

To Dystopia and Beyond: The WTO in a Warming Megaregional World

Bradly J. Condon ¹✉

Email bcondon@itam.mx

¹ Department of Law of the Instituto Tecnológico Autónomo de México (ITAM), Mexico City, Mexico

Abstract

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The effects of accelerating climate change will have a destabilizing impact on trade negotiations, particularly for the worst-affected developing countries. The effects of the climate crisis will make it more difficult to make concessions in crucial areas, such as agriculture and intellectual property rights, due to the effects of the climate crisis on agricultural yields and the increased need for technology to adapt to a warming climate and reduce greenhouse gas emissions. Rising sea levels, droughts, floods, and killer heat waves will provoke mass migration, with impacts on domestic politics that makes trade concessions more difficult. In this context, multilateral trade negotiations are unlikely to advance in a significant way and megaregional trade agreements will become increasingly difficult to join. The result will be a warming world that is divided between those included in and those excluded from the megaregional trade regime. This will also hamper efforts to slow and to adapt to the climate crisis, due to the key role that international trade plays in addressing both.

WTO Chair Professor, Department of Law of the Instituto Tecnológico Autónomo de México (ITAM).

There's no real way to know what will happen except by looking at roughly similar catastrophes in the past, which have left the Earth a graveyard of failed species. We burn some of them to drive our cars.—Roy Scranton¹

1. Introduction

This chapter will highlight the linkages between the climate crisis and trade negotiations in a dystopic post-WTO world. It will argue that the window of opportunity to achieve an effective multilateral trade regime has closed and will be sealed shut by accelerating climate change. The post-WTO regime is a megaregional regime, and it will exclude those countries that do not get on board before the destabilizing effects of the climate crisis make their inclusion impossible to achieve. Geopolitical shifts destabilized the WTO regime and have led to its collapse. The effects of the climate crisis will be even more dramatic. This chapter examines the (not even) worst-case scenario for the post-WTO twenty-first century, in order to highlight the importance of managing the risk of catastrophic economic, ecological and security consequences arising from the convergence of multilateral institution failure and the worsening climate crisis.

2. Climate Change and Its Impact on the Post-WTO Trade Regime

While scientists cannot predict the future climate with precision, the range of probabilities points to a global increase of the average temperature of between 2.6 °C (4.7 F) and 4.8 °C (8.6 F) between 2000 and 2100 (that is, in addition to the warming that already occurred up to 2000).² Land will warm faster than ocean, and the Arctic will warm faster than the tropics.³ Climate change could cause abrupt changes, including to the Atlantic

meridional overturning circulation (AMOC), Arctic sea ice, the Greenland ice sheet, the Amazon forest and monsoonal circulations, as it has in the past in periods of much slower climate change.⁴ Melting of the Greenland and Antarctic ice sheets may accelerate into a sudden loss of large amounts of ice, leading to dramatic changes in sea level and ocean circulation.⁵ Indeed, a catastrophic sea level increase is already unstoppable.⁶ New measurements have increased estimates of vulnerable coastal populations (based on 2010 population numbers); under a high emissions scenario, up to 630 million people live on land below year 2100 projected annual flood levels of 2 m, the majority in developing countries across Asia.⁷

Melting Arctic permafrost could rapidly release methane, which would create a feedback loop of increased warming that releases further methane emissions. Recent research shows that eroding coastal permafrost (about one third of the Earth's total coastline) releases significant quantities of CO₂, adding a new source of GHG emissions caused by increased warming.⁸ In addition, when seawater becomes too saturated with CO₂ to absorb any more, the rate of greenhouse warming will increase dramatically.⁹ Sea temperatures are increasing at an accelerating rate (the five warmest years since 1955 were 2015–2019) and are now at their warmest in recorded human history, which is an indicator of accelerating global warming and poses high risks to biodiversity and fisheries.¹⁰ The oceans store over 90% of warming and increased ocean temperatures lead to rising sea levels via thermal expansion and melting land ice. Interconnected tipping points in the climate system are more likely than previously thought and risk long-term irreversible changes. We could exceed the threshold for a cascade of tipping points between 1 and 2 °C of warming.¹¹ Since we are already more than 1 °C above pre-industrial levels,¹² the risk of unstoppable and catastrophic climate change is now a clear and present danger.

