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## Winners and losers in the global trade in food



The first pineapples seen by Europeans were objects of wonder. Everyone who heard of them wanted one. The problem was that almost no one could manage to grow them and the few that did, such as Louis XIV at Versailles, only succeeded by enormous investments in heated greenhouses.<sup>1</sup> Today, pineapples, in some form, can be found in shops in almost all parts of the world, with the Hawaiian pizza, initially greeted with horror by Neapolitan restauranteurs, becoming a symbol of the fusion of the world's foods. However, even in the richest countries in the world, while the wealthy can obtain fresh pineapples easily, the poor, who might live close by, might depend on stores where fruit of any sort only comes in tins.<sup>2</sup> In these ways, the global spread of the pineapple exemplifies the expansion of international trade in food and the uneven flow of benefits arising

Global trade in foods has grown for three main reasons. The first is low-cost travel. Despite the waste involved in preparing them, a third of whole pineapples consumed in Europe arrive by air.1 The second is the ability to preserve food on its journey, for example by freezing or processing. The third is trade liberalisation, with free trade agreements, such as the EU's Everything But Arms scheme,<sup>3</sup> enabling producers in poor countries to export their goods tariff free and with minimal checks.

The growth of trade has brought enormous benefits to many. Many consumers enjoy a more varied and exciting diet, which for those living in colder climates, is much more nutritious than what their ancestors consumed. Producers benefit from expanded markets for their products. At least, these are the benefits in theory. The reality is that there are winners and losers. The removal of trade barriers eases flows of both nutritious and junk food.4 Improved transport links in the nineteenth century that could have helped feed victims of famines took food away from them.5

Although large scale famine is rare nowadays, food insecurity is widespread and not just in the poorest countries.<sup>6</sup> In some of the richest ones, many people now depend on foodbanks. Among them are the victims of trade liberalisation, such as the industrial workers whose jobs moved to low-wage economies, and whose governments left them unsupported.7 Those who

produce the food are also at risk. The industrialisation See Articles page e1090 of agriculture, with a focus on cash crops, has often driven down the incomes of farmers and, in many cases, turning those who were once small-scale landowners into indentured labourers. For these groups, trade liberalisation has been, at best, a mixed blessing.

In The Lancet Global Health, a new study by Pepita Barlow and colleagues makes imaginative use of different datasets to shed light on the present relationship between trade liberalisation and food insecurity.8 Previous research on the topic has been conflicting. Using surveys done among 460 102 people in 132 countries during 2014-17, Barlow and colleagues described the characteristics of individuals experiencing food insecurity. The authors then map these findings onto a dataset that measures trade liberalisation in each country to examine the association between a country's trade policy score and the probability of individuals reporting moderate-severe or severe food insecurity. Barlow and colleagues' analyses controlled for multiple covariates including gross domestic product, degree of democratisation, and population size, thereby overcoming many of the limitations of previous studies.

Perhaps the most shocking finding was that 26.7% of individuals surveyed worldwide reported moderate-severe food insecurity, meaning they reduced the quantity of food they ate, skipped meals, or experienced hunger. This proportion rose to 58.1% in low-income countries. Only 7.8% of respondents were affected in this way in high-income countries. The initial analyses suggested that trade liberalisation was associated with less food insecurity, but this could be explained entirely by adjusting for other factors plausibly associated with food insecurity. After correcting for covariate imbalance, Barlow and colleagues observed no significant association between trade liberalisation and an individual's odds of having moderate-severe or severe food insecurity. However, given that we might expect there to be winners and losers, what we need to know is whether everyone is affected equally. When the data were disaggregated, Barlow and colleagues found that trade liberalisation was associated with more food insecurity among all but the wealthiest households in low-income countries: only households earning more than US\$2760 per

person per year (adjusted for purchasing power parity) did not have increase in food insecurity, and 94·7% of respondents in low-income countries had incomes lower than that amount. By contrast, trade liberalisation was associated with less food insecurity among all but the poorest households (<US\$450 per person per year) in high-income countries.

These findings are especially important now. The world is changing in several important ways. Agricultural production is threatened by a range of environmental threats, including global heating, desertification and water shortages, soil degradation, and loss of pollinators. Existing trade deals are being torn up. US President Donald Trump is raising protectionist barriers. The UK is withdrawing from the EU and, with it, from hundreds of global agreements while contemplating lowering food standards to get a trade deal with the USA. The COVID-19 pandemic threatens to usher in a global recession, with many millions of people at risk of losing their livelihoods, including many who worked tirelessly to ensure others still had food during the pandemic. But the pandemic also poses an opportunity to rethink things. Food insecurity is increasingly recognised as a global health and human rights issue.9 Tackling it should form part of the Healthy Recovery agenda, 10 conferring great gains for health and the environment. Our global systems are broken, so let's fix them.

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