

The Four Horsemen of the Apocalypse at the WTO

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The EU chose a marvelously provocative title for this panel: "[Pestilence, Famine, War. . . Death? The Future of Trade](#)".¹ With the use of foresight, one can see the four horsemen of the apocalypse from the WTO's headquarters building on the shores of Lake Geneva.

Taking in order each of the four in turn:

First Horseman: Pestilence

Three years ago, almost to the day, on March 16, 2020, the WTO closed its doors due to the COVID-19 pandemic, not to fully reopen for two years. The world had not seen a disease sicken and kill as many people since 1918. Desperately needed was information, regardless of national borders. Where were the supplies of masks to come from, personal protective equipment, medical equipment, and even soap?

Trade was essential to addressing COVID. No country could be self-sufficient in essential goods, medicines, and equipment. In fact, none were. In January and February 2020, China searched the world for pulmonary ventilators for use in Wuhan.² By March, Europe was doing the same for its needs. Just this one product, ventilators, needed upward of 1500 parts from some 200 suppliers located around the world.³

As factories closed and transportation shut down, the WTO Secretariat supplied information notes to its 164 Members on trade measures taken, both trade-limiting and trade-facilitating. Countries began to understand that they did not have to hoard domestic supplies of

¹ "Pestilence, Famine, War. . . Death? The Future of Trade," EU@SXSW Conference, March 13, 2023, Austin, Texas.

² "COVID-19: China Medical Supply Chains and Broader Trade Issues." Congressional Research Service. December 23, 2020. <https://crsreports.congress.gov/product/pdf/R/R46304>

³ Peggy G. Chen, Edward W. Chan, Nabeel Qureshi, Shoshana Shelton, and Andrew W. Mulcahy. "Medical Device Supply Chains: An Overview and Description of Challenges During the COVID-19 Pandemic." RAND Health Care. PR-A328-2-v2. September 2021.

<https://aspe.hhs.gov/sites/default/files/documents/e48047020834c0c34cf6baf08a9428d0/PR-A328-2-medicaldevices.pdf>

food, and agricultural export restrictions began to be lifted. A new Director-General, Ngozi Okonjo-Iweala, was chosen, bringing her expertise on vaccines and the challenges of their global distribution. Using WTO's convening power, she brought together executives from companies that made vaccines and those who understood where supplies existed and where the need for them was greatest. With time, the problems of supply eased. Vaccines, therapeutics, and other essential goods now exist in surplus quantities in most countries.

From COVID, the public learned a new term: "zoonotic disease", referring to sicknesses that spread from animals to humans. Experts say that this will not be the last pandemic. Avian flu is now being closely watched. Millions of chickens have been killed as a preventative measure. As I write these words, two cases of avian influenza H5N1 (H5N1 bird flu) have been reported by Cambodia, killing a girl and infecting her father.

Trade proved to be resilient during the pandemic and in the period of recovery. Human ingenuity was ultimately triumphant in inventing new medicines,⁴ but only after great loss of life. I would have liked to tell you that the world trading system is better prepared for the next pandemic, and that the WTO's members have agreed on how to pull together, with adequate processes and rules to share scarce supplies. But that is not the case. The existing WTO rule – that where an export control is imposed on a good due to short supply, provision will be made for an equitable share to other countries – was ignored and still lacks definition. The WTO members focused instead on one proposal, to circumvent vaccine intellectual property rights and obligations, with no clear indication that this was or will be a meaningful solution.

This is unfinished business for the WTO. Even though the immediate emergency has passed, and the feeling of urgency may be gone, it is still imperative to prepare for the future. What is in hand at present is a stated recognition by WTO members of some aspects of what a better world order might look like for trade and health, in a document labeled "Ministerial Declaration on the WTO Response to the COVID-19 Pandemic and Preparedness for Future Pandemics". The agreed text is careful to avoid any new obligations for members. By its terms, a stocktaking is due to take place in December 2024.⁵ This is not enough.

More far-reaching responses to pandemics need to be explored. These could include an international agreement to coordinate national subsidies to provide for greater reliability of

⁴ The stories range from schoolgirls in Afghanistan building ventilators from an open-source design posted online by MIT and using car parts (a Toyota windshield wiper motor) to the invention of COVID-19 vaccines.