To meet the goal of the Paris Climate Agreement, to limit global warming “to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels”, global emissions must peak by 2020.¹³ The most recent estimate from the United Nations concludes that there is only a 66% chance that warming will be limited to 3.2 °C by 2100 (range 3.0–3.5 °C) if all unconditional Nationally Determined Contributions under the Paris Agreement are implemented.¹⁴

Science can observe the effects of catastrophic climate events, such as drought and floods. Human innovations can move the dial, for example with crops genetically modified to withstand more drought or improved irrigation systems. However, climate change threatens the four pillars of food security: availability (yield and production), access (prices and ability to obtain food), utilization (nutrition and cooking), and stability (disruptions to availability).¹⁵ Recent research shows that rice yields will drop 39% further than previously estimated, due to climate-induced changes in soil arsenic behaviour and plant response.¹⁶ More than half of the global population depends on rice for subsistence.¹⁷ Infants will face potentially permanent effects of undernutrition.¹⁸

Science can attribute extreme weather events to climate change, such as the record-breaking heatwaves in Europe in June and July of 2019¹⁹ and the catastrophic bushfires in Australia that began later the same year.²⁰ However, if technology develops effective approaches to mitigation and adaptation, we might experience less than the worst-case scenario. Recent research is not encouraging, since it tends to show that the climate crisis will be worse than previously thought. There are promising new technologies that can consume or remove CO₂ from the atmosphere, but they are not yet fully developed. For example, genetically engineered *E. coli* bacteria can feed on CO₂.²¹ Scientists are developing materials that can convert CO₂ into usable products.²² There is also a process to convert atmospheric CO₂ to fuel, but that only achieves net zero emissions.²³ We are also developing clean energy sources and zero emissions vehicles. Nevertheless, it is too early to tell how effective such technological solutions will be in a world with well over 400 ppm of CO₂ in the atmosphere that is on the verge releasing a cascade of tipping points that lead to unstoppable and catastrophic climate change.

As a result of the ever-shifting range of possible climate change scenarios, the time frame for this chapter's predictions is not precise. Science can show us how to mitigate climate change, how to adapt to climate change and point to factors that make one country, or one population, more vulnerable than another. However, the degree of climate change and the speed with which it takes place will depend on political will and technological developments, as well as an unforeseeable magnitude of shifts in the climate system.

My predictions regarding the effects of the climate crisis are based on scientific evidence. My predictions for the world trading system are based on speculation regarding political responses to the likely consequences of catastrophic climate change, such as mass migration and catastrophic crop failures. Taken together, these elements reduce the likelihood of a successful round of multilateral trade negotiations, which in turn does not bode well for future of the WTO dispute settlement system.²⁴ However, the success of multilateral trade negotiations is likely to be the least of our worries in the near future. We are facing an existential threat to civilization and our survival as a species.²⁵ There are precedents in human history for climate-induced civilization collapse.²⁶ Those precedents pale in comparison to the magnitude of the climate risks we now face.

3. The Post-WTO Trade Regime and BRICS+ Countries

The rule making function of the WTO has migrated to megaregional free trade agreements, such as the TPP/CPTPP and the Trans-Atlantic Trade and Investment Partnership (TTIP). These megaregions include the group formally known as the “Quad”: Canada, Europe, Japan and the United States (assuming the United States chooses to return to the CPTPP and TTIP negotiations restart and succeed). Prior to the creation of the WTO, the Quad led the rule-making function for the GATT. In that sense, the post-WTO rule-making regime for trade agreements resembles the GATT era. With the weakening of the WTO dispute settlement mechanism, the resemblance to the GATT era is complete.

The megaregional regime permits the Quad to evolve the trade system beyond the 1980s, without countries like Brazil, Russia, India and China (the “BRICs”) blocking consensus. In the early years of the megaregional regime, there will be efforts to bring these countries, and other major emerging market countries like Indonesia, Nigeria and South Africa, back to the multilateral table. However, this will have to be preceded by their incorporation into the megaregional regime.

China will be the priority participant, since its trade dwarfs the others. China will be the only possible exception to exclusion from the Quad-led megaregional regime, because of the size of its economy and its geopolitical importance. Bilateral negotiations with the United States will set the stage for China’s incorporation into (or exclusion from) the Quad-led megaregional regime.²⁷ Beyond those negotiations, climate-related trade barriers could be less likely to affect China, due to its progress addressing mitigation. China’s total emissions from fossil fuel and industrial processes are projected to peak 5–10 years ahead of its 2030 target in the Paris Agreement, with carbon emissions peaking for most cities at a per capita GDP (in 2011 purchasing power parity) of US\$19,000 to 22,000.²⁸ Moreover, China is seeking its own megaregional, in the form of the Regional Comprehensive Economic Partnership (RCEP) with the Association of Southeast Asian Nations (ASEAN), Japan, South Korea, Australia and New Zealand. However, India has chosen not to participate and it remains to be seen how the RCEP might take shape.²⁹

