



Combating a Crisis of Global Food Protectionism Sparked By the War in Ukraine

Daniel C.K. Chow* & Ian M. Sheldon**

ABSTRACT

The world is currently gripped in a food crisis of historic proportions that is threatening tens of millions of people in the poorest countries of the world with famine and starvation. Sparked by the war in Ukraine, this crisis is being made worse by nations imposing export restrictions on food in a misguided attempt to curb soaring domestic food prices. Export restrictions are “beggar-thy-neighbor” policies that prevent increases in domestic food prices but at the expense of raising world prices, exacerbating the crisis.

Although nations have turned to the World Trade Organization (WTO) for help in removing these export restrictions, the WTO is currently an organization in disarray that lacks the legal tools and the political will to effectively address this global crisis. Unlike the WTO, many free trade agreements (FTAs) such as the United States-Mexico-Canada Trade Agreement and the Treaty on the Functioning of the European Union (EU), contain effective legal tools to curb export restrictions on food.

At the moment, FTAs are proliferating all over the world and have now displaced the WTO as the most effective means for eliminating or overcoming export restrictions on food. It is now up to the EU and the United States, the principals of the world’s most robust FTAs, to take the lead in demonstrating how FTAs can be used to effectively to combat

* Frank E. and Virginia H. Bazler Chair in Business Law, The Ohio State University Michael E. Moritz College of Law. Thanks to Tom Schoenbaum for his helpful discussion of this topic and to Matt Cooper, Moritz Reference Librarian, for his helpful assistance.

** Andersons Chair of Agricultural Marketing, Trade and Policy, The Ohio State University, Department of Agricultural, Environmental, and Development Economics.

a catastrophic food emergency. This Article proposes an innovative solution through the use of FTAs by the United States and the EU to create a free trade conduit for food exports to meet demand in world markets without a spike in prices in a time of crisis.

TABLE OF CONTENTS

I.	INTRODUCTION	1167
II.	THE ECONOMICS AND POLITICAL ECONOMY OF EXPORT CONTROLS.....	1174
	A. Rising Real Food Prices	1174
	B. Response to Food Price Spikes	1176
	C. The Impact of High Food Prices.....	1178
	D. Food Prices and Trade Policy	1181
	1. Political Economy Framework.....	1181
	2. Non-Cooperative Trade Policy Choices	1183
	3. Resolution of the Collective Action Problem?.....	1186
	E. Food Prices and Safety Nets.....	1187
	F. Trade Policy vs. Safety Nets.....	1189
III.	AGRICULTURE AND THE GATT/WTO	1190
	A. Import Trade Barriers and the GATT	1190
	B. History of Agriculture in the GATT/WTO	1192
	1. Import Trade Barriers	1192
	2. Domestic Support	1193
	3. Export Subsidies	1193
	C. AoA's Approach to Removing Trade Barriers	1194
	1. The AoA and "Tariffication".....	1194
	2. The AoA and Domestic Subsidies.....	1195
	3. The AoA and Export Subsidies.....	1195
	4. Food Security.....	1196
	D. GATT/WTO Rules on Export Restrictions.....	1196
	1. Export Taxes.....	1197
	2. Export Bans	1197
	E. The 2022 Geneva Ministerial Declaration on Food Insecurity	1199
	F. The Paralysis of the WTO Appellate Body and Unenforceability of GATT/WTO Obligations	1200
	G. Limits on Export Restrictions in Regional and Bilateral Trade Agreements.....	1202
	1. FTAs and Export Taxes	1204
	2. FTAs and Export Bans.....	1206
	3. Strategic Use of FTAs	1208
IV.	CONCLUSIONS.....	1209

I. INTRODUCTION

The world is currently gripped in a global food crisis of unprecedented proportions.¹ The crisis is driven by a number of factors: climate shocks, consequences of the COVID-19 pandemic, and rising costs, but the immediate catalyst is the war in Ukraine that began in 2022.² The Russia-Ukraine war has seriously disrupted global food supply chains, leading numerous countries to impose export restrictions on domestic food supplies that have only led to more increases in food prices on the world market, exacerbating the crisis.³ Since 2019, the number of people facing acute food insecurity has soared from 135 million to 345 million.⁴ According to the United Nations, a total of 49 million people in forty-nine countries are on the brink of famine.⁵

Russia's invasion of Ukraine led to the suspension of agricultural exports from both countries in order to maintain domestic supply and prevent domestic prices from rising. Russia banned exports of wheat, sunflower seeds, and sugar;⁶ Ukraine banned exports of wheat and

1. See *A Global Food Crisis*, WORLD FOOD PROGRAMME, <https://www.wfp.org/global-hunger-crisis> (last visited Sept. 14, 2023) [<https://perma.cc/KQ9L-WHNC>] (archived Aug. 23, 2023); *Emergency: Global Food Crisis*, WORLD FOOD PROGRAMME, <https://www.wfp.org/emergencies/global-food-crisis> (last visited Sept. 14, 2023) [<https://perma.cc/6M7N-SQCZ>] (archived Aug. 23, 2023) (hereinafter *Emergency Food Crisis*); Kristalina Georgieva, Sebastián Sosa & Björn Rother, *Global Food Crisis Demands Support for People, Open Trade, Bigger Local Harvests*, IMF BLOG (Sept. 30, 2022), <https://www.imf.org/en/Blogs/Articles/2022/09/30/global-food-crisis-demands-support-for-people-open-trade-bigger-local-harvests> [<https://perma.cc/A8QB-TFNE>] (archived Sept. 14, 2023). Agriculture (i.e. food production) has long been a controversial subject within the World Trade Organization. The inability of countries to agree on how to regulate trade barriers in agriculture led to the deadlock and termination of the recent WTO Doha Development Round of Negotiations in December 2015. See DANIEL C.K. CHOW, THOMAS J. SCHOENBAUM & GREGORY C. DORRIS, *INTERNATIONAL TRADE LAW: PROBLEMS, CASES, AND MATERIALS* 280 (Aspen Publishing 4th ed. 2022).

2. *Agriculture and Food*, WORLD BANK, <https://www.worldbank.org/en/topic/agriculture/overview> (last updated Mar. 31, 2023) [<https://perma.cc/U4NG-6932>] (archived Aug. 23, 2023); *Food Export Restrictions Hurt Millions in Least Developed Countries*, UNITED NATIONS CONF. ON TRADE & DEV., <https://unctad.org/topic/least-developed-countries/chart-march-to-june-2022> (last visited Aug. 22, 2023) [<https://perma.cc/5RR8-H27Z>] (archived Aug. 23, 2023) (hereinafter *Food Export Restrictions in LDCs*).

3. See *A Global Food Crisis*, *supra* note 1.

4. *Id.*; *Emergency Food Crisis*, *supra* note 1.

5. Press Release, Secretary-General, Forty-Nine Million People in 43 Countries One Step Away from Famine, Secretary-General Warns in Briefing to Security Council on Conflict, Food Security, U.N. Press Release SG/SM/21288 (May 19, 2022); WFP Staff, *WFP Urges G7: 'Act Now or Record Hunger will Continue to Rise and Millions More will Face Starvation'*, WORLD FOOD PROGRAMME (June 21, 2022), <https://www.wfp.org/stories/wfp-urges-g7-act-now-or-record-hunger-will-continue-rise-and-millions-more-will-face> [<https://perma.cc/C8DY-WA8S>] (archived Sept. 14, 2023).

6. Huileng Tan, *We're Living in an Age of Food Protectionism: 5 Countries That are Banning or Restricting Major Exports to Safeguard Food Supplies as Inflation Soars*,

oats.⁷ As Russia is the world's largest exporter of wheat and Ukraine is the world's fifth largest, these export bans have seriously disrupted the international supply chain for wheat.⁸ As supply bottlenecks grew and prices rose, other nations also began to impose export restraints. Since the beginning of 2022, nations have imposed seventy-four measures restricting agricultural exports, two-thirds of which are full export bans.⁹ These export restrictions have caused global food prices to spike.¹⁰ Export bans on rice, wheat, and citrus fruits have led to price increases estimated at 12.3 percent, 9 percent, and 8.9 percent, respectively, and export bans on vegetable oil have caused world prices to more than double.¹¹ According to the World Bank, the food crisis "is a crisis made worse by the growing number of countries that are banning or restricting exports of wheat and other commodities in a misguided attempt to put a lid on soaring domestic prices. These actions are counterproductive—they must be halted and reversed."¹²

In a statement to the World Trade Organization as it prepared for its Twelfth Ministerial Conference—its highest authority—in Geneva in June 2022, Bangladesh's Commerce Minister Tipu Munshi stated his concerns more bluntly: "We urge members not to impose export restrictions on products which are essential for our survival, particularly relevant for our food security, public health and long-term development goals in the [Least Developed Countries]."¹³

INSIDER (May 12, 2022), <https://www.businessinsider.com/food-protectionism-countries-restrict-exports-security-inflation-wheat-palm-beef-2022-5> [https://perma.cc/MX85-349D] (archived Aug. 23, 2023).

7. *Id.*

8. *See id.*

9. Alvaro Espitia, Nadia Rocha & Michele Ruta, *How Export Restrictions are Impacting Global Food Prices*, WORLD BANK BLOGS: PRIV. SECTOR DEV. BLOG (July 6, 2022), <https://blogs.worldbank.org/psd/how-export-restrictions-are-impacting-global-food-prices> [https://perma.cc/U6WT-HBHX] (archived Aug. 23, 2023).

10. *See id.*; see also Low De Wei, *Rising Global Food Protectionism Risks Worsening Inflation Woes*, BNN BLOOMBERG (May 24, 2022), <https://www.bnnbloomberg.ca/rising-global-food-protectionism-risks-worsening-inflation-woes-1.1769867> [https://perma.cc/5N3F-XTEN] (archived Sept. 14, 2023) (emphasizing how both developing and developed countries are falling victim to spiking food prices, with countries such as France promising some households food vouchers).

11. Espitia, Rocha & Ruta, *supra* note 9. See also Keith Good, *Food Protectionism Adds to "Chaos in Global Food Markets" While Ukraine Could Plant a Majority of Spring Crops*, FARM POL'Y NEWS (May 10, 2022), <https://farmpolicynews.illinois.edu/2022/05/food-protectionism-adds-to-chaos-in-global-food-markets-while-ukraine-could-plant-a-majority-of-spring-crops/> [https://perma.cc/9NAE-3DCT] (archived Aug. 23, 2023) (discussing rise in prices of vegetable oil "used in everything from cakes to cosmetics").

12. Mari Elka Pangestu & Axel Van Trotsenburg, *Trade Restrictions are Inflaming the Worst Food Crisis in a Decade*, WORLD BANK BLOGS: VOICES (July 6, 2022), <https://blogs.worldbank.org/voices/trade-restrictions-are-inflaming-worst-food-crisis-decade> [https://perma.cc/UG2Y-SZTX] (archived Aug. 23, 2023).

13. World Trade Organization, Ministerial Conference Statement by H.E. Mr. Tipu Munshi, (MP Minister for Commerce, Bangladesh), WTO Doc. WT/MIN(22)/ST/80 2 (June 12, 2022), https://www.wto.org/english/thewto_e/minist_e/mc12_e/statements

As further explained in Part II of this Article, export restrictions are “beggar-thy-neighbor” policies: they help the nation imposing them at the expense of harming other nations. Export restrictions help to stabilize prices in the country imposing them because the restrictions help to maintain or increase the food supply in the domestic market.¹⁴ At the same time, however, export restrictions decrease the food supply in the world market, leading to a spike in world prices.¹⁵ Export restrictions can also result in a cascade of retaliatory export restrictions intensifying the problem.¹⁶ When nations see other nations erecting protectionist export restrictions, they often react by imposing their own export restrictions. The result is the current escalation of food protectionism leading to even higher world food prices and deepening the global food crisis.

The most pernicious effect of the current spike in world food prices is that the greatest harm is suffered by the poorest nations of the world. According to the United Nations Conference on Trade and

/ST80.pdf [https://perma.cc/Z73R-E8ZJ] (archived Aug. 23, 2023) [hereinafter Tipu Munshi WTO Statement]. The Ministerial Conference is a meeting of the trade ministers of all WTO members every two years lasting about a week and is the supreme authority in the WTO. See THE WORLD TRADE ORGANIZATION, *Whose WTO is it Anyway?*, WORLD TRADE ORG., (last visited Aug. 22, 2023), https://www.wto.org/english/thewto_e/whatis_e/tif_e/org1_e.htm (last visited Aug. 22, 2023) [https://perma.cc/9UUT-2ALA] (archived Aug. 23, 2023). A permanent standing body, the General Council, consisting of the trade delegations of each member, is located in the WTO headquarters in Geneva, Switzerland. When the Ministerial Conference is not in session, the General Council is the highest authority of the WTO. See *id.* See also World Trade Organization, Ministerial Conference Statement by Hon. Ms Betty Maina (EGH Cabinet Secretary, Ministry of Industrialization, Trade and Enterprise Development, Kenya), WTO Doc. WT/MIN(22)/ST/72 (June 12, 2022), https://www.wto.org/1168nglish/thewto_e/minist_e/mc12_e/statements/ST72.pdf [https://perma.cc/E2D3-YPEA] (archived Aug. 23, 2023) (“[W]e have witnessed higher food prices that have affected the net food-importing countries such as Kenya, compounded by the crisis in some parts of the world. We need to revisit export bans, especially those imposed to create buffer stock, as they hurt the net importing WTO members.”); World Trade Organization, Ministerial Conference Statement by Hon. Mr. Mmusi Kgafela (Minister of Trade and Industry, Botswana), WTO Doc. WT/MIN(22)/ST/91 (June 12, 2022), https://www.wto.org/english/thewto_e/minist_e/mc12_e/statements/ST91.pdf [https://perma.cc/TWR7-S8TX] (archived Aug. 23, 2023) (“We have seen unprecedented levels of hyper-inflation. I can confirm that access to food has become a common phenomon especially for the lesser developed countries. There is no doubt that the Multilateral Trading System needs to have hard conversations on food security issues as a matter of urgency.”). See also *infra* Part III.E, pp. 1199–1200.

