Banque Centrale des Etats de l'Afrique de l'Ouest Authorized for distribution by Johannes Wiegand January 2021 <https://www.imf.org/en/Publications/WP/Issues/2021/01/29/Is-Regional-Trade-Integration-a-Growth-and-Convergence-Engine-in-Africa-50040> SM

\*REC = Regional Economic Communities (for example, FTAs, unions, etc.)

It has been argued in the literature that regional integration promotes shared economic growth and income convergence among member countries through direct and indirect channels of increased intra-regional trade, economies of scale, dissemination of knowledge and technology, and structural transformation. This paper contributes to this literature in Africa and African RECs. Its main objective was to analyses the effects of RTI on growth and income convergence in Africa and its different RECs. The study examines whether regional integration has played an important role in economic growth and income convergence of member countries in African major RECs in order to draw lessons for the process of establishing the African Continental Free Trade Area (AfCFTA). To this end, the study estimated two models, one for economic growth and the other for income convergence in the African sample and in the African major RECs over the period 1989 to 2018 using the instrumental variable method and the panel fixed-effects model.

The baseline results as well as the results of the multiple robustness tests indicate that RTI promotes economic growth in the participating countries. However, econometric evidence shows that it fuels divergence rather than income convergence across the continent implying that the positive effect on economic growth is mostly captured by the relatively more developed economies on the continent. These results are robust to the use of alternative indicators of trade integration, to the time frame of the analysis and to the estimation method particularly for the sample of Africa and in large RECs including COMESA, SADC, ECOWAS, WAEMU and SADC. For these RECs and in the context of the African continental free trade project, these results show how necessary it is to design specific programs (social programs and training programs) to support the most vulnerable economies in order to protect their sectors that will suffer negative shocks when the African Continental Free Trade Area (AfCFTA) will be in force. The results also show that regional integration offers substantial gains, whose full absorption is conditional on the implementation of comprehensive structural reforms aimed at diversifying economies and increasing their productivity. The positive effect of regional integration on growth suggests that the process of African trade integration would be beneficial to the continent’s economic growth. Therefore, the study recommends the elimination of non-tariff barriers in order to increase its effectiveness. Furthermore, regarding the positive effect on income divergence, the study recommends that RTI, beyond its traditional role as an instrument for trade promotion, should also be used as an instrument for providing essential infrastructure, improving the quality of institutions, building human capacity and strengthening the physical capital stock.

#### That’s key to preventing terror.

Ray 1/11 “Does Africa Matter to the United States?” Charles A. Ray [a member of the Board of Trustees and Chair of the Africa Program at the Foreign Policy Research Institute, served as U.S. Ambassador to the Kingdom of Cambodia and the Republic of Zimbabwe] January 11, 2021 <https://www.fpri.org/article/2021/01/does-africa-matter-to-the-united-states/> SM

The population of African countries is also overwhelmingly young. Approximately 40% of Africans are under 15, and, in some countries, over 50% is under 25. By 2050, two of every five children born in the world will be in Africa, and the continent’s population is expected to triple. These developments have positive and negative potential impacts on the United States and the rest of the world. Young Africans have, for the most part, completely skipped the analog age and gone directly digital. Comfortable with technology, they form a huge potential consumer and labor market. If, on the other hand, the countries of Africa fail to develop economically and do not create gainful employment for this young population, then there is the risk that they will become a huge potential source of recruits to extremist and terrorist movements, which currently target disadvantaged and disenchanted youth.

Lack of economic opportunity, increased urbanization, and climate-fueled disasters will also contribute to movement of people seeking better lives, which will impact economies and security not only on the continent of Africa, but also the economic and security situations around the world. Nations, lacking adequate critical infrastructure, education, and job opportunities are ripe for internal unrest and radicalization. In particular, inadequate health delivery systems, when coupled with natural disasters, such as droughts or floods that limit food production, cause famine and mass movements of populations.

The Challenges for U.S. Policy

Prior to World War II, the U.S. policy towards Africa was not as active as it was toward Europe, Asia, or Latin America. During the Cold War, Africa policy was primarily viewed from a perspective of super-power competition. The end of the Cold War and the rise of international terrorism introduced this as a major component in U.S. Africa policy along with competition with a rising China and increased Chinese engagement in Africa.

Before his first official trip to Kenya, U.S. President Barack Obama said, “Africa had become an idea more than an actual place . . . with the benefit of distance, we engaged Africa in a selective embrace.” This is probably an apt description of U.S. policy towards African nations despite the bipartisan nature of that policy. The United States, with the many domestic and international issues it has to cope with, can ill afford to continue to ignore Africa. Going forward, U.S. policy must include a hard-headed look at where Africa fits in policy priorities.