Brazil, Russia, India, Indonesia, Nigeria and South Africa (BRICS+) will have to get on board or face the prospect of being left to drift into the past with the rest of the WTO membership that remains outside the Quad-led megaregional regime. It is not clear what these countries should have agreed to in order to achieve a successful outcome of the WTO Doha Round, and it is beyond the scope of this chapter to analyze this complex set of issues. Moreover, it is not clear what these countries could do differently now to forestall the dystopian outcome of a climate crisis in a post-WTO world. Indeed, it is likely too late to achieve a successful multilateral negotiation. Had these countries made greater concessions in 2008 to reach a successful Doha Round conclusion, they might have been in a better position today to adapt to future climate impacts, given the important role of trade in goods and services in disseminating technology for climate change adaptation and mitigation.

Mexico is already part of the megaregional regime of the CPTPP and the USMCA and also has free trade agreements with the European Union and Japan, among others. Mexico is likely to remain integrated into the North American market due to its strategic geographic position. Similarly, Turkey is likely to remain integrated into the European market, due to its strategic geographic position. However, their geographic positions are both a blessing and a curse. Turkey is already the country with the most refugees in the world, with close to 4.1 million

refugees.³⁰ Mexico is under pressure to accept more refugees and to do more to prevent migrants from using Mexico as a bridge to the United States.³¹ The impact of the climate crisis on migration, together with the changing legal landscape for climate refugees, will only put Mexico and Turkey under greater pressure.³² The recent case of the case of Ioane Teitiota has opened the door to considering climate migrants as refugees.³³

With rule making already shifted to the megaregional regime, dispute settlement will follow. The megaregional dispute settlement system will be more acceptable to the United States than the defunct WTO dispute settlement system came to be. This system will provide the United States with *carte blanche* to use unilateral trade barriers as bargaining tools in negotiations. Canada and Mexico will harmonize their BRICS+ trade policies with the United States. Indeed, the USMCA requires consultations regarding trade negotiations with China.

A new multilateral global forum for rule making and dispute settlement would require a much greater effort on the part of BRICS+ to achieve consensus than they have made in the WTO context. Assuming that is unlikely, BRICS+ will have to demonstrate sufficient good will to be allowed to participate in the megaregional regime, which is now the only stepping stone available to return to a multilateral system. BRICS+ may try to build trade networks with African, Latin American, and Asian countries that also drift outside the Quad-led megaregional regime, such as the RCEP, but that is not an adequate long-term strategy for them to pursue. It is more of a negotiating strategy, but one that is likely to fail.

As the planet warms, the extent to which second-best international economic policy fails to achieve results will become more apparent to BRICS+. This could motivate them to adopt more flexible bargaining positions, but by then it would be too late. By the time BRICS+ understand the folly of their megaregional and multilateral bargaining positions, a climate-induced financial crisis could further complicate trade negotiations.³⁴ The stakes will only get higher for the financial system to avoid a climate-driven collapse in asset prices, as climate-related financial risks continue to rise with temperatures and sea levels.³⁵

Climate change may have contributed to the war in Syria, which produced a flood of migrants that set the stage for Brexit and other destabilizing political movements in the EU.³⁶ Similarly, climate change may have played a role in the flows of migrants from Central America to the United States, which the Trump administration linked to trade by threatening Mexico with trade sanctions for failure to stem the flow of migrants.³⁷ The effects of the climate crisis will only accelerate from this point on, increasing the politically destabilizing consequences of mass migrations and financial crises.

Continued use of market-distorting subsidies and trade remedies will impede innovation and increase the cost of clean energy technology, slowing the spread of clean energy and hobbling mitigation efforts.³⁸ Similarly, intellectual property rights that favor the producers of climate-ready GMO crops over the users of this technology will hamper adaptation efforts and worsen the impacts of climate change on farmers.³⁹ In this scenario, regulatory capture of trade policy will combine with the diminished bargaining power of developing countries to create a negative regulatory feedback loop, in addition to the feedback loops of the natural world that will accelerate climate change.