14. See PRACHI AGARWAL & YOHANNES AYELE, OVERSEAS DEV. INST., RISING FOOD PROTECTIONISM: WHO PAYS THE PRICE? 9–10 (2022), <https://odi.org/en/insights/rising-food-protectionism-who-pays-the-price/> [https://perma.cc/66B2-6XDX] (archived Aug. 23, 2023). See also *infra* Part II, p. 1174.

15. See *infra* Part II, p. 1171.

16. See *supra* Part I, p. 1167.

Development, export restrictions on agriculture hurt poor nations most of all:

[The United Nations Conference on Trade and Development] estimates, based on data from UN Food and Agriculture Organization, paint a grim picture, alerting the world to [impending] food crises in countries that already require external assistance to ensure food security.

At least 104 million people are affected by conflicts in . . . least developed countries (LDCs): Afghanistan, Burkina Faso, Central African Republic, Chad, Democratic Republic of the Congo, Ethiopia, Mali, Mozambique, Myanmar, Niger, Somalia, South Sudan and Yemen.¹⁷

To remove and oppose export restrictions on agriculture, nations naturally first turned to the General Agreement on Tariffs and Trade (GATT)¹⁸ and the World Trade Organization (WTO) for help, because the GATT/WTO established and administers the multilateral treaties that are designed to dismantle international trade barriers.¹⁹ However, a closer examination of the GATT/WTO indicates that its provisions limiting export restrictions on agricultural trade are too weak and inadequate to deal with the current food crisis. These systemic weaknesses can be traced to three factors.

First, the GATT/WTO was historically focused on dismantling import trade barriers.²⁰ Due to the rampant protectionism of the chaotic 1930s, nations imposed draconian import tariffs that

17. *Food Export Restrictions in LDCs*, *supra* note 2. *See also supra* Part I, p. 1167.

18. *See generally* General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187 [hereinafter GATT 1994]. The GATT regulates trade in goods and is administered by the WTO. The GATT was originally implemented in 1947. When the WTO was established in 1995, the GATT was updated and reissued in 1994. *See The Uruguay Round*, WORLD TRADE ORG., https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact5_e.htm (last visited Aug. 22, 2023) [<https://perma.cc/5G82-6QSD>] (archived Aug. 23, 2023). Unless otherwise indicated, all references to the GATT are to GATT 1994.

19. In addition to the GATT, the WTO also administers the General Agreement on Trade in Services (1994) (GATS), which deals with services trade, and the Agreement on Trade Related Intellectual Property Rights (1994) (TRIPS), which deals with trade in technology. *See* General Agreement on Trade in Services art. I, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 U.N.T.S. 183 (1994) (hereinafter GATS); *Overview: A Navigational Guide*, WORLD TRADE ORG., https://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm1_e.htm (last visited Aug. 22, 2023) [<https://perma.cc/F7X8-A4FD>] (archived Aug. 23, 2023). The WTO also administers the WTO Dispute Settlement System set forth in the Dispute Settlement Understanding (DSU) (1994). *See Understanding the WTO: Settling Disputes*, WORLD TRADE ORG., https://www.wto.org/english/thewto_e/whatis_e/tif_e/disp1_e.htm (last visited Aug. 22, 2023) [<https://perma.cc/A5L7-YPCK>] (archived Aug. 23, 2023).

20. *See infra* Part III.A, pp. 1190–1191; Daniel C.K. Chow, *Export Restrictions in the Post-Covid World: Another Step in the Demise of the World Trade Organization*, 25 J. INT'L ECON. L. 507, 507 (2022).

contributed to the eruption of the Second World War.²¹ After the war, the GATT focused on dismantling import trade barriers to prevent such disastrous policies from giving rise to another global conflict.²² Scant attention was paid to export trade barriers—this is reflected in the limited number of GATT/WTO provisions that directly address export restrictions.²³

Second, the GATT/WTO singled out agriculture for special treatment from the very beginning and tolerated many forms of food protectionism.²⁴ The collapse of world food prices during the Great Depression of the 1930s, and the need to rebuild agricultural industry and food production after the Second World War, meant that many nations could often ignore GATT rules without any justification.²⁵ The importance of agriculture has led some countries, including the United States and China, to draw a direct link between food and national security.²⁶

Third, due to the actions of the United States, the GATT/WTO does not currently have a fully functioning dispute settlement system.²⁷ The most significant consequence of the crippling of the dispute settlement system is that WTO obligations have become, in effect, unenforceable, launching the GATT/WTO into a crisis of its own.²⁸ Even if a country attempted to enforce the few available GATT/WTO limitations on export restrictions on agriculture, the

21. See *infra* Part III.A, pp. 1190–1191.

22. See *infra* Part III.A, pp. 1190–1191.

23. See *infra* Part III.A, pp. 1190–1191.

24. See *infra* Part III.B, p. 1191; CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 280.

25. CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 280.

26. See S. 3089, 117th Cong. § 2 (2021) (“amend[ing] section 721 of the Defense Production Act of 1950” to include food security in the United States as a consideration “when determining to take action with respect to foreign investment”). China explicitly considers food security to be a matter of national security. See STATE COUNCIL INFO. OFF. OF THE PEOPLE’S REPUBLIC OF CHINA, FOOD SECURITY IN CHINA (2019), http://english.scio.gov.cn/2019-10/14/content_75300394.htm [https://perma.cc/N9BB-C7TT] (archived Aug. 23, 2023) (“As food decides national prosperity and the people’s wellbeing, food security is a major prerequisite for national security.”); see also EHUD EIRN, MICHAELA ELIAS & ARON M. TROEN, *No Bread, No Peace: Food Should be Treated as a National Security Issue*, FOREIGN POL’Y (Jan. 23, 2021), <https://foreignpolicy.com/2021/01/23/food-hunger-national-security-issue-instability/> [https://perma.cc/K2LW-DTCW] (archived Aug. 23, 2023) (“Access to food and national security are tightly connected.”).

27. The United States is extremely dissatisfied with the WTO dispute settlement system. See *infra* Part III.F, pp. 1199–1200; see also DANIEL C.K. CHOW, *A New and Controversial Approach to Dispute Resolution Under the U.S.-China Trade Agreement of 2020*, 26 HARV. NEG. L. REV. 31, 34–35 (2020) (hereinafter Chow, *U.S.-China Dispute Resolution*) (explaining the United States’ dissatisfaction for the WTO Appellate Body because of its frequent rulings against the United States and “effectively unenforceable” holdings).

28. See CHOW, *U.S.-China Dispute Resolution*, *supra* note 27, at 50–51.

offending country is able to nullify any adverse decisions by the dispute settlement system and to ignore its results.²⁹

An additional indication of the weakness of the GATT/WTO system was the inability of WTO members to agree on binding rules limiting or prohibiting export restrictions on agriculture at the Twelfth Ministerial Conference, held in Geneva in June 2022.³⁰ Ahead of the Conference, both developing and least developed countries exhorted the need for rules limiting export restrictions on agriculture.³¹ Despite these protests and the obvious harm caused by export restrictions, the Geneva Ministerial Conference resulted in a Declaration on Food Security that has largely symbolic significance only.³² This impasse illustrates the deep political divisions in the WTO on agriculture and the lack of political will to agree on clear and effective solutions to a global crisis. These developments portend a gloomy future for the GATT/WTO, at least in the near term, as an organization that can effectively deal with trade barriers in agriculture.

The weak and inadequate export controls under the GATT/WTO stand in stark contrast to the robust set of systemic controls established under the many free trade agreements (FTAs) that are proliferating around the world. FTAs abolish all or most tariffs on goods traded among members of the FTA.³³ The GATT/WTO explicitly recognizes and encourages their formation because FTAs further liberalize trade.³⁴

The most prominent example of a robust FTA is the European Union (EU), which prohibits export bans on goods traded within the EU, as well as export bans between EU countries and non-members of the EU.³⁵ The EU also prohibits export taxes on intra-EU trade and subjects export taxes between EU countries and nations with which the EU has trade agreements to strict limitations that effectively eliminate their use.³⁶ Although not as expansive or as robust, the United States' FTAs also allow the United States a similar ability to eliminate or severely limit the use of export taxes and export bans.³⁷ Other FTAs in Asia, Africa, and South America have provisions similar to those of the United States. FTAs that can also be used to provide

29. See *infra* Part III.F, pp. 1200–01.

30. See *infra* Part III.E, pp. 1199–1200.

31. See *supra* notes 13–14 and accompanying text.

32. See *infra* Part III.E, pp. 1199–1200.

33. See *infra* Part III.G, p. 40. Trade between members of a FTA and non-members are subject to ordinary tariffs. If the member of the FTA and the non-member are both WTO members then trade between them is subject to their GATT/WTO tariff schedules. See discussion *infra* Part III.G, p. 1202.

34. See discussion *infra* Part III.G, p. 1202. FTAs are authorized by GATT Article XXIV. See *The Uruguay Round*, *supra* note 19.

35. See *infra* Part III.G, pp. 1204–07.

36. See *infra* Part III.G, pp. 1202–03.

37. See *infra* Part III.G, pp. 1202–03.

similar protections against export restrictions on agriculture.³⁸ There are now 109 members of current FTAs, or two-thirds of the 164-country membership of the GATT/WTO.³⁹ As FTAs are continuing to grow in popularity and membership, the total number of FTA countries might soon equal or surpass the membership of the WTO. FTAs also have their own fully functioning dispute resolution mechanisms that are independent of the GATT/WTO.⁴⁰

This Article argues that, due to the GATT/WTO's many political conflicts and internal problems, FTAs have now supplanted the role of the GATT/WTO in responding with enforcement of obligations to avoid food protectionism. This Article argues that it is now up to the EU and the United States, the principals of the FTAs with the most rigorous controls on export restrictions, to lead other FTAs in combating the rise of global food protectionism. The EU and the United States can use their legal expertise and political prowess to demonstrate how the EU and U.S. FTAs can be used to block export restrictions.⁴¹ Part III of this Article proposes an innovative method of using FTAs that the United States and EU can implement to create a free trade conduit for food exports from Ukraine and other nations to world markets. This method can become a model for other FTAs to follow.

This Article will proceed as follows: Part II will examine the economics of trade in agriculture and explain in depth how export restrictions result in an increase in world food prices. Part II explains that nations have an incentive to use export restrictions in the face of a sudden exogenous supply shock because such restrictions can be effective in stabilizing domestic prices. Such restrictions, however, destabilize world prices by creating price spikes and disproportionately affect the poorest nations in the world. Next, Part III turns to an examination of the history of agricultural trade in the GATT/WTO and the special protectionist treatment that agriculture has historically enjoyed from the GATT/WTO. Part III will also examine the GATT/WTO provisions limiting export restrictions on agriculture and explain why they are weak and inadequate to deal with the current food crisis. Further, Part III will examine the relevant provisions of the EU, U.S., and other FTAs proliferating around the world that can be used to effectively limit export restrictions and to slow down escalating world food prices. Part III suggests that FTAs have now eclipsed the GATT/WTO as the leading entities that can effectively respond to the global food crisis. Part IV will conclude with some suggestions for the future and the leading role that the EU and the United States need to play in controlling export restrictions on agriculture.

38. See *infra* Part III.G, pp. 1204–05.

39. See *infra* Part III.G, p. 1202.

40. See *infra* Part III.G, p. 1202.

41. We review some methods and arguments that the EU and United States can use to block export bans. See discussion *infra* Part III.G.2.

II. THE ECONOMICS AND POLITICAL ECONOMY OF EXPORT CONTROLS

A. *Rising Real Food Prices*

To understand the extensive use of export policy interventions in food and agricultural markets over the past two decades, it is important to place them in the context of the long-run trend in real food prices over the past 120 years. In inflation-adjusted dollars, agricultural prices fell by an average of 1 percent per year between 1900 and 2010, despite an increase in the world's population from 1.7 billion to almost 7 billion over the same time period.⁴² The explanation for this phenomenon is very straightforward: over time, as gross domestic product per capita has risen, consumers have spent proportionately less of their income on food compared to other manufactured goods—a phenomenon known as Engel's Law.⁴³ At the same time, agricultural productivity has increased, global gross agricultural output growing on average about 2.2 percent per year between 1960 and 2010.⁴⁴ In the early part of this period, output growth came mainly from additional land, labor, irrigation, fertilizer, and energy inputs, but, over time, increases in the productivity of these inputs have become the main driver of growth. As a result of improving agricultural productivity, there has been no Malthusian crisis whereby population growth outstrips agricultural production.⁴⁵ Essentially, the supply of food has shifted faster than the demand for food over time, driving down its real price, with the agricultural sector's terms-of-trade declining.

Over the same time-period, both negative and positive price spikes have occasionally interrupted the downward trend in real food prices, most notably the fall in prices during the 1930s and the rise in prices during the mid-1970s. However, this pattern has been broken over the past two decades; world prices of key staple foods have been volatile around relatively high levels, with four peaks in real prices since 2008.⁴⁶ Using the Food Price Index, published by the Food and Agricultural Organization of the United Nations (UN), with real prices indexed at 2014–16=100, at the start of the 21st Century, the index stood at 67.1, spikes subsequently occurring in 2008 at 114.3, in 2011

42. Keith Fuglie & Sun Ling Wang, *Productivity Growth in Global Agriculture*, 39 POPULATION & DEV. REV. 361, 361 (2013).

43. See RODNEY TYERS & KYM ANDERSON, DISARRAY IN WORLD FOOD MARKETS: A QUANTITATIVE ASSESSMENT 30–33 (1992).

44. See Fuglie & Ling Wang, *supra* note 42, at 361–62.

45. See Thomas Malthus, *Essay on the Principle of Population*, in THE ENVIRONMENTAL DEBATE: A DOCUMENTARY HISTORY 30–31 (Peter Rhoades Mott ed., Grey House Publishing 3d ed. 2017).