The incoming Biden administration will face a number of important issues and challenges as it develops its Africa policy. The most pressing issues are the following:

Climate Change: Climate change is an existential problem that affects the entire globe, but Africa has probably suffered more from the effects of climate change than other continents—and the problem will only get worse with time. In an October 2020 article, World Meteorological Organization (WMO) Secretary-General Petteri Taalas said,

Climate change is having a growing impact on the African continent, hitting the most vulnerable hardest, and contributing to food insecurity, population displacement and stress on water resources. In recent months we have seen devastating floods, an invasion of desert locusts and now face the looming specter of drought because of a La Nina event. The human and economic toll has been aggravated by the COVID-19 pandemic.

Climate change impacts water quality and availability, and millions in Africa will likely face persistent increased water stress due to these impacts. A multi-year drought in parts of South Africa, for instance, threatened total water failure in several small towns and had livestock farmers facing financial ruin. Another pressing climate-change issue is the need for protection of the Congo Basin rainforest. This 178-million-hectare rainforest is the world’s second largest after the Amazon and is currently threatened by agricultural activities in Cameroon, Central African Republic, Democratic Republic of Congo, Republic of the Congo, Equatorial Guinea, and Gabon. Countries in the Congo Basin need to address the preservation issue, while also enabling sustainable agricultural activities to ensure food security for the region’s population. In addition to the impact on global climate caused by destruction of the rainforest, such destruction also brings human populations into closer contact with the region’s animals, creating the risk of future animal-to-human transmission of new and possibly more virulent viruses similar to COVID-19, which will have a global impact. In a January 2021 CNN report, Dr. Jean-Jacques Muyembe Tamfum, who as a researcher helped discover the Ebola virus in 1976, warned of possible new pathogens that could be as infectious as COVID-19 and as virulent as Ebola.

Rule of Law/Mitigation of Corruption: A key to African development, given the increasing urbanization, population increases, and youthfulness of the continent’s population, will be an increase in domestic and international investment to build the industries that can provide meaningful employment and improved standards of living. In order for this to be successful, African nations will need to address the issues of rule of law and corruption. Investors will not risk money if the business climate comes with a level of political risk that is too high. Government leaders throughout Africa need to establish legislation that provides an acceptable level of security for investments and take action to curb the endemic corruption that currently discourages investment. Corruption in Africa ranges from wholesale political corruption on the scale of General Sani Abachi’s looting of $3-5 billion of state money during his five years as Nigeria’s military ruler to the bribes paid by businessmen to police and customs officials. The “tradition” of having to pay bribes, or “sweeteners,” drives away domestic investment and scares away foreign investment, leaving many countries mired in poverty.

Violent Extremism and Terrorism: A number of African nations are currently plagued with rising extremist movements. While primarily a domestic issue, the mass movement of people fleeing violence and the disruption of economic activity have the potential to negatively impact the rest of the world. African nations need regional responses to curb extremist and terrorist organizations, many of which are supported by international terrorist organizations, such as ISIS and al Qaeda. In addition, the underlying conditions that helped to create these movements must be addressed. Terrorist groups in Africa range from relatively large and dangerous groups, such as Boko Haram, a group in Nigeria that has received support from al Qaeda and that aims to implement sharia law in the country; Al-Shabab, an al Qaeda affiliate aiming to overthrow the government in Somalia and to punish neighboring countries for their support of the Somali regime; and Uganda’s Lord’s Resistance Army, a fundamentalist Christian group. Terrorist groups in the fragile political climate of Libya also pose a threat to sub-Saharan Africa.

#### Causes terrorist CBW usage.

Fyanka 20 Bernard B. Fyanka (epartment of History and International Studies, Redeemer’s University) (2020): Chemical, biological, radiological and nuclear (CBRN) terrorism: Rethinking Nigeria’s counterterrorism strategy, African Security Review, DOI: 10.1080/10246029.2019.1698441 (SGK)