"Ventilator From Old Car Parts? Afghan Girls Pursue Prototype." The Detroit News. April 18, 2020.

<https://www.detroitnews.com/story/news/nation/coronavirus/2020/04/19/afghan-girls-ventilator-car-parts/111571060/>

"How Scientists Drew Weissman (MED'87, GRS'87) and Katalin Karikó Developed the Revolutionary mRNA Technology inside COVID Vaccines." Bostonia - Boston University's Alumni Magazine. November 18, 2021.

<https://www.bu.edu/articles/2021/how-drew-weissman-and-katalin-kariko-developed-mrna-technology-inside-covid-vaccines/>

⁵ "Ministerial Declaration on the WTO Response to the COVID-19 Pandemic and Preparedness for Future Pandemics WT/MIN(22)/31 WT/L/1142." World Trade Organization. June 22, 2022.

<https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN22/31.pdf&Open=True>

elements of global value chains in the production of essential goods. (For example, see Chad P. Bown's proposals for enhancing supply chain resilience.⁶) WTO members need to adopt trade facilitation measures (such as speeding up customs clearance) and remove obstacles to trade in essential goods, including measures such as tariffs, unnecessarily restrictive standards, and other barriers. Some members have made proposals. Although they do not go far enough, even these have not been adopted by the WTO membership.⁷ What is needed:

- An understanding that when restrictions are placed on exports, due to general or local short supply, provision will be made so that all WTO members are assured that they will receive an equitable share of the international supply of products that are subject to the export restrictions;
- Removal or at least suspension of unnecessary trade barriers to essential goods, and;
- An agreement to provide for the coordinated subsidization of portions of the value chain that each WTO member has within its borders, in support of access to essential goods when a pandemic strikes.

This work lies ahead.

Second Horseman: Famine

According to the World Health Organization,

- As many as 828 million people were affected by hunger in 2021, or nearly 10% of the world population.
- Around 2.3 billion people (over 29% of the world population) were moderately or severely food insecure in 2021, a third of these severely so – that is about 924 million people (nearly 12% of the world population).

⁶ Chad P. Bown. "Covid-19 Vaccine Supply Chain Bottlenecks and International Policy Cooperation." World Trade Organization. June 2021.

https://www.wto.org/english/tratop_e/trips_e/techsymp_290621/bown_presentation.pdf

Chad P. Bown. "The WTO and Vaccine Supply Chain Resilience During a Pandemic." Peterson Institute for International Economics. September 2022. <https://www.piie.com/publications/working-papers/wto-and-vaccine-supply-chain-resilience-during-pandemic>

⁷ "Communication from the European Union to the WTO General Council: Urgent Trade Policy Responses to the COVID-19 Crisis." Trade - European Commission. June 4, 2021.

https://trade.ec.europa.eu/doclib/docs/2021/june/tradoc_159605.pdf

"COVID-19 and Beyond: Trade and Health WT/GC/223." World Trade Organization. November 24, 2020.

<https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:WT/GC/223.pdf&Open=True>

- Almost 3.1 billion people (approximately 30% of the world's peoples) could not afford a healthy diet in 2020.⁸

Part of the recent upsurge in world hunger is due to COVID, the war in Ukraine, and its accompanying price spikes. But the greater threat going forward is climate change.

The Food and Agriculture Organization (FAO) reported to the WTO in June 2022 that in 2021, at least 193 million people were acutely food insecure – a 38 million increase since 2020 and the highest level in six years – with 53 countries/territories requesting external assistance.⁹

Food insecurity related to trade can occur when access to foreign sources becomes unavailable due to border measures restricting exports or imports, due to physical obstacles, or because there is a spike in prices that excludes poor consumers. Price was a serious problem during both the financial crisis in 2007-2008 and again when the Black Sea was closed as a result of the Russian Invasion of Ukraine in 2022. For several months, the grain and fertilizer that was to be shipped from Russia and Ukraine could not flow to places dependent on this major source of food.¹⁰ (Pre-war, Ukraine's exports made up 15% of world corn trade and 10% of world wheat trade).¹¹ As it turned out, the worst fears of shortages were not realized. Prices declined after a few months but are still high as compared with pre-war prices.¹² The effects are visible in much of the world. For example, due to the war and increased prices for flour and cooking oil, the street food in Uganda increased greatly in cost, diminishing its affordability.¹³ The availability of food was already inadequate in the Middle East and North Africa before the war in Ukraine. Then the situation got far worse.¹⁴