46. Will Martin, *Managing High and Volatile Food Prices* 1 (World Bank, Int'l Agric. Trade Rsch. Consortium, Working Paper No. 2012-6, 2012).

at 118.8, in 2012 at 111.5, and most recently in 2022 at 140.6, their highest level since 1974 when the index stood at 137.4.⁴⁷

As noted earlier, the Russian invasion of Ukraine led to the current spike in real food prices, although prices were already increasing in 2021 due to poor harvests in South America, strong global demand, reduced global stocks of grains and oilseeds, an input cost squeeze mostly due to fertilizer price increases, and global supply chain pressures post-pandemic.⁴⁸ These specific and recent shocks need to be seen in the context of a broader structural shift in underlying global agricultural market conditions. In this context, agricultural economists have analyzed why the downward trend in real food prices has reversed over the past two decades. The most convincing explanation for this break in trend is a combination of both supply-side and demand-side factors.

On the supply side, there have been key developments in the markets for key food staples. Since 1970, the growth rate for global yields of maize, rice, and wheat have declined, and there is some evidence of a slowdown in the growth rate of soybean yields.⁴⁹ With a substantial increase in demand from the biofuels sector for coarse grains such as maize, oilseeds, and sugar, as well as strong consumption demand for maize globally, and for soybeans in China, the world may have entered a period of rising real food prices.⁵⁰ Recent research suggests that since 2000, the gap between the growth in consumption and yield of world feed grains, oilseeds, and food grains increased, and the gap is projected to increase over the next decade unless there are significant increases in harvested land area and/or increased yield growth.⁵¹ With harvested land increasing by a modest 0.9 percent since 2002 and the path of yield growth being stable since the early 1980s, higher real food prices are to be expected as global agricultural markets adjust.⁵²

47. See *World Food Situation: FAO Food Price Index*, FOOD & AGRIC. ORG. OF THE UNITED NATIONS, <https://www.fao.org/worldfoodsituation/foodpricesindex/en/> (last visited Sept. 16, 2023) [<https://perma.cc/7QGT-Z47R>] (archived Sept. 16, 2023).

48. See generally FOOD & AGRIC. ORG. OF THE UNITED NATIONS, *FOOD OUTLOOK: BIENNIAL REPORT ON GLOBAL FOOD MARKETS* (2021).

49. See Jason M. Beddow, Philip G. Pardey & Julian M. Alston, *The Shifting Global Patterns of Agricultural Productivity*, CHOICES, 4th Quarter 2009, at 5, <https://www.choicesmagazine.org/magazine/article.php?article=95> [<https://perma.cc/W9MQ-MBQX>] (archived Sept. 16, 2023).

50. See Martin, *supra* note 46, at 3–9.

51. See Carl Zulauf, *The World's Increasing Need for Cropped Land*, FARMDAILY (Nov. 16, 2022), <https://farmdaily.illinois.edu/2022/11/the-worlds-increasing-need-for-cropped-land.html> [<https://perma.cc/TCW8-ZPJP>] (archived Sept. 16, 2023).

52. See *id.*

B. *Response to Food Price Spikes*

While much of the initial discussion of the 2008 food price spike focused on its major causes, the extensive subsequent economic analysis was about how policymakers, especially those in developing countries, responded to rising prices. Most commonly, developing countries chose to directly intervene to stabilize domestic food prices. A study of eighty-one developing countries for the Food and Agricultural Organization found that a total of sixty-eight used border measures to suppress domestic food price inflation. Of these countries, twenty-five either restricted or banned exports, while the other forty-three reduced tariffs and other customs fees on imports. In addition, thirty-five countries also released stocks at subsidized prices.⁵³

The use of direct market interventions goes against the typical recommendations put forward by economists and policy analysts since the early 1980s.⁵⁴ In the immediate post-WWII period, the focus of public policy was ensuring price stability for agricultural commodities through the use of production, border, and stock controls.⁵⁵ Policy instruments included, *inter alia*, input subsidies, import and export taxes, and public buffer stocks.⁵⁶ Protection of the agricultural sector by developed countries, along with the extensive use of farm subsidies, had the effect of depressing international commodity prices, with the knock-on effect of reducing the incomes of farmers in developing countries.⁵⁷ Given that three-quarters of the world's poorest people live in low-income countries, with agriculture being a major source of their income, such policies only added to global income inequality and poverty.⁵⁸ At the same time, many developing countries taxed their agricultural sector, further reducing farmers' incentives.⁵⁹

The late D. Gale Johnson famously described this situation as one of "disarray in world agriculture," where there was over-production of agricultural products in developed countries, under-production in developing countries, and less international trade than would have occurred under free trade, with thin markets exhibiting greater price

53. See Mulat Demeke, Guendalina Pangrazi & Materne Maetz & UNITED NATIONS FOOD & AGRIC. ORG., COUNTRY RESPONSES TO THE FOOD SECURITY CRISIS: NATURE AND PRELIMINARY IMPLICATIONS OF THE POLICIES PURSUED 1, 5 (2009).

54. See Christophe Gouel, *Food Price Volatility and Domestic Stabilization Policies in Developing Countries 2* (Nat'l Bureau of Econ. Rsch., Working Paper No. 18934, 2013).

55. See *id.* at 29–31.

56. See *id.* at 11–13.

57. See Kym Anderson, *Krueger, Schiff, and Valdés Revisited: Agricultural Price and Trade Policy Reform in Developing Countries since 1960*, 32 APPLIED ECON. PERSPECTIVES & POL'Y, 195, 196 (2010).

58. See THE WORLD BANK, WORLD DEVELOPMENT REPORT: AGRICULTURE FOR DEVELOPMENT 1–2 (2008).

59. See Anderson, *supra* note 57, at 197.

volatility.⁶⁰ Tyers and Anderson have calculated that the instability of international food prices in the early 1980s was three times greater than it would have been under free trade.⁶¹ Key to the policy decision-making was the nominal rate of assistance (NRA) given to farmers in developed compared to developing countries up to the late 1980s. The NRA is measured as the percentage by which government farm policies raise (lower) gross returns to farmers above (below) what they would be without government intervention.⁶²

For developed countries, over the period from 1955 to 1989, the NRA to farmers rose from 23 to 55 percent; for developing countries, it fell from -24 to -16 percent over the same period, i.e., the former subsidized their farmers while the latter taxed them.⁶³ Note that after 1989, agricultural NRAs fell in developed countries following reform of their farm policies, while they became modestly positive in developing countries as the latter have increased agricultural import protection.⁶⁴

After 1980, however, the use of direct market intervention fell out of favor for both economic and political reasons.⁶⁵ The economic argument put forward against attempting to stabilize agricultural commodity prices was twofold.⁶⁶ First, prices should be allowed to play their role as a signal for production, trade, and storage decisions.⁶⁷ Second, economists argued that instability of agricultural producer's incomes could be increased through stabilizing prices.⁶⁸ This follows from the fact that agricultural production and price levels are negatively correlated, which provides a form of insurance to farmers.⁶⁹ Given that instability of producer income is the variance of price multiplied by production, price and production risks partially offset each other, prices being (low) when production is low (high).⁷⁰ Therefore, policies aimed at price stabilization have the potential to increase producer income instability.⁷¹

Instead, current policy advice recommends that agricultural producer incomes should be stabilized through market-based risk-management instruments such as futures and options contracts and weather index insurance, in combination with public provision of

60. See D. GALE JOHNSON, *WORLD AGRICULTURE IN DISARRAY* 17–27 (Palgrave Macmillan London 1973); Anderson, *supra* note 57, at 197.

61. See TYERS & ANDERSON, *supra* note 43, at 225–26.

62. Anderson, *supra* note 57, at 200.

63. See *id.* at 212–16.

64. See *id.* at 216.

65. See Franck Galtier, *Which Instruments Best Tackle Food Price Instability in Developing Countries?*, 21 DEV. PRACTICE 526, 529 (2011); Gouel, *supra* note 54, at 2.

66. See Gouel, *supra* note 54, at 7–10.

67. See *id.* at 7–8.

68. See *id.* at 8.

69. See *id.* at 30.

70. See *id.* at 8–9; David M.G. Newbery & Joseph E. Stiglitz, *The Theory of Commodity Price Stabilisation Rules: Welfare Impacts and Supply Responses*, 89 ECON. J. 799, 802–08 (1979).

71. See Newbery & Stiglitz, *supra* note 70, at 811–12, 816.

safety nets targeted at maintaining the purchasing power of vulnerable rural and urban households.⁷² In addition, there should be support for long-run productivity growth in agriculture through investment, and trade and private storage should be relied on to take care of market shortages.⁷³

However, what has been termed “best practice” came under considerable criticism in the aftermath of the 2008 food price spike.⁷⁴ Specifically, some argued that risk management tools are often unavailable in developing countries, safety nets have proven too complex to use, and poor food-importing countries have been hurt the most during food price spikes, even as they have attempted to rely on world markets.⁷⁵ It is not surprising, therefore, that despite the recommendations of economists and institutions such as the World Bank, direct intervention to stabilize food prices is, and has been, widespread among developing countries over the past two decades.⁷⁶

C. *The Impact of High Food Prices*

The typical justification for public intervention targeted at food price instability is based on the assumption that markets for insuring against price risks are incomplete.⁷⁷ However, according to standard economic theory, the benefits of stabilizing food prices are relatively small for consumers and are sensitive to both the degree of consumer risk aversion and the share of food expenditure in their budgets.⁷⁸ With downward-sloping demand curves and no income effects, the consumer surplus gains from low food prices more than compensate for surplus losses from high food prices.⁷⁹ This implies that stabilizing food prices at the mean will be harmful to consumers in developed countries where only a small proportion of their income is devoted to food consumption, although the welfare losses would be very small.⁸⁰ In the case of consumers in developing countries, allowing for both high food budget shares and risk aversion, the welfare gains from price stabilization still tend to be small for the range of food price volatility experienced in world food markets.⁸¹

72. See Gouel, *supra* note 54, at 2, 22–23.

73. See *id.* at 2–3.

74. See C. Peter Timmer, *Behavioral Dimensions of Food Security*, 109 PROC. NAT'L ACAD. SCIENCE, 12315, 12318 (2012).

75. See Gouel, *supra* note 54, at 2, 22.

76. See *id.* at 2.

77. See *id.* at 22 (“[T]he case for public intervention is based not on excessive volatility, but on people’s lack of capacity to deal with this risk.”).

78. See *id.* at 5–6.

79. See *id.* at 5–6, 7–8.

80. See *id.*

81. See C. L. Gilbert & C. W. Morgan, *Food Price Volatility*, 365 PHIL. TRANSACTIONS ROYAL SOC'Y 3023, 3027 (2010).

In the case of producers, it is important to recognize that in developing countries, rural households often produce food for their own consumption, and, as a result, their production and consumption choices are interdependent, which has substantial implications for the welfare effects of price volatility.⁸² In particular, the impact of price volatility for such households depends on whether they are net producers or net consumers of food and the size of the food surplus or deficit they face.⁸³ For poor net food buyers who are risk-averse and spend a large proportion of their income on food, price fluctuations are modestly welfare-reducing.⁸⁴ In the case of net food sellers, they may benefit from less price volatility, as it helps to stabilize a significant share of their income, given they make production decisions before price uncertainty is resolved.⁸⁵

If reducing food price volatility is not necessarily socially optimal, it is reasonable to ask why there was so much focus on the issue during and following the 2008 price spike, as well as more recently. For example, in 2011, during France's leadership of the G20, former president Nicholas Sarkozy specifically focused on tackling instability in global commodity markets, noting that: "If we don't do anything we run the risk of food riots in the poorest countries . . . The day there are food riots, what country at the G20 table will say this does not concern them?"⁸⁶

At the time, economists pointed out that international leaders, including Sarkozy, were making the mistake of combining concerns about high food prices and food price volatility, and, as a result, made three errors of fact.⁸⁷ First, while real food prices have exhibited spikes in the past two decades, it is not clear that there has been a similar problem with increased food price volatility.⁸⁸ Second, the effects on consumers and producers of food price spikes and food price volatility are quite different—the former may hurt poor consumers by reducing their purchasing power, while benefiting food producers, and, as noted earlier, the latter may hurt food producers. Third, blaming political unrest on food price volatility as opposed to high food prices is not supported by empirical evidence. In other words, for consumers in developing countries, it is high food prices that matter, not price volatility.

82. See Gouel, *supra* note 54, at 6–7.

83. *Id.* at 6.

84. *Id.*

85. *Id.*

86. Andrew Willis, *French G20 Leadership to Focus on Commodity Prices*, EUOBSERVER (Jan. 24, 2011), <https://euobserver.com/news/31693> [<https://perma.cc/BA42-3PWA>] (archived Sept. 17, 2023).

87. See Christopher B. Barrett & Marc F. Bellemare, *Why Food Price Volatility Doesn't Matter*, FOREIGN AFFS. (July 12, 2011), <https://www.foreignaffairs.com/world/why-food-price-volatility-doesnt-matter> [<https://perma.cc/9ELY-QM5V>] (archived Sept. 17, 2023).