The most commonly used non-conventional weapons are chemical or biological in nature. The long history of chemical and biological weapons usage dates as far back as 600 BC when, during a siege, Solon of Athens poisoned the drinking water of the city of Kirrha.44 More recently – starting with the use of mustard gas during the First World War – nations have acquired chemical and biological weapons easily, deploying them against enemies and their own citizens alike. For terrorist groups like Boko Haram, chemical and biological weapons are uniquely suited to their agenda and as such present very attractive alternatives to nuclear; they are extremely difficult to detect, cost effective and easy to deploy. Aerosols of biological agents are invisible to the naked eye, silent, odourless, tasteless and relatively easily dispersed. Most importantly they are 600 to 2000 times cheaper than other WMDs. Recent esti- mates place the cost of biological weapons at about 0.05% of the cost of a conventional weapon which could produce similar numbers of mass casualties per square kilometre. 45 The proliferation of chemical and biological weapons has proved to be very fluid over the past century due to advancements in technology. Production is comparatively easy via the commonplace technology that is used in the manufacturing of antibiotics, vaccines, foods and beverages, while delivery systems such as spray devices deployed from airplane, boat or car are widely available. Another advantage of biological agents is the natural lead time pro- vided by the organism’s incubation period (three to seven days in most cases), allowing the ter- rorists to deploy the agent and then escape before an investigation by law enforcement and intelligence agencies can even begin. Furthermore, not only would the use of an endemic infec- tious agent likely cause initial confusion because of the difficulty of differentiating between a biological warfare attack and a natural epidemic, but with some agents the potential also exists 46 for secondary or tertiary transmission from person to person or via natural vectors. Unlike their nuclear and radiological counterparts, biological and chemical weapons have been used for terrorism by both state and non-state actors. The challenges faced in preventing the use of these weapons through international control mechanisms include the increasing availability of larger quantities of substances, ease of use and most especially advanced tech- nological deployment facilities that portend a high risk factor to larger populations. Table 1 catalogues the use of biochemical weapons in warfare and by terrorists and other groups or individuals over the past century, offering concrete historical precedent and empirical grounds for the potential future actions of Boko Haram. The data shows consistent recourse to the use of these weapons, in spite of the chemical and biological weapons conventions out- lawing them. It can be seen that from the 1970s onwards there has been an increase in the use of biochemical weapons by religious cults and terrorist groups in pursuit of their agendas. The rise of Boko Haram and its ISIS affiliation could lead to a future where the use of biochemical weapons is the norm rather than the exception.

#### Trade wars don’t go to hot wars

**Dayen 17**, New Republic contributor (David “Trump Is Signaling a Trade War, but It’s Not as Disastrous as You May Think”, https://www.thenation.com/article/trump-is-signaling-a-trade-war-but-its-not-as-disastrous-as-you-may-think/)

Can Trump enact tariffs on his own? Though it would appear to contradict the Origination Clause of the Constitution, Congress has delegated that authority in enough pieces of legislation that Trump could probably raise import duties unilaterally. But what would be the practical effect? Hard-core free traders paint a picture of cataclysm. Tariffs will launch trade wars, increase prices, and destroy the economy. This is all hard-wired into the pro-globalization worldview. Thomas Friedman once famously admitted that he wrote a column supporting a free-trade agreement with Central America without knowing a thing about it: “I just knew two words: free trade,” he told an audience. Presumably the opposite is true for Friedman: He sees one word, “tariff,” and immediately screams in horror. Oddly, many of those same proponents of free trade favor a policy that looks very much like a tariff. The Republican corporate-tax revamp includes something called a border-adjustment tax, which would impose a 20 percent tax on imports while eliminating a tax on exports. Like with tariffs, the goal appears to be to encourage domestic production. In fact, the tax would be much higher than the 5-10 percent tariff being floated. (It also might be illegal under the current global trade regime.) Supporters of border adjustment, particularly economists, argue that it will end up trade neutral, because the exchange rate will fluctuate in response to the tax. In other words, though the tax would make American-made goods more attractive, the value of the dollar would increase, leveling that out. Few of these economists seem to carry over the same analysis to the effects of a tariff. I don’t understand why. There’s no reason to doubt the fact that, if Trump imposed an across-the-board tariff, the dollar would strengthen, thus nullifying the desired effect. Indeed, before Trump has even taken office, the dollar has risen to a 14-year high, in anticipation of a more protectionist stance. Incidentally, for all the one-off announcements by Trump (however factually challenged) about hundreds of jobs he has allegedly rescued here or there, this one development—the rise in the dollar—has likely caused the loss of hundreds of thousands of manufacturing jobs, under standard economic theory. Looked at this way, higher tariffs wouldn’t cause a recession (as Paul Krugman has acknowledged), but would be somewhat pointless, with currency exchanges shifting to account for any changes. Trade wars might temporarily reduce efficiency, as domestic supply chains would have to be rebuilt, but they’re unlikely to radically alter the balance of trade on their own. There are other variables here. Importers and exporters who have lived in a world of floating exchange rates for decades may be fairly nimble in adjusting to them. On the downside, Krugman explains that raising tariffs could inhibit capital flows, meaning that investors will place less money into US markets. You can see how that might reduce economic growth. But Jeff Spross points out that America currently has a problem with too much foreign money flowing in; reducing the flow could arguably make the economy more stable. Trump could also seek to prevent unlawful currency manipulation (not necessarily from China, but from other Asian nations) that artificially disadvantages US manufacturing. The real unknown here is what Trump would do with all that tariff revenue. The border adjustment tax at 20 percent is assumed to bring in $1 trillion over the 10-year budget window. So a tariff of even one-quarter or one-half that size would draw significant funds. What’s the plan for it? Would it get plowed into job-creating investments? Tax cuts for the wealthy? That’s a significant variable as well. We do know that the same pundits who confidently predicted that globalization would be a win-win policy for America repeatedly got it wrong. Those on the losing side saw their jobs shipped out and factories closed down, and weren’t given the kind of assistance needed to offset the disruption. So it’s worth being a little skeptical of the warnings coming from the same corners now. I don’t have a ton of faith in the Trump team to necessarily make their trade agenda work (especially as corporate interests will seek to co-opt the redesigned policies in ways even friendlier to their bottom line). And I think there are smarter ways to balance our trade deficit than a tariff strategy which will just run up against currency exchange rates. But the hysteria accompanying these tariffs (which wasn’t at all present when President Obama imposed his own tariffs on Chinese tires and steel) seems far beyond what little we can assume about the actual results of such a strategy.