The BRICS+ are likely to become increasingly marginalized. India will suffer from killer heat waves, floods, drought, and famines. This will only make concessions on agricultural subsidies and intellectual property rights for climate-ready plant varieties more difficult for India and prevent it from participating effectively in any megaregional regimes. Indeed, climate change has shifted agriculture and subsistence strategies in the Indian subcontinent before, to more drought tolerant crops, and served as a catalyst for the de-urbanisation of the Harappan civilization.⁴⁰ The modern equivalent would be a shift to GMO crops, but intellectual property rights, combined with terminator genes that make seeds infertile, could create an obstacle to access.⁴¹ While richer countries can achieve some adaptation to killer heatwaves in their cities,⁴² India is unlikely to fall into this category. Indian cities will struggle to save lives because of economic inequality, even if wealth increases. It is the poorest and most vulnerable who die in killer heat waves in urban areas. As for subsistence farmers, we know that it would not take much money to solve that problem, given the political will.⁴³ While the links between climate change, migration and conflict are complex, the effects of climate change on subsistence

farmers could produce waves of climate migrants from India that would dwarf the flows seen thus far from Syria and Central America.⁴⁴ Rising sea levels on India's coastline will be another source of migrants, but the complexity of interacting factors (infrastructure, sea level rise, climate change mitigation and adaptation) makes numbers difficult to predict.⁴⁵

In Russia, forest fires in boreal forests will increase dramatically, with far-reaching ecological and socioeconomic consequences.⁴⁶ This will coincide with the massive release of methane gas from the previously frozen north. Devastating air pollution will combine with rising alcoholism and suicide rates to reduce life expectancy in Russia's shrinking population.⁴⁷ Russia's belligerence with its neighbours delayed its accession to the WTO.⁴⁸ The combined effect of the climate crisis and shrinking revenues from fossil fuels will only increase Russian security concerns. The result will depend on Russia's response to its changing circumstances. Increasing belligerence could make Russia's inclusion in the megaregional regime more difficult. At the same time, the security threat posed by Russia could motivate the Quad to push for its integration into the megaregional system. Russia's history in and out of the G8 demonstrates how difficult it is to predict how Russian aggression will play out in international institutions.

Brazil's status as an agricultural powerhouse will decline as the effects of climate change increase; the destruction of the Amazon is likely to accelerate that process.⁴⁹ The climate crisis will be devastating to Indonesia, South Africa and Nigeria as well. Climate change is likely to increase economic inequality between and within these and other countries.⁵⁰ Moreover, in some of the countries most exposed to climate change, including India, Indonesia, and Nigeria, insurance penetration is less than 1%, making them more vulnerable financially.⁵¹ A developed country like Australia is very vulnerable to climate change, as the 2019–2020 bushfires have demonstrated. However, a country like Australia has greater resilience than a country like Nigeria, due to its greater financial capacity, well developed insurance markets, and high level of technological development.

A recent study has estimated the economic cost of climate change by country, measured as the social cost of carbon per tonne of CO₂ (tCO₂). India's is the highest (US\$86 per tCO₂), followed by the United States (US\$48 per tCO₂), Saudi Arabia (US\$47 per tCO₂), Brazil (US\$24 per tCO₂), China (US\$24 per tCO₂) and the United Arab Emirates (US\$24 per tCO₂). Northern Europe, Canada and the Former Soviet Union are expected to have a net benefit because their current temperatures are below the economic optimum.⁵² Another study predicts that the negative impact of climate change on economic growth, measured as the percent loss in GDP per capita by 2100 with no climate change mitigation, will be worse for the countries with the greatest temperature increases, which includes Russia (12.46%), India (13.39%), and the United States (14.32%).⁵³ India and the United States are the common denominators in these two studies, but the United States has greater adaptation capabilities than India and the United States will find itself inside the Quad-led megaregional regime; India will not.

It is possible that catastrophic climate change will motivate countries like India to make concessions that will lead to breakthroughs in trade negotiations. After all, international trade can facilitate access to and development of climate change mitigation and adaptation technologies. Unfortunately, history demonstrates that catastrophic climate change is likely to deepen existing divisions in society.⁵⁴ To put it another way, in times of crisis there is a tendency for humans to circle the wagons and start shooting inwards. Civilizations are not insulated from environmental change.⁵⁵

There is every reason to think that the economic hardship and existential threat from climate change will lead to populism and the scapegoating of trade, migration, and "them". Humans have evolved to be a cooperative species within "tribes" and a competitive species between "tribes". As Karthik Panchanathan puts it, "The logic of between-group conflict to foster within-group cooperation, the very logic that may have got us into problems like global warming, surely cannot get us out of it."⁵⁶ Evolutionary psychology tells us that the influence of evolutionary forces on human intuitions decreases their reliability. Tribalism is a good example. Tribalism selects for racism, nationalism and xenophobia, indirectly influences political views, and affects the acceptance of scientific evidence on climate change.⁵⁷ The evolutionary forces that prevent humanity from addressing climate

change are the same ones that will increase obstacles to successful trade negotiations because of the climate crisis.