88. See Gilbert & Morgan, *supra* note 81, at 3023–24.

Casual empiricism would certainly seem to support this claim. Descriptive research using the Food and Agricultural Organization Food Price Index from January 2004 to May 2011 finds that the timing of reported food price riots over the period coincided with food price spikes.⁸⁹ For example, in 2008, sixty food price riots occurred worldwide, ten of which resulted in multiple deaths; larger protests followed in 2011 in North Africa and the Middle East, known as the “Arab Spring.”⁹⁰ These observations are consistent with the idea that high global food prices could be correlated with social unrest. Of course, correlation does not necessarily imply causation, as such unrest can be the result of a variety of factors including poverty, unemployment, and social injustice. However, other research using monthly data and the appropriate statistical methods has found that food price increases resulted in increased social unrest over the period from January 1990 to December 2011, while food price volatility over the same period was not associated with social unrest.⁹¹

Why, then, are policymakers in developing countries so concerned about high food prices? Given that poor households spend a large share of their incomes on food, when food prices rise, their purchasing power falls more than households on higher incomes.⁹² It is important to note that with 75 percent of the world’s poor living in rural areas, where many are also farmers, high food prices are not necessarily unambiguously bad for the poor.⁹³ What matters is whether rural households are net consumers or net producers of food, and also whether higher food prices eventually stimulate increased agricultural production, resulting in higher wages being paid to unskilled agricultural labor, thereby lifting them out of poverty.⁹⁴ However, empirical research has found that even allowing for increased production in the long run, higher food prices typically raise poverty.⁹⁵

Social unrest over high food prices is a signal of significant economic hardship for poor households, who often adapt by reducing their intake of food and nutrients. This may result in significant long-term effects on “education[al] outcomes, cognitive skills, and adult economic achievement,” and the available empirical evidence indicates

89. See Marco Lagi, Karla Z. Bertrand & Yaneer Bar-Yam, *The Food Crises and Political Instability in North Africa and the Middle East*, at 3 (Aug. 10, 2011) (Manuscript, New England Complex Systems Institute) (SSRN).

90. See *id.* at 4.

91. See Marc F. Bellemare, *Rising Food Prices, Food Price Volatility, and Social Unrest*, 97 AM. J. AGRIC. ECON., 1, 1–3 (2015).

92. See Martin, *supra* note 46, at 12.

93. See *id.* at 12, 29.

94. See Martin Ravallion, *Rural Welfare Effects of Food Price Changes under Induced Wage Responses: Theory and Evidence for Bangladesh*, 42 OXFORD ECON. PAPERS 574, 574–76 (1990).

95. See Will Martin & Maros Ivanic, *Food Price Changes, Price Insulation, and Their Impacts on Global and Domestic Poverty*, in *FOOD PRICE VOLATILITY AND ITS IMPLICATIONS FOR FOOD SECURITY AND POLICY* 101, 105–07 (Matthias Kalkuhl, Joachim von Braun & Maximo Torero eds., 2016).

poorly nourished children perform less well in school.⁹⁶ Also, as poor households seek to protect their food intake, they reduce their expenditures on child schooling and health services, with the potential of preventing the accumulation of human capital; i.e., the welfare losses from high food prices may compound over time.⁹⁷

Clearly, such social costs cannot be compensated for during subsequent periods of low food prices. Importantly, politicians in developing countries must react to food price spikes, especially where there are large populations of poor people. For example, in his successful re-election campaign in 2009, Prime Minister Manmohan Singh emphasized how he had limited the impact of the 2008 food crisis on India, while Haitian Prime Minister Jacques-Édouard Alexis was forced to resign in 2008 for failing to keep down the price of rice, with Haiti importing 82 percent of its rice requirements.⁹⁸

D. *Food Prices and Trade Policy*

As noted above, poor households are affected not so much by food price volatility but rather high food prices. Therefore, policymakers should only intervene in markets when food prices are high. However, high food prices are only one component of price volatility, i.e., volatility is only a meaningful concept if there are also periods of low prices which may hurt producers. Consequently, one would expect to observe policy interventions during periods of both high and low food prices, where, in the former, the concern is for consumer welfare, while, in the latter, it is for producer welfare. The available empirical evidence certainly supports this hypothesis, with trade policies for a sample of seventy-five countries being adjusted by similar magnitudes in response to both the upward price spikes of the mid-1970s and mid-2000s, as well as the downward price spike of the mid-1980s.⁹⁹

1. Political Economy Framework

To tie observed policy choices back to the idea that policymakers care about the impact of food prices, it is necessary to have a political-

96. Gouel, *supra* note 54, at 8; see Anna D'Souza & Dean Jolliffe, *Rising Food Prices and Coping Strategies: Household-Level Evidence from Afghanistan*, 48 J. DEV. STUD., 282, 296 (2012) ("Micronutrient deficiencies have been linked to negative outcomes for children and adults . . . recent literature highlights the links between early childhood nutrition and cognitive development."); Paul Glewwe, Hanan G. Jacoby & Elizabeth M. King, *Early Childhood Nutrition and Academic Achievement: A Longitudinal Analysis*, 81 J. OF PUB. ECON. 345, 347 (2001).

97. See Robert J. Myers, *On the Costs of Food Price Fluctuations in Low-Income Countries*, 31 J. FOOD POL'Y 288, 288–91 (2006).

98. See Gouel, *supra* note 54, at 2; see also Bellemare, *supra* note 91, at 1 (discussing the connection between periods of extreme food volatility and social unrest, which resulted in Haitian Prime Minister Jacques-Édouard Alexis resigning in 2008).

99. See Kym Anderson & Signe Nelgen, *Trade Barrier Volatility and Agricultural Price Stabilization*, 40 WORLD DEV. 36, 37–45 (2012).

economy structure that can explain why countries unilaterally act to insulate their domestic market from international price fluctuations. The most convincing framework draws on the approach to decision-making under risk originally developed by Nobel Prize-winning behavioral economists Amos Tversky and Daniel Kahneman. Their key insight is that there are three characteristics of an individual's behavior that are not included in orthodox utility theory: first, economic gains and losses relative to a reference point matter; second, individuals exhibit loss aversion in the sense that economic losses have a larger effect on their welfare than corresponding gains; and third, the marginal value of economic gains and losses decreases with their size.¹⁰⁰ Originally incorporated into a trade model accounting for protection of producers,¹⁰¹ it has been subsequently extended to analysis of both food consumers and producers where the world food market is affected by both positive and negative price shocks.¹⁰²

The structure of the model is one where, for a small open economy, a manufactured good is produced using labor only, while food is produced using labor and land, the price of food affecting the return to owners of that land.¹⁰³ The economy imports the manufactured good and exports food at the world price P^* . A small fraction of the population are landowners, their utility being a function of the price they receive for supplying food, their consumer surplus, and government transfers. The remaining population are workers, their utility being a function of their wage income, consumer surplus, and government transfers. Importantly, the utility functions of both landowners and workers are adjusted by a behavioral component designed to reflect reference dependence and loss aversion.¹⁰⁴

In the case of workers, their reservation utility corresponds to a specific reference food price \bar{P} , consistent with a subsistence level of consumption. If there is a positive spike in food prices such that $P > \bar{P}$, the expected utility of workers falls below the reference point, with additional welfare losses being incurred. If, instead, food prices are low, such that $P < \bar{P}$, workers get no additional utility. Landowners have a reference price, \underline{P} , such that if there is a negative spike in prices, $P < \underline{P}$, they suffer a loss of welfare, while a positive spike in food prices, $P > \underline{P}$, generates no additional utility.¹⁰⁵

100. See Amos Tversky & Daniel Kahneman, *Loss Aversion in Riskless Choice: A Reference-Dependent Model*, 106 Q. J. ECON. 1039, 1046–50 (1991).

101. See Caroline Freund & Çağlar Özden, *Trade Policy and Loss Aversion*, 98 AM. ECON. REV. 1675, 1677 (2008).

102. See generally Paolo E. Giordani, Nadia Rocha & Michele Ruta, *Food Prices and the Multiplier Effect of Export Policy* (World Trade Org., Staff Working Paper No. ERS-2012-08, 2012).

103. See *id.* at 5. A small open economy is unable to influence the world price of food.

104. See *id.* at 6.

105. See *id.* at 6–7.

Social welfare for this economy consists of the sum of labor income, the return on land, consumer surplus, and government revenue. The government then sets export policy to maximize social welfare, taking account of society's aversion to any welfare losses. It turns out that the optimal export policy in the presence of loss aversion depends on the world price of food P^* . If the world price of food takes an intermediate value, $\underline{P} \leq P^* \leq \bar{P}$, the optimal trade policy is free trade. If instead there is a positive food price spike $P^* > \bar{P}$, the optimal trade policy is an export tax set to maintain the domestic price of food facing workers at the reference level \bar{P} .¹⁰⁶ Finally, if there is a negative food price spike, $P^* < \underline{P}$, the optimal trade policy is an export subsidy, the objective being to maintain the domestic price of food facing landowners at the reference level \underline{P} .¹⁰⁷

2. Non-Cooperative Trade Policy Choices

Therefore, accounting for loss aversion on the part of workers and landowners can rationalize observed policy responses to both positive and negative food price spikes.¹⁰⁸ Importantly, with countries unilaterally reacting to a world food price increase through application of an export tax (or export restriction), this simply exacerbates the initial price shock, giving rise to a multiplier effect whereby exporters implement additional export taxes (export restrictions).¹⁰⁹ Suppose there is an exogenous shock to the world price of food under free trade, driving it above the worker reference price, $P_n^* > \bar{P}$. The policymaker in each exporting country responds by imposing an export tax to protect their workers/consumers by maintaining the domestic food price at \bar{P} .¹¹⁰ However, as all exporters face the same incentive, there is a multiplier effect where they all impose export taxes, thereby pushing up the world price of food, which then starts off another round of higher export taxes, further pushing up world food prices.¹¹¹

This “beggar-thy-neighbor” result has been highlighted by, *inter alia*, trade economists Will Martin and Kym Anderson who have suggested that in using trade restrictions:

Insulation generates a classic collective-action problem akin to when a crowd stands up in a stadium to get a better view: no

106. *See id.*

107. *See id.* at 7–9.

108. *See id.* at 10.

109. *See id.*

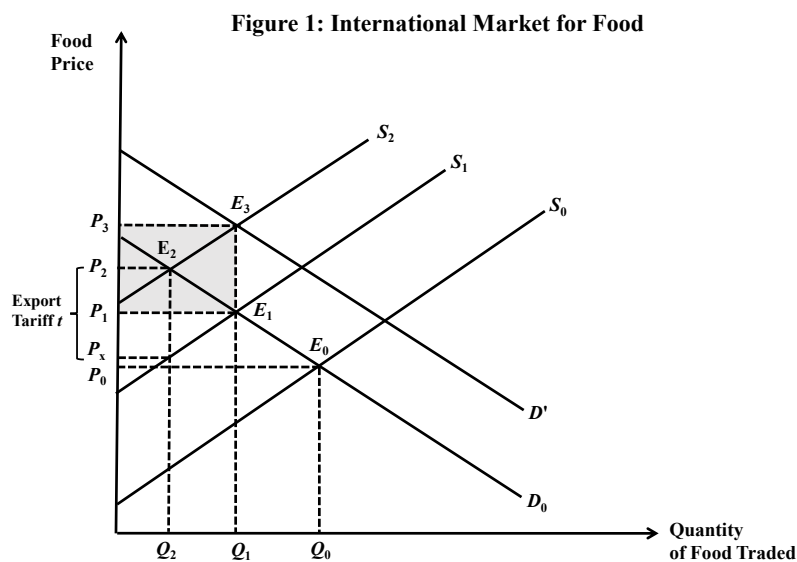
110. *Id.*

111. *Id.*

one gets a better view by standing, but any that remain seated get a worse view.¹¹²

The collective action problem here is one where countries would be better off cooperating not to use export policies, but in the absence of any mechanism to enforce that cooperation, countries apply such policies unilaterally. Individual countries do this to protect themselves from high world food prices, even though the result is even higher world food prices for all countries.¹¹³

As already noted, if multiple exporters use interventionist trade policy, it generates a global public bad through even higher world food prices. This is illustrated with reference to Figure 1, which describes the international market for food. In a normal year, world market equilibrium is the intersection at E_0 of the world supply and demand curves, S_0 and D_0 respectively, with Q_0 being the amount traded at the world price P_0 .¹¹⁴



112. See Will Martin & Kym Anderson, *Export Restrictions and Price Insulation During Commodity Price Booms*, 94 AM. J. AGRIC. ECON. 422, 422–23 (2011).

113. See *id.*; MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* 36–39 (Harvard Univ. Press 1971); Will Martin & Kym Anderson, *Export Restrictions and Price Insulation During Commodity Price Booms* 6, 12 (World Bank, Pol’y Rsch. Working Paper No. 5645, 2011).

114. See Kym Anderson & Signe Nelgen, *Agricultural Trade Distortions During the Global Financial Crisis*, 28 OXFORD REV. ECON. POL’Y 235, 238–40 (2012).

Now suppose there is an exogenous supply shock at a time when food storage levels are also at low levels.¹¹⁵ As a result, the supply shifts to S_1 , and without any policy intervention, the equilibrium shifts from E_0 to E_1 , Q_1 being the amount of food traded at a higher world price of P_1 . Based on the political-economy framework outlined, policymakers in food exporting countries implement an export tax t (export restriction), shifting the export supply curve to S_2 , moving the market equilibrium to E_2 , the world price increasing further to P_2 . Importantly, from the policymaker's perspective, this drives the domestic price of food down to P_x , which lies below the price P_1 , i.e., exporting countries provide some insulation to their workers/consumers from the initial exogenous supply shock.¹¹⁶

Even if each exporting country is individually small, their combined reactions to the supply shock reduces food exports to Q_2 . The aggregate tariff revenue generated by export taxes is given by the per unit export tax t multiplied by the level of food exports Q_2 , but importing country workers/consumers now face the higher world food price P_2 , while exporting country producers face the lower price of P_x .¹¹⁷ Note that an export quota set at Q_2 will have the same effect on the world price, except that the wedge between P_2 and P_x is now per unit quota rent, which in the absence of any auction mechanism could be totally captured by export license holders or, in some cases, the political elite.¹¹⁸

As noted earlier, many food importing countries responded to price spikes in 2008 by reducing their barriers to imports in response to rising world prices.¹¹⁹ Assuming exporting countries have already intervened after the exogenous supply shock, the policy choice of importing countries shifts the import demand curve from D_0 to D' , the new market equilibrium being E_3 . As a result, the world price rises to P_3 , and the domestic price in the exporting country rises to P_1 , Q_1 being the quantity of food traded. By construction, these policy choices result in the same quantity of food being traded as compared to the initial supply shock, but at a higher world price. Importantly, due to the terms-of-trade effect, there is an economic transfer from food importing

115. See Angus Deaton & Guy Laroque, *On the Behaviour of Commodity Prices*, 59 REV. ECON. STUD. 1, 1–4 (1992) (showing, through research, that the prices of storable agricultural commodities are characterized by long stable periods, punctuated by short but intense price spikes).