⁸ "UN Report: Global Hunger Numbers Rose to As Many As 828 Million in 2021." Food and Agriculture Organization of the United Nations. July 6, 2022. <https://www.fao.org/newsroom/detail/un-report-global-hunger-SOFI-2022-FAO/en>

⁹ "Food and Agriculture Organization (FAO) Submission on "COVID-19 and Agriculture" G/AG/GEN/202." World Trade Organization. June 20, 2022. <https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/AG/GEN202.pdf&Open=True>

¹⁰ "Putin's Black Sea Blockade Leaves Millions Facing Global Famine." Atlantic Council. May 18, 2022. <https://www.atlanticcouncil.org/blogs/ukrainealert/putins-black-sea-blockade-leaves-millions-facing-global-famine/>

¹¹ "The Russia-Ukraine War and Changes in Ukraine Corn and Wheat Supply: Impacts on Global Agricultural Markets." Farmdoc Daily. February 24, 2023. <https://farmdocdaily.illinois.edu/2023/02/the-russia-ukraine-war-and-changes-in-ukraine-corn-and-wheat-supply-impacts-on-global-agricultural-markets.html>

¹² Joe Glauber. "Ukraine One Year Later: Impacts on Global Food Security." International Food Policy Research Institute. February 23, 2023. <https://www.ifpri.org/blog/ukraine-one-year-later-impacts-global-food-security>

¹³ "Ukraine War Squeezes Street Snack in Uganda." New York Times. February 28, 2023. <https://www.nytimes.com/interactive/2023/02/28/world/africa/uganda-food-prices-ukraine-war.html>

¹⁴ "Russia's Invasion of Ukraine Exacerbates Hunger in Middle East, North Africa." Human Rights Watch. March 21, 2022. <https://www.hrw.org/news/2022/03/21/russias-invasion-ukraine-exacerbates-hunger-middle-east-north-africa>

"Near East and North Africa – Regional Overview of Food Security and Nutrition 2021: Statistics and Trends." Food and Agriculture Organization of the United Nations. 2021. <https://www.fao.org/3/cb7495en/cb7495en.pdf>

When I worked at the WTO (2017-22), I argued that global trade rules had to be designed, in an era of climate change, to provide greater agility and get food from places of surplus to areas of deficit. It would be possible, for example, to have an agreement assuring access where there also were assurances of market access. Trade-distorting subsidies could be reduced to increase production where the crops could be most efficiently grown.

At the Twelfth Ministerial Conference in June 2022, the WTO's members did take a step to address the food crisis. The Ministers committed not to interfere with purchases by the World Food Programme – "Members shall not impose export prohibitions or restrictions on foodstuffs purchased for noncommercial humanitarian purposes by the World Food Programme." But then they also limited this obligation:

*This Decision shall not be construed to prevent the adoption by any Member of measures to ensure its domestic food security in accordance with the relevant provisions of the WTO agreements.*¹⁵

Far-reaching changes are needed in the WTO's rules on agriculture. But regrettably, Ministers could not make decisions on the core agriculture negotiating issues.

- Subsidies that distort trade and result in unsustainable agriculture need to be curbed. The world needs an efficient allocation of resources to produce food without degrading soil, water supplies, or the atmosphere.
- Agreement is needed to forego export restrictions on food, except in extreme circumstances, seeking to assure an equitable supply on an international basis.
- These undertakings should be paired with trade facilitation and provisions for the suspension of tariffs when short-supply conditions exist.
- Market access – removal of tariffs and non-tariff barriers should be negotiated to make sure that production occurs where it is most efficient and sustainable, without depriving countries that are less efficient of their agricultural sectors.
- Where there are restrictions, they should be transparent (notified and monitored), and be consistent with providing an equitable share for other WTO members.
- Subsidies should be promoted to increase productivity, particularly in developing countries where yield gaps are often the greatest.¹⁶

¹⁵ "Ministerial Decision on World Food Programme Food Purchases Exemption From Export Prohibitions or Restrictions WT/MIN(22)/29 WT/L/1140." World Trade Organization. June 22, 2022.