#### Globalization causes war

Irandoust 17 Manuchehr Irandoust 17, Department of Economics and Finance, School of Business Studies, Kristianstad University, “Militarism and globalization: Is there an empirical link?” Quality and quantity, June 16, 2017, Springer Open Access

[GLOB = globalization index, MIS = militarized spending]

The results of the bootstrap panel Granger causality test are shown in Table 2. The findings show that GLOB and MIS are causally related in most of the countries under review. There is a bi-directional causality in UK, US, Saudi Arabia, and Russia. The causality is unidirectional running from GLOB to MIS in Australia, Brazil, India, and China, and running from MIS to GLOB in Turkey. The degree of significance level varies from country to country. There is no any causal relationship between military spending and globalization in France, Italy, South Korea, Germany, and Japan. Overall, this evidence shows a relatively robust association between changes in globalization and changes in military expenditure. In other words, countries experiencing greater globalization have relatively large increases in militarization over the past 20 years.

However, it has been shown that globalization may not lead to more peaceful relations or demilitarization. As we discussed in Sect. 2, bilateral trade increases the opportunity cost of bilateral war and may hinder bilateral war. Globalization (equivalent to multilateral economic openness) reduces this opportunity cost with any given country and devitalize the incentive to make concessions during negotiations, and, therefore, increases the probability of war between any given pair of country. Thus, an increase in trade or openness between two countries may restore peace between those but may increase the probability of conflict with third countries.

6 Conclusion

While previous studies mostly focused on the causal nexus between military expenditure and economic growth, those studies have not considered the role of globalization. This study uses data from the top 15 military expenditure spenders over the period 1990–2012 to examine the relationship between militarism and globalization. The bootstrap panel Granger causality that accounts for both cross-sectional dependence and heterogeneity across countries is utilized to detect the direction of causality. The results show that military expenditures and globalization are causally related in most of the countries under review. Despite the increasing role of globalization, the results show that military expenditures are growing and pointing to a strengthening in nationalist sentiments and militarism. This paper suggests that changes in domestic political and economic conditions might hinder the process of globalization. The results are consistent with those of Acemoglu and Yared (2010) who conclude that high military spending endangers globalization. This study also supports the results of Martin et al. (2008) who find that an increase in multilateral trade raises the chance of conflict between states. The policy implication of the findings is that greater military spending by a country increases the likelihood of military conflict in the future, the anticipation of which discourages globalization.

#### Disease won’t cause extinction—

#### Burnout and empirics.

Owen Cotton-Barratt 17, et al, PhD in Pure Mathematics, Oxford, Lecturer in Mathematics at Oxford, Research Associate at the Future of Humanity Institute, 2/3/2017, Existential Risk: Diplomacy and Governance, https://www.fhi.ox.ac.uk/wp-content/uploads/Existential-Risks-2017-01-23.pdf

For most of human history, natural pandemics have posed the greatest risk of mass global fatalities.37 However, there are some reasons to believe that natural pandemics are very unlikely to cause human extinction. Analysis of the International Union for Conservation of Nature (IUCN) red list database has shown that of the 833 recorded plant and animal species extinctions known to have occurred since 1500, less than 4% (31 species) were ascribed to infectious disease.38 None of the mammals and amphibians on this list were globally dispersed, and other factors aside from infectious disease also contributed to their extinction. It therefore seems that our own species, which is very numerous, globally dispersed, and capable of a rational response to problems, is very unlikely to be killed off by a natural pandemic.

One underlying explanation for this is that highly lethal pathogens can kill their hosts before they have a chance to spread, so there is a selective pressure for pathogens not to be highly lethal. Therefore, pathogens are likely to co-evolve with their hosts rather than kill all possible hosts.39

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

Adalja 16

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

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

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

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

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

**Intervening actors check**

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

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

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

#### But it’s good—

#### Disease outbreaks will be defeated with quarantines

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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