In general terms, small and developing states will suffer the most in a warming post-WTO world. The most vulnerable of these face a higher cost of capital, which makes adaptation even more costly.⁵⁸ One view holds that the people most vulnerable to the climate crisis live in low-latitude, hot regions of the world, like central South America, the Arabian Peninsula and much of Africa, and relatively less so in India and China.⁵⁹ However, it makes more sense to categorize countries based on objective criteria that affect the economic impacts of the climate crisis, the likelihood that the country will be the target of climate-motivated trade barriers and the capacity to address the cost of mitigation and adaptation: the “Climate Sensitivity Index” (CSI). The CSI would include: (1) current per capita annual GHG emissions; (2) proportion of population who are subsistence farmers; (3) population of the country who are poor in absolute terms. Other criteria could be added, such as the per capita GDP and some measure of technological capacity.⁶⁰

Higher per capita GHG emissions in a country increase its exposure to the risk of climate-motivated trade barriers. A high rate of emissions would override every other criterion in the CSI, since the risk of trade barriers would exceed the country’s capacity to lower emissions.

Second, one needs to consider whether there is a significant proportion of subsistence farmers, as is the case with India.⁶¹ This criterion measures both vulnerability to climate change and its related impact on the probability that a country would make sufficient concessions in trade negotiations to achieve consensus at the multilateral or megaregional level. Climate change will make farmers with less than 3 ha of land particularly vulnerable because they will be hard pressed to buy genetically modified seeds that would be able to withstand more variable weather as a consequence of climate change.⁶² Countries with a significant proportion of subsistence farmers will find it more difficult to make concessions regarding agricultural trade and intellectual property rights.

Third, greater poverty increases the risk of mass migration of climate refugees. Average income is not an adequate measure, because it does not consider inequality in income among the population. One commonly used measure of inequality is the Gini coefficient. However, if everyone’s income increases by tenfold, the Gini coefficient is not affected. Thus, the Gini coefficient would be meaningless as a measure of inequality that can be compared across countries. A more appropriate measure of inequality is to include people who are poor in the country in absolute terms. The more people there are below an absolute poverty level, the more difficult it is to pay for climate adaptation.

Poverty data is not as easy to find as one might think, and should be taken with a grain of salt. India accounted for 24% of the world’s population in extreme poverty in 2015,⁶³ but it lost its position of the country with the largest number of people living in extreme poverty to Nigeria in 2018, and the number is projected to continue falling.⁶⁴ As of March 2019, 3.5% of India’s population lives in extreme poverty, or 47.4 million.⁶⁵ In Brazil, the number of people living in extreme poverty increased from 13.5 million in 2016 to 15.2 million in 2017.⁶⁶ In Russia, while poverty is increasing, the available data is that none live in extreme poverty, which may refer to the availability of data rather than the real number.⁶⁷ In China, only 0.7% lived in extreme poverty in 2015, according to the World Bank, and only 0.4% in 2019, according to World Poverty Clock.⁶⁸

If current trends continue, the climate crisis will only widen the gap between rich and poor, within countries and between countries, and increase the gap in bargaining power between countries. Brazil, India, Indonesia, Nigeria and South Africa are among the countries with the highest probability of economic damage from the climate crisis. Russia has the lowest probability, due to its cooler climate, and China is in the middle.⁶⁹ The climate crisis makes it likely that BRICs+ (minus China and Russia) will suffer from declining bargaining power in trade negotiations. Moreover, the climate crisis is an important cause of a biodiversity crisis that is a major contributor to economic damage, through environmental damage to key resources such as fish and water.⁷⁰ The combined climate crisis and biodiversity crisis will hurt economic growth and change priorities in the hardest hit countries.