116. See Anderson & Nelgen, *supra* note 114, at 239–40.

117. See *id.* at 239–40.

118. See Murray E. Fulton & Travis Reynolds, *The Political Economy of Food Price Volatility: The Case of Vietnam and Rice*, 97 AM. J. AGRIC. ECON. 1206, 1214–16 (2015). In the case of the Vietnamese rice sector, export market access is controlled by the Vietnam Food Association (VFA) who stopped granting export contracts in late-2007 early 2008. At the same time large state-owned enterprises (SOEs) got the lion's share of the remaining export contracts, generating significant quota rents, which in turn benefited Vietnam's political elite. See *id.* at 1213–14.

119. See Demeke, Pangrazio & Maetz, *supra* note 53, at 4.

to food exporting countries equal to the shaded area $P_1E_1E_3P_3$.¹²⁰ Redistribution occurs due to the combined effect of export and import policies after the initial exogenous supply shock: exporting country producers and consumers receive/pay the price of P_1 , while importing country consumers pay the higher world price of P_3 , i.e., there is an income transfer from importing to exporting countries.

Given the number of developing countries that implemented trade policies during the run-up of food prices between 2006 and 2008, it is unsurprising that there is strong empirical evidence of a serious collective action problem. For example, one study found that of the 113, 83 and 70 percent increases in the prices of rice, maize, and wheat, respectively, between 2006 and 2008, trade restrictions accounted for 40, 10 and 19 percent of those increases.¹²¹

Note, however, that attempts to insulate domestic markets from world food price spikes may be partially effective if not all countries intervene, and especially if those that insulate have large poor populations. Empirical evidence suggests that for the 2006 to 2008 run up in food prices, the collective effect of trade interventions reduced the global poverty headcount by around 56 million, with the burden of higher food prices being exported to other developing as well as developed countries.¹²² However, the same study also points out that, due to exacerbation of the world food price spike, countries that chose to insulate through border policies would have experienced a lower increase in food prices if they had not directly intervened in the first place.¹²³

3. Resolution of the Collective Action Problem?

The analysis presented suggests if individual policymakers believe unilateral use of export policies to insulate their populations from high world food prices is effective, it may be difficult to place disciplines on such non-cooperative policies, despite driving up prices even further.¹²⁴ The key to this possibility is that in a standard model of trade policy coordination, trade policy adjustments are positively correlated with trade volumes, while for food production, trade policy adjustments are negatively correlated with price spikes.¹²⁵

120. See Anderson & Nelgen, *supra* note 114, at 240.

121. See *id.* at 254.

122. See Kym Anderson, Maros Ivanic & William J. Martin, *Food Price Spikes, Price Insulation, and Poverty*, in *THE ECONOMICS OF FOOD PRICE VOLATILITY* 311, 324–30 (Jean-Paul Chavas, David Hummels & Brian D. Wright eds., Univ. Chicago Press 2014).

123. See *id.* at 330–34.

124. See Gouel, *supra* note 54, at 3.

125. See Christophe Gouel, *Trade Policy Coordination and Food Price Volatility*, 98 AM. J. AGRIC. ECON. 1018, 1018–20 (2016) (hereinafter Gouel, *Trade Policy Coordination*).

In the standard model, with no cooperation, countries have a unilateral incentive to implement import tariffs (import quotas), thereby improving their terms-of-trade.¹²⁶ With cooperation, lower levels of import protection can be sustained in what can be thought of as “normal periods” of trade volume. However, during periods of high trade volume, there is a greater incentive for countries to deviate and seek to protect themselves from terms-of-trade losses. To prevent reversion to the non-cooperative high import tariff (import quota) equilibrium, countries cooperate over the use of “special” protection during surges in trade volume, i.e., there is “managed” trade.¹²⁷

In the case of food production, the focus of policymakers is on insulating their domestic markets from global price spikes rather than maintaining their terms-of-trade in the face of changing trade volumes. How this plays out is sensitive to the asymmetric distribution of food prices, with more prices below than above the mean, but with occasional spikes.¹²⁸ Without cooperation, food importing countries will utilize trade policy more frequently because of the concentration of prices below the mean—essentially what developed countries did prior to the 1990s.¹²⁹ However, with cooperation, a food exporting country has a greater incentive to deviate because positive deviations of food prices from the mean are larger than negative ones.¹³⁰ Therefore, asymmetry of the distribution of food prices could make it more difficult to discipline export taxes than import tariffs in trade agreements.

E. *Food Prices and Safety Nets*

The evidence that use of trade restrictions by developing countries has been largely self-defeating has resulted in many analysts recommending that effective WTO disciplines be implemented with respect to the use of export restrictions.¹³¹ In addition, others appeal to the post-1980s orthodoxy that recommends use of public safety nets to protect vulnerable populations in developing countries.

Safety nets are non-contributory targeted transfers designed to maintain the purchasing power of poor households and thereby prevent

126. See Kyle Bagwell & Robert W. Staiger, *A Theory of Managed Trade*, 80 AM. ECON. REV. 779, 781–83 (1990).

127. See *id.* at 780.

128. See Deaton & Laroque, *supra* note 115, at 2–3.

129. See Gouel, *supra* note 54, at 31; Gouel, *Trade Policy Coordination*, *supra* note 125, at 1019

130. See Gouel, *Trade Policy Coordination*, *supra* note 125, at 1018 (“Such use can be so widespread that the high levels reached by international prices could be seen as a consequence of these interventions, and the restrictions can be so stringent that they can lead to the near disappearance of the world market, as happened to the rice market over nine months in 1973.”).

131. See Martin & Anderson, *supra* note 113, at 426–27.

them from falling into poverty after a price shock.¹³² Such policy instruments range from cash transfers and food stamps to food-for-work and cash-for-work programs. They are often seen as being complementary to price stabilization policies that may be insufficient in protecting the purchasing power of the poor.¹³³ A reduction in the real income of households that spend a large proportion of their income on food can be placed in the context of Nobel Prize winner Amartya Sen's approach to the economics of poverty and famines. Amartya's approach focuses on an individual's entitlements to commodity bundles including food and individuals suffering from starvation as they are unable to get access to a bundle containing enough food.¹³⁴ If local food prices rise, there is pressure on the purchasing power of the poor; therefore, safety nets are a means of maintaining that purchasing power.¹³⁵

When governments of developing countries utilize safety nets to provide insurance to poor households, they face fiscal, targeting, and implementation constraints.¹³⁶ This compares to trade policies that are easily implemented, possibly less costly, and apparently politically effective.¹³⁷ Nevertheless, empirical evidence shows that that in response to the 2006 to 2008 run up in food prices, twenty-three countries used cash transfers, nineteen used food assistance, and sixteen used policies to increase disposable income.¹³⁸

Even though many developing countries' safety nets are not considered adequate,¹³⁹ they have in some cases been crucial in protecting the poor from food price increases. For example, programs exist such as *Progres*a in Mexico, where cash is provided to households, conditional on children attending school and household members getting regular health check-ups, and Bangladesh's Public Food Distribution System (PFDS) which makes grains available to poor households who would otherwise not have access to enough food, as well as distributing food during emergency situations.¹⁴⁰

132. Gouel, *supra* note 54, at 23.

133. *See id.* at 23–24.

134. *See* AMARTYA SEN, POVERTY AND FAMINES: AN ESSAY ON ENTITLEMENT AND DEPRIVATION 45–48 (Oxford Univ. Press 1981).

135. *See* Harold Alderman & Trina Haque, *Countercyclical Safety Nets for the Poor and Vulnerable*, 31 FOOD POL'Y 372, 372–73 (2006).

136. *See id.* at 381.

137. *See* Gouel, *supra* note 54, at 23–24.

138. *See* Demeke, Pangrazio & Maetz, *supra* note 53, at 10.

139. *See* Margaret Grosh, Colin Andrews, Rodrigo Quintana & Claudia Rodriguez-Alas, *Assessing Safety Net Readiness in Response to Food Price Volatility* 9–13 (World Bank Soc. Prot. & Lab., Discussion Paper No. 1118, 2011).

140. *See* Demeke, Pangrazio & Maetz, *supra* note 53, at 12–15.

F. *Trade Policy vs. Safety Nets*

Both trade policies and safety nets are being used as substitutes for private insurance mechanisms that are not being provided by the market in developing countries. To use the jargon of economics, a world where private, market-based contracts can be written against any future contingency is efficient and is therefore the “first-best” outcome.¹⁴¹ However, without functioning insurance markets, the optimal policy for a small open economy may not be free trade.¹⁴² If contingent contracts do not exist, any attempt by policymakers to provide insurance is likely to create market inefficiencies, therefore, trade policies and safety nets are “second-best” policy instruments and should be judged accordingly.

Even if a social protection program could achieve the same allocation of resources as a world with contingent contracts, it is still possible for such a scheme to exacerbate a food price shock. Under such a scheme, when food prices are high, income is transferred from net food producers who face a positive income shock to net food consumers who face a negative income shock and vice versa when food prices are low.¹⁴³ However, such a scheme may not be consumption-neutral if income is transferred to households that have a higher propensity to spend that income on food. In this case, there will be an increase in the aggregate domestic consumption of food, with implications for world supply and prices. In other words, if an optimal social protection scheme could have “beggar-thy-neighbor” effects, then so will publicly supplied safety nets.¹⁴⁴ Empirical evidence suggests that the size of such effects will be a function of the type of transfer (i.e., cash vs. in-kind), how responsive the supply of food is to higher prices, and how integrated into the world market is the economy in question.¹⁴⁵

The key point of this discussion is that when poor consumers are unable to insure themselves against high food prices, both trade policies and public safety nets can intensify food price spikes. While it may be the case that trade policies tend to overreact to price spikes, and safety nets tend to underreact, the conclusion to be drawn here is that trade policies should not be dismissed out of hand as inefficient; instead, their effects should be evaluated relative to other policies that may also generate negative effects on the world market.¹⁴⁶

141. See Christophe Gouel & Sébastien Jean, *Optimal Food Price Stabilization in a Small Open Developing Country*, 29 *WORLD BANK ECON. REV.* 72, 76–81 (2015).

142. See *id.* at 75.

143. See Quy-Toan Do, Andrei A. Levchenko & Martin Ravallion, Trade Insulation as Social Protection, in *THE ECONOMICS OF FOOD PRICE VOLATILITY* 345, 345–48 (J. Chavas, D. Hummels & B. Wright eds., Univ. Chicago Press 2014).

144. See *id.* at 346–47.

145. See Jesse M. Cunha, Giacomo De Giorgi & Seema Jayachandran, *The Price Effects of Cash Versus In-Kind Transfers* 1–5 (Nat'l Bureau of Econ. Rsch., Working Paper No. 17456, 2011).

146. See Do, Levchenko & Ravallion, *supra* note 143, at 346–47.

Importantly, in the absence of public food safety nets, export restrictions are frequently used by policymakers seeking to insulate workers-consumers from high food prices. However, notwithstanding the political efficacy of trade policies, their destabilizing effect on world food markets is well-understood, emphasizing the need for a cooperative response to their use at the multilateral level.¹⁴⁷

III. AGRICULTURE AND THE GATT/WTO

The previous part of this Article indicates that export restrictions are often used by countries to control domestic prices for food even though such restraints lead to higher prices on the world market for the same products. Export restraints present a collective action problem, as individual nations have an incentive to act in their own self-interest in imposing export restrictions, while there is a disincentive for all nations to act collectively to refrain from their use. Despite their overall negative effect, nations have an incentive to use export restrictions to deal with exogenous supply shocks in the absence of better alternatives such as market-based risk-management techniques and safety nets. As the negative effects of export restrictions, as well as the incentives of nations to use them, are generally acknowledged and well-understood, the question arises of whether legal rules exist in the international legal order to limit or prohibit the use of export restrictions. The first place that nations will look for such rules is in the GATT/WTO.

An examination of the GATT/WTO agreements indicates, however, that the bulk of its provisions deal with import controls and that the agreements only consider export controls in a few and limited contexts. The relative paucity of rules on export controls within the GATT/WTO can be traced to two main historical themes: (1) the focus of the GATT in the post war period on reducing import trade barriers; and (2) the special and protectionist treatment that nations reserved for agriculture from the very beginnings of the GATT/WTO.

A. *Import Trade Barriers and the GATT*

In the years preceding the Second World War, nationalism and protectionism in international trade reached an apex.¹⁴⁸ During the Great Depression and global recession of the 1930s, nations erected trade barriers that prevented trade.¹⁴⁹ In the United States, the U.S. Congress passed the Smoot-Hawley Tariff Act of 1930, which imposed an effective average tariff of 53% on imports.¹⁵⁰ Other nations

147. See Gouel & Jean, *supra* note 141, at 98.

148. See Chow, *supra* note 20, at 507.

149. See CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 10.

150. *Id.*

retaliated with similarly draconian tariffs.¹⁵¹ These protectionist trade barriers stymied international trade, which was their intended purpose.¹⁵² During this chaotic and turbulent period, nations viewed each other with suspicion and mistrust.¹⁵³ These protectionist policies and sentiments contributed to the eruption of the Second World War and its immensely destructive impacts on the global economy.¹⁵⁴

After the end of the war, a group of nations gathered in Bretton Woods, New Hampshire, to create a blueprint on how to prevent such disastrous trade policies from triggering another global conflict.¹⁵⁵ The Bretton Woods nations envisioned a post-war triumvirate of international organizations that would instill discipline in economic, fiscal, and trade policies.¹⁵⁶ The World Bank would lend money to developing countries to modernize their economies and to European allies for the reconstruction of Europe.¹⁵⁷ The International Monetary Fund would instill discipline into the management of national currency exchange rates.¹⁵⁸ A third organization, the International Trade Organization (ITO) would help to reduce barriers to international trade, but the ITO failed to win approval due to opposition from the U.S. Congress.¹⁵⁹ To jumpstart liberalization in the international trade in goods, the Bretton Woods nations implemented, on a provisional basis, the GATT 1947 that would be administered by the ITO.¹⁶⁰ In 1995 the World Trade Organization was established to assume the role originally intended for the ITO.¹⁶¹

The focus of the GATT 1947 was squarely on dismantling import trade barriers and paid little attention to export restrictions. To reduce import tariffs, the GATT led successive rounds of negotiations among GATT contracting states that were a resounding success in reducing tariffs to new historical lows.¹⁶² When the World Trade Organization was established in 1995, WTO members turned their attention to other trade issues, such as intellectual property, the needs of developing

151. *See id.*

152. *See id.*

153. *See* Chow, *supra* note 20, at 507–08.