¹⁶ Joseph Glauber. "Rethinking Trade Rules to Achieve a More Climate Resilient Agriculture." SSRN. January 17, 2023. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4330646

- Sustainability (lowering greenhouse gas emissions) should be achieved in a manner that takes into account food production needs.

Agricultural exports have more than tripled in value and more than doubled in volume since 1995 when the WTO was founded.¹⁷ The WTO members need to stretch to build on this record for the coming years. The EU in its 2019 foresight exercise, looking toward the year 2030, stated that “hotter summers will be the norm throughout Europe – but also in the United States, the southern neighborhood and Asia. This will lead to increased occurrences of droughts and wildfires.” An expansion of world trade in agriculture will be increasingly required to supply the world’s food needs in a time of climate change and continued population growth at greatly differing rates by country and continent. Trade will have to increase at an even greater rate. It is imperative that the rules of the world trading system be updated to facilitate this growth in a sustainable manner.

Third: War

The multilateral trading system was created as a result of war. The basic precepts for the system were part of the original war aims of the United States and Britain.¹⁸ Emerging from the war, the system was established to support an enduring peace and it has done so.

Neither trade nor trade agreements can prevent war. This was true in the First World War when Great Britain and Germany had robust trading relations between them. It has been proven true yet again by the Russian invasion of Ukraine. In some ways, the relationship between trade and war could even be said on occasion to have worked somewhat in reverse. It may be that President Putin believed that the dependency of Western Europe on hydrocarbon fuels from Russia would prevent Europe from giving major material support to Ukraine when Russia invaded that country.

Conflicts today are increasingly intra-country (with Russia’s invasion of Ukraine as an anomaly to this trend), and the number of civil conflicts is expected to grow.¹⁹ Deploying trade in the cause of peace has come back to the WTO in a serious way as conflict-affected countries have recently joined the organization and others are applying for membership. The last two countries to be admitted to the WTO were Liberia and Afghanistan in 2015. In the queue seeking entry are Somalia, Sudan, South Sudan, Iraq, Ethiopia, Timor-Leste, and other countries which seek to be integrated into the world trading system through WTO membership. They are firm believers in the efficacy of trade to help increase the standard of living within their countries and diminish the forces of destruction that cause conflict.

¹⁷ Ibid.

¹⁸ This was before the US had entered the conflict, and in the Atlantic Charter issued by Roosevelt and Churchill in August 1941.

¹⁹ "ESPAS Report 2019: Global Trends to 2030: Challenges and Choices for Europe." Open Repository Base on International Strategic Studies. European Strategy and Policy Analysis System (ESPAS). April 5, 2019. <https://espas.secure.europarl.europa.eu/orbis/node/1362>

A foremost example of the relationship between trade and peace is the one presented to us by the EU and the UK in their latest Brexit understanding the week before last – a compromise to keep the Good Friday Agreement in place and stop the sectarian bloodshed in Northern Ireland by avoiding impeding trade at national borders. It is often true that where there is trade, there is peace, and vice versa. In the case of Northern Island, to impair trade was to clearly threaten the peace.

A fraying trade relationship that could end in war is the one between the two largest trading nations, the United States and China. Contests between a rising power and an established one, studied by Harvard Professor Graham Allison and other scholars are not promising. In the 13 cases throughout history that Allison studied, only in four instances did this situation not result in open war. He called this the Thucydides Trap, after the Greek historian who traced the inevitability of the Peloponnesian War between Athens and Sparta.²⁰

The best example of a peaceful transition was the emergence of the United States on the world stage during the 20th century when the established world power was Great Britain. (We can put aside the Revolutionary War and the War of 1812, when the capitol and White House were burned by the British, as this was not when the US was a world power, but a rebellious colony and then an independent offspring against an overbearing parent.) There are a lot of differences between the US-Great Britain case and the present China-US one. Great Britain was the mother country of the US, a democracy, and a close ally in two world wars. None of these affinities apply with respect to China. Whatever warm feelings existed from being on the same side in World War II, much good will evaporated with the Chinese communist takeover of China in 1949, although there have been ebbs and flows since then.

Both China and the US being members of the WTO will not prevent a conflict between them. Only careful management of the relationship can do that. The WTO set of rules and processes can be of assistance in that vitally important endeavor, providing rules of engagement with respect to areas of commerce not critical to the national security of either country and serving as an arena in which they can cooperate with respect to shared objectives – dealing with the trade aspects of a pandemic and climate change are two key examples.