The effects of accelerating climate change will have a destabilizing impact on trade negotiations, particularly for the worst-affected developing countries. The effects of the climate crisis will make it more difficult to make concessions in crucial areas, such as agriculture and intellectual property rights, due to the effects of the climate crisis on agricultural yields and the increased need for technology to adapt to a warming climate and reduce greenhouse gas emissions. Rising sea levels, droughts, floods, and killer heat waves will provoke mass migration, with impacts on domestic politics that makes trade concessions more difficult. In this context, multilateral trade negotiations are unlikely to advance in a significant way and megaregional trade agreements will become increasingly difficult to join. The result will be a warming world that is divided between those included in and those excluded from the megaregional trade regime. This will also hamper efforts to slow and to adapt to the climate crisis, due to the key role that international trade plays in addressing both. It is beyond the scope of this chapter to analyze the political links between the effects of climate change on each country's trade policy, as useful as that might be. We have seen how migration and trade policy have become linked in the public's minds in the United States and the United Kingdom. We have seen how large populations of vulnerable subsistence farmers creates obstacles to concessions on agricultural subsidies for India and among a broader set of developing countries with respect to intellectual property rights for new plant varieties. However, we have only begun to imagine how the multiplicity of impacts from accelerating climate change will affect the political feasibility of different trade policies in different countries as they grapple with unique combinations of food insecurity, catastrophic weather events, mass migration, health impacts, and risks to financial stability.

4. Conclusion

At the eleventh BRICS Summit, the Brasilia Declaration displays an apparent disregard for the predicament that the participating countries are in. They reiterate their commitment to the implementation of the Paris Agreement, "including the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances". They also urge developed countries "to scale up the provision of financial, technological and capacity-building assistance to developing countries to support mitigation and adaptation action".⁷¹ These statements reveal a willful blindness to the realities of the post-WTO world order, in which trade and environmental policies become decreasingly supportive of each other, GHG emissions grow dramatically in China and India, and these large developing countries move into the league of the developed countries. Calls for a greater transfer of wealth from the Quad to the BRICS, based on the Twentieth Century notion of common but differentiated responsibilities and outdated ideas of where technological capacity is located, are not helpful. Such calls are particularly unhelpful in a post-WTO world that was brought about by the very geopolitical and economic shifts that make such claims so outdated. While some wealth transfer is necessary to improve access to technology, finance adaptation, reduce emissions and deal with the economic and human costs of the climate crisis, the needs and capacities of countries vary considerably from one to the next. Moreover, a successful multilateral trade regime, or participation in the megaregional alternatives, would help spur innovation and reduce barriers to technology, provided that countries are able to resist calls for excessive intellectual property rights protections in the case of technologies such as new plant varieties and provided trade regimes improve food security. It would be more helpful to categorize countries and technologies in accordance with a more sophisticated measure of vulnerability to climate impacts and financial and technological capacity. Indeed, in the case of the most vulnerable countries, such as small, low-lying island States, no amount of wealth transfer will prevent their disappearance. In such cases, resettlement is the only option, which raises very different issues from the case of a technologically advanced developing country such as China or India.

Of course, the ecological crises spawned by the climate crisis will also affect developed countries in northern latitudes, but they have greater adaptation capacities and a different climate base line. For example, while Canada is warming at twice the rate of tropical countries like India,⁷² Canada's starting climate point means that this will bring benefits, not just problems, as the climate gets milder and arable land expands north. Moreover, Canada has greater adaptation capacity than India, as measured by the CSI.⁷³ Similarly, although Australia is highly vulnerable to climate change, it has greater financial and technological capacity to confront the challenge. For both Australia and Canada, membership in the megaregional regime also makes them more economically resilient and leaves them with better access to trade in goods, services and technologies for adaptation and mitigation.

The Quad-led megaregional trade order will combine with the climate and biodiversity crises to marginalize most of the major emerging markets. The only ones that have a chance to be included in the new trade order are China (due to its trade volume, strategic importance, and its relative resilience to climate change), Russia (due to its strategic importance and higher resilience to climate change), as well as Mexico and Turkey (due to their strategic geographic locations next door to North America and Europe and their current trade ties to the megaregional regime). Brazil, India, Indonesia, Nigeria, and South Africa will be excluded and suffer diminishing bargaining power as the climate crisis worsens.

Even though we cannot predict the effects with precision, science tells us that the effects of climate change will not be evenly distributed. The worst-case scenario for climate change is the collapse of human civilization and the extinction of millions of species. Humans probably will not be among the survivors in that scenario.⁷⁴ Technological innovation and political capacity are wild cards. Thus far, political incapacity has proved to be a stronger force than technological innovation. We are headed towards catastrophic climate change at an accelerating rate. The consequences for trade negotiations will convert trade into part of the problem, adding negative political feedback loops to the climatological feedback loops that already threaten to take us past the point of no return. Ironically, it is the very developing countries that have stalled WTO negotiations past the point of no return that will be the first to suffer the catastrophic consequences of a runaway climate crisis.

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