154. *See* Hunter Nottage, *Trade in War's Darkest Hour: Churchill and Roosevelt's Daring 1941 Atlantic Meeting that Linked Global Economic Cooperation to Lasting Peace and Security*, 49 VICTORIA UNIV. WELLINGTON L. REV. 595, 600 (2018).

155. *See id.* at 598; CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 10.

156. *See* CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 10.

157. *See History*, WORLD BANK, <https://www.worldbank.org/en/about/history> (last visited Aug. 23, 2023) [<https://perma.cc/7LAW-YYM5>] (archived Aug. 23, 2023).

158. *See History: Cooperation and Reconstruction (1944–71)*, INT'L MONETARY FUND, <https://www.imf.org/external/about/histcoop.htm> (last visited Sept. 17, 2023) [<https://perma.cc/KL5V-K7GK>] (archived Sept. 17, 2023).

159. *See* CHOW, SCHOENBAUM, & DORRIS, *supra* note 1, at 10.

160. *See The GATT Years: From Havana to Marrakesh*, https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact4_e.htm (last visited Aug. 23, 2023) [<https://perma.cc/YDU2-M97S>] (archived Aug. 23, 2023).

161. *Id.*

162. *See* CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 15, 151–52.

countries, and agriculture.¹⁶³ The lack of attention to export controls remained, which helps to explain there are only a few provisions in the WTO agreements that relate directly to export controls.

B. *History of Agriculture in the GATT/WTO*

A second reason why so few controls on exports of agricultural products exist is because the GATT/WTO has always treated agriculture as a special case.¹⁶⁴ Historically, agriculture was subject to heavy protectionism because it is the major food source for most countries.¹⁶⁵ Many countries believed that it was a matter of national concern to be able to grow their own food and not have to depend on other countries for their supply.¹⁶⁶

Although subject to GATT/WTO rules from the very beginning of the GATT in 1947, trade in agricultural goods was subject to many trade barriers, such as subsidies, and a myriad of border measures including tariffs and many non-tariff barriers that caused many distortions in international trade.¹⁶⁷ The collapse of world agricultural prices during the 1930s during the Great Depression and the need to support domestic agricultural production in the aftermath of the widespread destruction of the Second World War meant that agriculture was singled out for special treatment.¹⁶⁸ Nations violated and ignored GATT rules, often without any justification.¹⁶⁹

There are three categories of common agricultural trade barriers: import trade barriers, domestic support programs, and export subsidies.

1. Import Trade Barriers

Historically, nations imposed many different types of import trade restrictions on agricultural products that are now prohibited under the WTO Agreement on Agriculture: tariffs, quotas, tariff rate quotas, variable levies, import licensing requirements, and minimum import prices.¹⁷⁰ These restrictions were all applied at the border by customs authorities. These import trade barriers reduced market access for

163. See Chow, *supra* note 20, at 508.

164. See CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 279–80.

165. *Id.*

166. See S. 3089, 117th Cong. § 2 (2021) (enacted).

167. See *id.*; *Agriculture: Fairer Markets for Farmers*, WORLD TRADE ORG., https://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm3_e.htm#:~:text=The%20original%20GATT%20did%20apply%20to%20agricultural%20trade%2C,not%20normally%20have%20been%20allowed%20for%20industrial%20products.333%20%C2%A0 (last visited Aug. 23, 2023 [https://perma.cc/476B-JU47] (archived Aug. 23, 2023)).

168. See S. 3089; *Agriculture: Fairer Markets for Farmers*, *supra* note 166.

169. See *Agriculture: Fairer Markets for Farmers*, *supra* note 167.

170. See Agreement on Agriculture art. 4.2 & ann. 5, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 410.

agricultural exports. Market access is important for all countries but especially for developing countries that seek additional markets in which to sell their products.

2. Domestic Support

Many governments provide domestic support in the form of financial payments, research and training programs, pest control, and other forms of assistance.¹⁷¹ Governments are aware that agricultural production is subject to many variables that can be unpredictable (such as weather) and that can cause loss and hardship to farmers.¹⁷² These uncertainties can disrupt agricultural production and a nation's food supply.¹⁷³ To alleviate some of these concerns, many governments provide financial assistance to farmers in the form of direct payments or subsidies.¹⁷⁴

Domestic subsidies, however, can create a trade distortion. For example, agricultural producers who receive government payments are able to lower the price of their products in the domestic market.¹⁷⁵ The price advantage created by these payments can create market entry barriers for foreign agricultural products that are unable to compete on price.¹⁷⁶ The market entry barrier becomes, in effect, an import trade barrier.

Domestic support is very high in certain countries. For example, in 2020, government payments constituted 12% of farm income the United States, 19% in the EU, and 41% in Japan.¹⁷⁷

3. Export Subsidies

An export subsidy is a financial payment contingent upon the export of the product.¹⁷⁸ Under the WTO Subsidies and Countervailing Measures Agreement, export subsidies are illegal per se and are prohibited.¹⁷⁹ However, Article 3 of the Agreement on Subsidies and Countervailing Measures exempts agricultural subsidies and provides that they are subject to the Agreement on Agriculture (AoA), which permits their existence but provides for their gradual elimination.¹⁸⁰

171. See *id.* at arts. 6, 7; CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 280.

172. See Thomas J. Schoenbaum, *Fashioning a New Regime for Agricultural Trade: New Issues and the Global Food Crisis*, 14 J. INT'L ECON. L. 593, 597 (2011).

173. See *id.*

174. See *id.*

175. See CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 289.

176. See *id.* at 280.

177. *Id.* at 446.

178. See Agreement on Subsidies and Countervailing Measures art. 3.1(a), Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 14.

179. See *id.* at art. 3.1.

180. See Agreement on Agriculture, *supra* note 170, at arts. 8–10.

Article 3 is an example of the historical approach of the GATT/WTO in treating agriculture as a special case exempt from general prohibitions on trade restrictions on export subsidies.

An export subsidy is considered harmful in international trade because the subsidy creates a financial advantage for the exporter, which can charge a lower price for its product in the import market.¹⁸¹ This price advantage can harm domestic agricultural industries that may be unable to compete with subsidized export competition. The price advantage of the exports is not the result of efficiencies in production but derive from a government payment that is an intrusion into the market.¹⁸² Such subsidies are inconsistent with free market principles and harm competition.¹⁸³

C. AoA's Approach to Removing Trade Barriers

During the Uruguay Round of negotiations, countries decided to fully integrate agriculture into the GATT/WTO regime and subject trade in agriculture to GATT/WTO discipline.¹⁸⁴ The AoA was the result of these negotiations and was designed to gradually remove these trade distortions.¹⁸⁵ We review the AoA's approach to removing trade barriers below, but note that the AoA contains no prohibitions on export bans or export taxes.

1. The AoA and "Tariffication"

In dealing with import trade barriers, the AoA pursued a two-step approach. First, the AoA pursued a policy of "tariffication," i.e., all WTO members were to convert all other forms of trade barriers into tariffs.¹⁸⁶ The reasoning behind this approach is that tariffs are universally used and are well understood. Exporters can reliably determine GATT/WTO tariffs with accuracy and can then plan on those costs in structuring its transactions. Some other types of import trade barriers, however, were non-transparent and difficult to understand. For example, a variable levy is one that varies in each case in accordance with criteria established by the importing country.¹⁸⁷ These criteria were often opaque, leading to uncertainty and unpredictability in determining the tariff. This type of uncertainty can itself become an impediment to trade as exporters are unable to

181. See CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 446.

182. *See id.*

183. *Id.*

184. *Id.* at 280.

185. Appellate Body Report, *Chile-Price Band System and Safeguard Measures Relating to Certain Agricultural Products*, ¶¶ 4.88–4.89, WTO Doc. WT/DS207/AB/R (adopted Oct. 23, 2002) [hereinafter *Chile-Price Band Appellate Report*].

186. Agreement on Agriculture, *supra* note 170, at art. 4.2.

187. Chile-Price Band Appellate Report, *supra* note 185, at ¶¶ 4.88–4.89; CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 286–87.

determine their costs with confidence in dealing with certain countries and may seek to deal with countries with more predictable import barriers instead.

Once tariffication is complete, the tariffs for all agricultural products are incorporated in each country's tariff schedule that is on file with the GATT/WTO.¹⁸⁸ A second step is then for all countries to negotiate reduction of agricultural tariffs as part of general tariff reduction negotiations, another well-understood process within the WTO.¹⁸⁹ Together, this two-step process—conversion of all trade barriers to tariffs and then negotiations to reduce tariffs—has been notably successful in reducing import trade barriers to trade in agriculture.

2. The AoA and Domestic Subsidies

The AoA approach to domestic subsidies is to divide them into two categories: (1) domestic subsidies that have little or minimal trade-distorting effects or exempt support programs and (2) those that distort trade or non-exempt support programs.¹⁹⁰ For example, a government funded program that provides agricultural research or training is deemed to have few trade effects and is considered an exempt support program. By contrast, a government program that purchases crops that cannot be sold commercially at a government guaranteed minimum price is deemed to be a non-exempt program. The AoA requires WTO members to reduce non-exempt programs but contains no obligations to reduce exempt support programs.

3. The AoA and Export Subsidies

Articles 8-10 of the AoA place limits on the use of export subsidies.¹⁹¹ In December 2015, at the Tenth Ministerial Conference of the WTO, its highest governing body, held in Nairobi, Kenya, WTO members agreed to abolish export subsidies for agricultural products.¹⁹² The elimination of export subsidies was effective immediately for developed countries and for developing countries at the end of 2018.¹⁹³ The WTO has now eliminated all export subsidies in agricultural trade.

188. Schoenbaum, *supra* note 172, at 599.

189. CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 281.

190. *Id.* at 280–81. Domestic subsidies that have little or no trade distorting effects are known as “Green Box” and “Blue Box” subsidies. Domestic subsidies that distort trade are known as “Amber Box” subsidies. *Id.* at 282.

191. Agreement on Agriculture, *supra* note 170, at arts. 8–10.

192. World Trade Organization, Ministerial Declaration on Export Competition, ¶¶ 1–2, WTO Doc. WT/MIN(15)/45—WT/L/980 (Dec. 21, 2015).

193. *Id.* at ¶ 5.

4. Food Security

AoA Article 20 refers to “non-trade concerns” in agriculture.¹⁹⁴ Trade and the environment is one area of non-trade concerns.¹⁹⁵ Another non-trade concept that has gained prominence in agricultural trade in the aftermath of the 2007-2008 food crisis is that of “food security.”¹⁹⁶ According to the United Nations’ “Framework for Action,” that is produced by the U.N. High Level Task Force on the Global Food Security Crisis of 2007-2008, food security consists of four principles: (1) production and availability of food; (2) access to food and nutrition; (3) people’s use of food and nutrition to lead their lives to the full potential; and (4) stability of supply.¹⁹⁷ Food security has become an important policy of the AoA and the GATT/WTO.

D. *GATT/WTO Rules on Export Restrictions*

Against this historical background, we now turn to the major GATT/WTO provisions that apply to controls on agricultural exports. The GATT/WTO rules limiting the use of export restrictions must begin with the so-called “No Quotas Rule” contained in GATT Article XI entitled “General Elimination of Quantitative Restrictions.”¹⁹⁸ This is a general rule, not limited to agricultural goods:

1. No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.¹⁹⁹

In examining GATT/WTO rules on export restrictions, we must distinguish between export quotas (or bans) and export tariffs. An export quota is a quantitative restriction on the total number of exports, e.g., “No more than 200,000 tons of sugar can be exported in 2023.”²⁰⁰ A quota of zero is an export ban. By contrast, an export tariff is a tax imposed on each product or unit that is exported.²⁰¹ The tariff

194. *Id.* at ¶ 6.

195. CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 284.

196. Schoenbaum, *supra* note 172, at 605–06.

197. *Trade Important for Food Security, UN Specialist Tells Agriculture Delegations*, WORLD TRADE ORG., https://www.wto.org/english/news_e/news10_e/agri_18nov10_e.htm (last visited Sept. 17, 2023) [<https://perma.cc/7WVE-A93C>] (archived Aug. 22, 2023).

198. GATT 1994, *supra* note 18, at art. XI(1).

199. *Id.*

200. CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 257.

201. *Id.* at 152.

can be a flat tariff, e.g., \$1 per bushel of corn, or ad valorem, i.e., a percentage of the value of the product, e.g., “15% ad valorem.”²⁰²

1. Export Taxes

Article XI eliminates quotas and various other types of trade barriers but does not eliminate import or export tariffs. The first sentence states that no restrictions “*other than duties, taxes, or other charges . . . shall be instituted or maintained . . . on the exportation of any product . . .*”²⁰³ This language expressly *exempts* export tariffs, taxes, and other export charges (such as administrative fees) from the scope of Article XI’s prohibition. In other words, Article XI permits exports tariffs; moreover, no other provision contained in any of the WTO agreements prohibits export tariffs. Thus, while GATT Article XI eliminates export quotas or bans, export tariffs are lawful under the GATT/WTO. This GATT position means that if a restriction on export taxes is to be found, it must be found outside of the WTO.