The work of the Trade for Peace (T4P) Programme, in cooperation with the peace community, for conflict-affected countries is the area of the WTO that is likely to have the clearest effect on diminishing wars. The program should be expanded.²¹

A related area where the cause of peace through trade is being fostered is the African Continental Free Trade Agreement (AfCFTA), which aspires “to silence the guns”. The Agreement itself lists as its first objective to “create a single market for goods, services,

²⁰ Graham Allison. *Destined for War: Can America and China Escape Thucydides' Trap?* (Boston: Houghton Mifflin Harcourt, 2017).

²¹ "Trade for Peace Programme." World Trade Organization.
https://www.wto.org/english/thewto_e/acc_e/tradeforpeace_e.htm

facilitated by movement of persons to deepen the economic integration of the African continent and in accordance with the Pan African Vision of ‘An integrated, prosperous and peaceful Africa’’. WTO Members should make every reasonable effort to make the agreement a success.

Fourth and The Last Horseman: Death

Meeting in Havana three-quarters of a century ago, on March 24, 1948, 56 countries decided to create the multilateral trading system, which has become the WTO today. They did so, they said, “to create conditions of stability and well-being which are necessary for peaceful and friendly relations among nations”. “Peaceful relations” were of paramount concern. 70 to 85 million people had been killed in the Second World War, concluding the deadliest period in human history. Death stalked the world. 20 million were killed in World War I. The Spanish Flu infected a third of the world’s population in 1918 and killed 50 million. During these same years, famines in Lebanon, Germany, East Africa, China, Russia, Ukraine, Kazakhstan, Poland, the USSR, Iran, Turkey, India, Yemen, and Indonesia killed between 24 and 42 million individuals.²²

These were excess deaths. As many as 200 million of them occurred from 1914 to 1948, a total that was equivalent to one and a third times the population of the United States in 1948. The Center for Disease Control defines “excess deaths” as the difference between the observed and expected numbers of deaths in the same time period. CDC attributes 6.87 million deaths worldwide to COVID as of the first of March of this year.²³ Those were excess deaths too.

Updating and making more perfect the WTO will not cause the threats to human life that are attributable to disease, famine, and war to disappear. But the adoption of trade rules can reduce the impact of those threats. Being prepared for the next pandemic by having the right trading arrangements in place can greatly reduce the loss of life. Vastly improving the Agreement on Agriculture can reduce the risks of famine and food insecurity. Finding effective means to combat climate change must include cooperating on creating and living by trading rules that facilitate the movement of food from where food is available to areas where it is needed.

The fourth horseman, death, must not be allowed to triumph. WTO Members need to recall that the multilateral trading system they have inherited is by nature a peace project. This mission is still vitally important and current. The WTO must be updated and made more effective. My recommendations on how to accomplish this important objective are set out in my forthcoming book “Revitalizing the World Trading System”, to be published by Cambridge University Press in Spring 2023.

²² Joe Hasell and Max Roser. "Famines." Our World in Data. December 7, 2017.

<https://ourworldindata.org/famines#famines-by-world-region-since-1860>

²³ "Excess Deaths Associated with COVID-19." Center for Disease Control and Prevention.

https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess_deaths.htm

"WHO Coronavirus (COVID-19) Dashboard." World Health Organization. <https://covid19.who.int/>

The institutional reforms for the world trading system must emphasize strategic foresight – scanning for what is on the horizon, and what may be just over the horizon, that will affect the well-being of the WTO's members and their peoples. This should be combined with active policy planning. Reliance will be needed on a stronger, more independent executive, consisting of the Director-General, Deputy Directors-General and expert Secretariat.

The four horsemen of the apocalypse do not represent black swan events -- extremely negative events that are impossibly difficult to predict, that are unexpected and unknowable. Rather they represent a category that has come to be called "gray rhino events" that consist of highly probable, high impact, yet all too often neglected, threats that we can see and acknowledge yet do nothing about.

Without improvements in the world trading system, in its rules and its procedures, the nations of the world will remain underprepared and overexposed to threats where trade can make a vitally important positive difference. The costs are too great not to put into place the means to deal with global challenges where trade can be an important part of an effective response.