2. Export Bans

While Article XI requires the general elimination of export bans, a further reading of the GATT/WTO agreements indicates that export bans of agricultural products are permitted or tolerated. Recent developments in the WTO, such as the paralysis of the Appellate Body, are also reasons why export bans will be permitted.

The general elimination rule for quotas contained in Article XI is immediately followed by an exception for agriculture:

2. The provisions of paragraph 1 of this Article shall not extend to the following:
- (a) Export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party.²⁰⁴

The Analytical Index of the GATT, which summarizes the legislative history of the GATT and includes other interpretive tools, indicates that the preparatory work for the GATT stated that the words “prevent or” were intended “to enable a member to take remedial measures before a critical shortage has arisen.”²⁰⁵ The U.S. representative took the position that “critical shortage” does not mean “economic distress but referred to shortages of crops, etc.”²⁰⁶ The GATT Analytical Index

202. *Id.*

203. GATT 1994, *supra* note 18, at art. XI(1).

204. *Id.* at art. XI(2).

205. Analytical Index of the General Agreement on Tariffs and Trade ¶ II.A.2(1) (p. 326), Apr. 15, 1994, 1867 U.N.T.S. 187 [hereinafter GATT Analytical Index].

206. *Id.* at ¶ II.A.2(2) (p. 326).

also indicates that GATT countries believed that a similar provision in a previous draft form is adequate to allow a country to impose “temporary export restrictions applied to meet a considerable rise in domestic prices of food-stuffs due to a rise in prices in other countries.”²⁰⁷ In considering the terms “essential to the exporting country,” the Sub-Committee at the Geneva session of the Preparatory Committee considered this language to indicate that the “importance of any product should be judged in relation to the particular country concerned.”²⁰⁸ This legislative history suggests that while the GATT/WTO generally prohibits export bans in agricultural trade, WTO countries are allowed to impose temporary export bans as a preventative measure in reaction to shortages in foodstuffs that are considered essential to the particular country involved. GATT Article XI:2(a) is further attenuated by AoA Article 12, “Disciplines on Export Prohibitions and Restrictions”:

1. Where any Member institutes any new export prohibition or restriction on foodstuffs in accordance with paragraph 2(a) of Article XI of GATT 1994, the Member shall observe the following provisions:

(a) the Member instituting the export prohibition or restriction shall give *due consideration* to the effects of such prohibition or restriction on importing Members’ food security²⁰⁹

The requirement that a country give “due consideration” to the interests of importing members is a vague requirement that appears to be precatory in nature only and appears by design to be unenforceable. The GATT has found similar terms to be precatory and unenforceable due to the imprecision and vagueness of the term.²¹⁰ In addition, AoA Article 12.2 also provides that Article 12.1 does not apply to any developing country member unless the member “is a net-food exporter of the specific foodstuff concerned.”²¹¹ A net exporter means that a member exports more foodstuff than it consumes. Few countries will fall into this category for essential food staples.

The current GATT/WTO regulations on export bans and export taxes do not provide meaningful limitations on the ability of countries to impose such restrictions. These current provisions may reflect the historical deference given to nations to protect domestic agriculture and are not adequate to discipline the use of export restrictions in the

207. *Id.*

208. *Id.* at ¶ II.A.2(3) (p. 326).

209. Agreement on Agriculture, *supra* note 170, at art. 12.1 (emphasis added).

210. The original articles in the GATT for developing countries contains similar language and were long viewed as weak and ineffectual to protect the interests of developing countries. See CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 718, 722.

211. Agreement on Agriculture, *supra* note 170, at art. 12.2.

current global food crisis. In the aftermath of the last food crisis during the global recession of 2007-2009, the United Nations stated that these GATT/WTO provisions “are considered to have been insufficient and weak during the 2007-2009 period.”²¹² Recognizing these limitations and the need for emergency measures to deal with the food crisis, the WTO decided to take action in its most recent ministerial conference held in Geneva in June 2022. The WTO Ministerial Conference, a meeting of all WTO trade ministers, is the highest authority in the WTO and meets every two years.²¹³

E. *The 2022 Geneva Ministerial Declaration on Food Insecurity*

On June 17, 2022, at the conclusion of the Twelfth Ministerial Conference held in Geneva, the WTO issued a Ministerial Declaration on the Emergency Response to Food Insecurity.²¹⁴ Rather than prohibiting all export bans and export taxes on agricultural products, the Ministerial Conference simplified the parameters of their use. The relevant provisions of the Geneva Declaration provide as follows:

4. We underscore the need for agri-food trade to flow, and reaffirm the importance of not imposing export prohibitions or restrictions in a manner inconsistent with relevant WTO provisions.²¹⁵

5. We resolve to ensure that any emergency measures introduced to address food security concerns shall minimize trade distortions as far as possible; be temporary, targeted, and transparent; and be notified and implemented in accordance with WTO rules. Members imposing such measures should take into account their possible impact on other Members, including developing countries, and particularly least-developed and net food-importing developing countries.²¹⁶

An additional document, the Ministerial Decision on the World Food Programme, prohibited export bans or export taxes on foodstuffs purchased by the World Food Programme for non-commercial humanitarian purposes.²¹⁷

212. FOOD & AGRIC. ORG. & ORG. FOR ECON. COOP. & DEV., PRICE VOLATILITY IN FOOD AND AGRICULTURAL MARKETS: POLICY RESPONSES ¶ 97 (2011).

213. CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 16.

214. World Trade Organization, Ministerial Declaration on the Emergency Response to Food Insecurity, WTO Doc.WT/MIN(22)/28 WT/L/1139 (June 17, 2022) [hereinafter Geneva Declaration].

215. *Id.*

216. *Id.*

217. World Trade Organization, Ministerial Decision on World Food Programme Food Purchases: Exemption from Export Prohibitions or Restrictions, WTO Doc. WT/MIN(22)/29 WT/L/1140 (June 17, 2022).

The Geneva Ministerial Declaration affects the GATT/WTO limitations on export taxes and export bans differently. The Declaration's exhortation to not impose export restrictions inconsistently with relevant WTO provisions does not affect the ability of WTO countries to implement export taxes. Under the relevant WTO provision, GATT Article XI, export taxes are permitted.²¹⁸ However, Paragraph 5 of the Declaration purports to contain a clearer statement of the parameters on export bans and export taxes: these restrictions should be "temporary, targeted, and transparent" and, in addition, nations imposing export bans (but not taxes) must notify the WTO under existing WTO rules.²¹⁹ The Decision on Notification Procedures for Quantitative Restrictions adopted by the Council for the Trade in Goods on June 22, 2012, sets forth the application notification procedures.²²⁰

Ultimately, the Geneva Ministerial Conference did not result in any new binding rules on export restrictions, with the exception of the decision to exempt food provided by the UN World Food Programme from all export restrictions. This latter exception served a symbolic purpose, for there was never a doubt that nations would restrict food shipped by the WFP for humanitarian purposes. The true purpose of the Geneva Ministerial Declaration on Food Insecurity might have been a symbolic one: to create momentum for a fuller and more robust consideration of binding rules on export restrictions at the thirteenth ministerial conference to be held in Abu Dhabi during the first quarter of 2024.

F. *The Paralysis of the WTO Appellate Body and Unenforceability of GATT/WTO Obligations*

The effectiveness of the GATT/WTO's rules concerning export restrictions on agricultural goods must also be understood in the context of the recent paralysis of the WTO Appellate Body that the United States instigated.²²¹ In 2016, due to extreme dissatisfaction with the work of the Appellate Body, the Obama Administration adopted a policy of blocking the reappointment of existing members or the appointment of new members to the Appellate Body of the WTO.²²²

218. GATT 1994, *supra* note 18, at art. XI(1).

219. Geneva Declaration, *supra* note 214, at ¶ 5.

220. Council for Trade in Goods, *Decision on Notification Procedures for Quantitative Restrictions*, WTO Doc. G/L/59/Rev.1 (June 22, 2012). These procedures apply only to Quantitative Restrictions. An export ban is a quantitative restriction and is thus subject to these procedures, but an export tax is not and so is outside of these notification procedures.

221. CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 123.

222. The United States' criticism of the Appellate Body is set forth in OFF. OF THE U.S. TRADE REPRESENTATIVE, REPORT ON THE APPELLATE BODY OF THE WORLD TRADE ORGANIZATION (2020), <https://ustr.gov/sites/default/files/>

The Trump administration continued this policy of intransigence with the result that, in December 2019, the members of the Appellate Body fell below the number needed for a quorum, so the Appellate Body cannot convene.²²³ The Biden administration has not moved to unblock the Appellate Body but instead has continued most of the Trump-era trade policies.²²⁴

The most significant ramification of the paralysis of the Appellate Body is that all WTO obligations and WTO agreements have become, in effect, unenforceable. The WTO dispute settlement system is a two-tier system with panels serving as trial courts and the Appellate Body as a high court of international trade.²²⁵ A third body, the Dispute Settlement Body (DSB), consisting of the entire WTO membership, must then adopt panel decisions that are not appealed, as well as Appellate Body decisions, before the decisions can become legally binding.²²⁶ Panel decisions that are not appealed are not affected by the paralysis of the Appellate Body. However, any decisions of panels that are appealed to the Appellate Body are suspended indefinitely and cannot be adopted by the DSB. Article 16.4 of the WTO Dispute Settlement Understanding provides that a “report by the panel shall not be considered for adoption by the DSB until after completion of

Report_on_the_Appellate_Body_of_the_World_Trade_Organization.pdf
https://ustr.gov/sites/default/files/Report_on_the_Appellate_Body_of_the_World_Trade_Organization.pdf [https://perma.cc/RB56-7LQV] (archived Aug. 22, 2023). The USTR argues that the United States is being treated unfairly in the WTO dispute settlement system. Out of 155 disputes filed against the United States in the WTO, about 90 percent of the disputes resulted in a finding against the United States. *Id.* at 3. The USTR asserts that on average over the past 25 years, the WTO has found a U.S. law or measure to be in violation of the WTO five or six times a year, year after year. *Id.* U.S. criticism of the Appellate Body falls into three main categories. According to the United States, the Appellate Body (1) engages in “judicial activism” by inventing rights and duties found nowhere in the WTO agreements and by usurping the authority of the WTO Ministerial Conference and General Council; (2) ignores or violates numerous procedural rules of the DSU dispute settlement process, including the mandatory deadline for deciding appeals, making findings of fact, and permitting persons whose term on the Appellate Body has expired to continue deciding appeals; and (3) intrudes upon the legitimate policy space of the United States by unlawfully rejecting U.S. trade law statutes pertaining to anti-dumping duties, subsidies and countervailing duties, safeguards, and country of origin labeling. *Id.* at 15–25, 25–80, 81–119.

223. *Id.* at A–1; Krzysztof J. Pelc & Joost Pauwelyn, *The WTO’s Trade Dispute Appeal System Could End on Dec. 10. Here’s What You Need to Know.*, WASH. POST (Dec. 5, 2019), <https://www.washingtonpost.com/politics/2019/12/05/wtos-trade-dispute-appeal-system-could-end-dec-heres-what-you-need-know/> [https://perma.cc/EC3U-V48B] (archived Sept. 17, 2023).

224. *Amid Reform Talks, U.S. Maintains Block on Appellate Body Nominations*, WORLD TRADE ONLINE (Sept. 23, 2022), <https://insidetrade.com/daily-news/amid-reform-talks-us-maintains-block-appellate-body-nominations> [https://perma.cc/C6YE-T8UR] (archived Aug. 22, 2023).

225. See CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 108–09.

226. See DSU, Dispute Settlement Rules: Understanding on Rules and Procedures Governing the Settlement of Disputes, Marrakesh Agreement Establishing the World Trade Organization art. 2.1, Annex 2, Apr. 15, 1994, 1867 U.N.T.S. 154 [hereinafter WTO DSU Rules].

appeal.”²²⁷ Since no appeals to the Appellate Body can now be completed, any appeal of a panel decision launches it into a legal limbo, and it becomes a nullity. When China won a panel decision on September 15, 2020 against the United States, finding that certain U.S. tariffs were unlawful, the United States promptly appealed the decision, nullifying its effect.²²⁸

Although there are a number of proposals in the WTO to resolve this impasse, as of now, none have taken effect that would fully redress this problem. The blockage of the Appellate Body means that any WTO member that wishes to impose any export ban or taxes can do so indefinitely by appealing any adverse panel decision to the now-decommissioned Appellate Body. At the Geneva Ministerial Conference held in June 2022, WTO members recognized the fundamental threat to the WTO posed by the crippling of the WTO dispute settlement system. In the MC12 Outcome Document, the Ministerial Conference declared:

We acknowledge the challenges and concerns with respect to the dispute settlement system including those related to the Appellate Body, recognize the importance and urgency of addressing those challenges and concerns, and commit to conduct discussions with the view to having a fully and well-functioning dispute settlement system accessible to all Members by 2024.²²⁹

G. *Limits on Export Restrictions in Regional and Bilateral Trade Agreements*

The discussion of the relevant GATT/WTO provisions indicate that they create weak and inadequate restraints on the ability of WTO members to impose export restrictions on the trade in agriculture. The recently completed Geneva Ministerial Conference failed to strengthen these inadequate restraints by enacting new binding rules or new guidelines circumscribing the operation of the existing rules. These weak and inadequate restraints, coupled with the paralysis of the WTO Appellate Body, indicate that, at present, the WTO does not provide any effective limits on the ability of countries to impose export restrictions on foodstuffs. Nothing in the GATT/WTO texts prohibit export taxes on agricultural products, and export bans are permitted, subject to certain parameters. The current crippling of the WTO dispute settlement system means that members can ignore these

227. *Id.* at art. 16.4.

228. See Notification of an Appeal by the United States to the Appellate Body, *United States–Tariff Measures on Certain Goods from China*, WTO Doc. WT/DS543/10 (Oct. 26, 2022).

229. World Trade Organization, MC12 Outcome Document, WTO Doc. WT/MIN(22)2 WT/L/1135 (June 17, 2022) [hereinafter WTO MC12 Outcome].

parameters with impunity and impose any export restrictions that they wish on agricultural trade. These conditions indicate that the WTO does not create effective limits on the widespread use of export restrictions that is exacerbating the global food crisis.

In this section, we examine limitations on export restrictions that are found in the numerous regional and bilateral free trade agreements (FTA) among WTO members countries. An FTA creates a free trade area in which all or most tariffs among the member states are reduced to zero.²³⁰ FTAs are permitted by the WTO by GATT Article XXIV, as they further liberalize trade.²³¹ FTAs create “WTO plus” treatment, as tariffs in the FTA are lower than comparable GATT tariffs. Under an exception to the Most Favored Nation principle, members of an FTA are not required to extend duty-free treatment to all other members of the WTO.²³² Only members of the FTA enjoy preferential tariffs (and other trade preferences) in intra-area trade.²³³ Non-members of an FTA do not enjoy trade preferences when trading with FTA members.²³⁴

Recently, regional FTAs have proliferated around the world. In North America, there is the United States-Mexico-Canada Trade Agreement (USMCA);²³⁵ in Europe, there is the Treaty on the Functioning of the EU;²³⁶ in Asia, there is the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP),²³⁷ the result of U.S.-led efforts,²³⁸ and the Regional Comprehensive Economic Partnership (RCEP) led by China;²³⁹ in Africa, there is the African

230. See CHOW, SCHOENBAUM & DORRIS, *supra* note 1, at 45.

231. See *id.* at 46.

232. See *id.*

233. See *id.* at 45.

234. See *id.*

235. See *generally* Protocol Replacing the North American Free Trade Agreement with the Agreement Between the United States of America, the United Mexican States, and Canada, Nov. 30, 2018, 107 Stat. 2116 [hereinafter USMCA].

236. See *generally* Consolidated Version of the Treaty on the Functioning of the European Union, Oct. 26, 2012, 2012 O.J. (C 115) 47 [hereinafter TFEU]. Members of the EU are: Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. *Id.*

237. See *generally* Comprehensive and Progressive Agreement for Trans-Pacific Partnership, Mar. 8, 2018 [hereinafter CPTPP]. The members of the CPTPP are Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam.

238. The United States led efforts to create the Trans-Pacific Partnership and was one of its original members. After Donald J. Trump was elected to the U.S. President, he withdrew the United States from the TPP on January 23, 2017. The remaining seven members then formed the CPTPP (also known as the TPP-11). The CPTPP adopts the basic texts of the TPP. Under U.S. leadership, China was not invited to join.

239. See Regional Comprehensive Economic Partnership Agreement, Nov. 15, 2020 [hereinafter RCEP]. The RCEP members are Australia, New Zealand, Brunei Darussalam, Cambodia, China, Japan, Laos, Malaysia, Republic of Korea, Singapore,

Continental Free Trade Area (AfCFTA),²⁴⁰ and in South America, there is the South Common Market (Mercosur).²⁴¹ Together, these FTAs have 109 member countries, which is about two-thirds of the 164 membership of the GATT/WTO.²⁴² These FTAs are also constantly adding new members, so their memberships will continue to close in on the total membership of the GATT/WTO.

The United States and the European Union also have numerous bilateral FTAs with nations around the world.²⁴³ In this discussion below, we examine the most prominent FTAs covering these regions to determine what limits they create on export restrictions on agriculture.

1. FTAs and Export Taxes

FTAs contain provisions eliminating or freezing import and export duties among their members. For example, in the EU, Article 1 of the

Thailand and Vietnam. China is the leading proponent of RCEP. *Id.*; see also *Official: China Ready to Implement RECEP Agreement*, THE STATE COUNCIL: THE PEOPLE'S REPUBLIC OF CHINA (Dec. 30, 2021), [https://perma.cc/XWU5-S253] (archived Aug. 17, 2023) (describing China's leadership on RCEP). Just as China was not invited to join the TPP under U.S. leadership, the United States is not invited to join RCEP.

240. *Creating One See generally Agreement Establishing the African Continental Free Trade Area*, Mar. 21, 2018, AFRICAN Union Doc. Ext/Assembly/AU/Dec.1(X) [https://au-afcfta.org/ (last visited Sept. 17, 2023)] [hereinafter AfCFTA]. The AfCFTA members are Ghana, Kenya, Rwanda, Niger, Chad, Eswatini, Guinea, Côte d'Ivoire, Mali, Namibia, South Africa, Congo, Rep., Djibouti, Mauritania, Uganda, Senegal, Togo, Egypt, Ethiopia, Gambia, Sahrawi Arab Democratic Rep., Sierra Leone, Zimbabwe, Burkina Faso, São Tomé & Príncipe, Equatorial Guinea, Gabon, Mauritius, Central African Rep., Angola, Lesotho, Tunisia, Cameroon, Nigeria, Malawi, Zambia, Algeria, Burundi, Seychelles, Tanzania, Cabo Verde, Democratic Republic of the Congo, Morocco and Guinea-Bissau. *Id.*; *State Parties*, AfCFTA, [https://au-afcfta.org/state-parties/ (last visited Sept. 28, 2023)] [https://perma.cc/E4YF-3X3R] (archived Sept. 28, 2023).

241. See generally *Southern Common Market (Mercosur) Agreement*, Nov. 29, 1991, 2140 U.N.T.S. 257 [hereinafter Mercosur], [https://www.mercosur.int/en/about-mercocur/mercocur-countries/ (last visited Sept. 17, 2023)]. Mercosur members are Argentina, Brazil, Paraguay, and Uruguay. Associate members are Bolivia, Chile, Colombia, Ecuador, Guyana, Peru, and Suriname. Associate members receive preferential tariffs when trading with full members but have no voting rights. *Id.*; MERCOSUR, [https://www.mercosur.int/en/about-mercocur/mercocur-countries/ (last visited Sept. 17, 2023)] [https://perma.cc/6QEW-P84W] (archived Aug. 17, 2023).

242. See *Members and Observers*, WORLD TRADE ORG., [https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited Sept. 17, 2023)] [https://perma.cc/P8YE-586H] (archived Sept. 17, 2023) (listing the 164 current members of the WTO since July 29, 2016).

243. See *Free Trade Agreements*, OFF. OF THE U.S. TRADE REPRESENTATIVE, [https://ustr.gov/trade-agreements/free-trade-agreements/chile-fta/final-text (last visited Aug. 21, 2023)] [https://perma.cc/XH2H-CMZS] (archived Aug. 18, 2023) [hereinafter *U.S. Free Trade Agreements*] (explaining that the United States has free trade agreements with Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Korea, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, Singapore, USMCA); see also *Free Trade Agreements*, DEPT OF ENTER., TRADE & EMP., [https://enterprise.gov.ie/en/what-we-do/trade-investment/free-trade-agreements/ (last visited Sept. 17, 2023)] [https://perma.cc/7T5C-3Z5W] (archived Sept. 17, 2023) [hereinafter *EU Free Trade Agreements*] (detailing that the EU has free trade agreements with Canada, Japan, Mexico, Singapore, Vietnam).

Treaty on the Functioning of the European Union provides: “Customs duties on imports and exports and charges having equivalent effect shall be prohibited between Member States.”²⁴⁴ Article 2.4:1 of USMCA provides that “no Party shall increase any existing customs duty, or adopt any new customs duty, on an originating good.”²⁴⁵ Similar provisions eliminating all customs duties are found in AfCFTA, CPTPP, RCEP, and Mercosur.²⁴⁶ A new export duty imposed on agricultural trade in response to the global food crisis is in violation of these provisions.

U.S. and EU bilateral trade agreements also have provisions limiting export taxes on agriculture. For example, in the US-Chile FTA, Article 3.13 provides: “Neither Party may adopt or maintain any duty, tax, or other charge on the export of any good to the territory of the other Party, unless such duty, tax, or charge is adopted or maintained on any such good when destined for domestic consumption.”²⁴⁷ In the EU-Chile FTA, Article 2.7 provides: “No Party shall introduce or maintain any duty, tax or other charge of any kind imposed on, or in connection with, the exportation of a good to the other Party . . . that is in excess of the tax or charge that would be imposed on like goods when destined for domestic consumption.”²⁴⁸ Under these provisions, Chile cannot impose an export tax on an agricultural export unless the same tax is imposed on the agriculture product used for domestic consumption. As such, a tax on domestic consumption will defeat the purpose of the export tax, so these rules should provide an effective deterrent against the use of export taxes. With only two exceptions, all of the United States’ and EU’s trade agreements with other partners have similar provisions.²⁴⁹

244. TFEU, *supra* note 236, at art. 30.

245. USCMA, *supra* note 235, at art. 2.4(1).

246. See AfCFTA, *supra* note 240, at art. 2, 4; CPTPP, *supra* note 237, at art. 2.4; RCEP, *supra* note 239, at art. 2.4; Mercosur, *supra* note 241, at art. 1.

247. United States – Chile Free Trade Agreement art. 3.13, U.S.-Chile, June 6, 2003, 117 Stat. 909 [hereinafter U.S.–Chile FTA].

248. Advanced Framework Agreement, Eur.–Chile, art. 2.7, Dec. 9, 2022, [<https://perma.cc/M37A-YXKL>] (archived Sept. 28, 2023) [hereinafter Eur.–Chile FTA].

249. See *U.S. Free Trade Agreements*, *supra* note 243 (for U.S. FTAs: Australia FTA, Section C, Article 2.11 (Export Taxes); Bahrain FTA, Article 2.10 (Export Taxes); CAFTA-DR (Dominican Republic-Central America, including Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Article 3.11 (Export Taxes); Chile FTA, Article 3.13 (Export Taxes); Colombia Trade Promotion Agreement, Article 2.11 (Export Taxes); Korea FTA (KORUS), Article 2.11 (Export Duties, Taxes, or Other Charges); Morocco FTA, Article 2.10 (Export Taxes); Oman FTA, Article 2.10 (Export Taxes); Panama Trade Promotion Agreement, Article 3.11 (Export Taxes); Peru Trade Promotion Agreement, Article 2.11 (Export Taxes); Singapore FTA, Article 2.4 (Export Tax); USMCA, Article 2.15 (Export Duties, Taxes, or Other Charges)). The U.S. trade agreements with Israel and Jordan do not have provisions on export taxes. See also *EU Free Trade Agreements*, *supra* note 243 (for EU FTAs: Canada FTA, Article 2.9 (Fees and Other Charges); Chile FTA, Article 2.7 (Export Duties, Taxes, or Other Charges); Japan Economic Partnership, Article 2.12 (Export Duties); Singapore FTA, Article 2.7 (Elimination of Customs Duties and Taxes on Exports); United Kingdom FTA, Article 22 (Export Duties, Taxes or Other Charges); Vietnam FTA, Article 2.11 (Export Duties, Taxes or Other Charges)).

A study of the remaining free trade agreements indicates that, while export taxes are prohibited on intra-area trade, these other FTAs have not entered into trade agreements with other partners. This indicates that trade between these FTA members and non-members may not be subject to any restrictions on export taxes on agricultural goods.

2. FTAs and Export Bans

Article 35 of the TFEU provides that “[q]uantitative restrictions on exports, and all measures having equivalent effect, shall be prohibited between Member States.”²⁵⁰ Further, Article 1 of EU Regulation 2015/479 provides that “[t]he exportation of products from the Union to third countries shall be free, that is to say, they shall not be subject to any quantitative restriction, with the exception of those restrictions which are applied in conformity with this Regulation.”²⁵¹ Under EU law, no EU member is allowed to impose export bans on agricultural products to EU countries or to non-EU countries.²⁵² Thus, no EU country can impose an export ban on agricultural products whether they are destined for an EU country or to a non-member of the EU.

Article 5 of EU Regulation 2015/479 provides for an exception “[i]n order to prevent a critical situation from arising on account of a shortage of essential products,” but the EU Commission, its executive body, acting at the request of a member, must first authorize the export ban only if the member meets the conditions laid down in Article 5 and other provisions.²⁵³ Article 36 of the TFEU also recognizes an exception for various non-economic objectives such as health protection and security.²⁵⁴ However, Article 36 further provides that export bans must not “constitute a means of arbitrary discrimination or a disguised restriction on trade between member states.”²⁵⁵ An additional limitation is that in response to Slovakia’s proposed restrictions on exports of cereals and grains, the EU Commission warned that export restrictions on agriculture must be “necessary and . . . strictly proportionate.”²⁵⁶ In March 2020, a Romanian export ban of wheat and corn was rejected by the EU Commission, which held that the measures do not appear to be proportionate, as there was no evidence

250. TFEU, *supra* note 236, at art. 35.

251. Commission Regulation 2015/479, 2015 O.J. (L 83) 35.

252. *Id.* at 36.

253. *See id.*

254. *See* TFEU, *supra* note 236, at art. 36.

255. *Id.*

256. *See* Marián Koren & Natasha Foote, *Commission Slams Slovakia’s Proposed Restrictions of Grain, Cereal Exports*, EURACTIV (Sept. 27, 2022), <https://www.euractiv.com/section/agriculture-food/news/commission-slams-slovakias-proposed-restriction-of-grain-cereal-exports/> [<https://perma.cc/SL87-6WQ7>] (archived Aug. 18, 2023).

that Romania was facing an imminent shortage of agricultural products intended for human consumption.²⁵⁷

With the exception of Mercosur, each of the other FTAs deals with export bans by incorporating GATT Article XI, the “no quotas” rule.²⁵⁸ Thus, the exception for export bans on agricultural goods, Article XI:2(a), is also part of these FTAs. In addition, the United States and the EU also include GATT Article XI in their trade agreements with other trading partners. This indicates that the Article XI exception for export trade bans on agriculture is in widespread use in current free trade agreements.

Parties to these other FTA agreements, however, might be able to use the treaty’s dispute resolution mechanism to limit the use of export bans. For example, suppose that Chile is considering an export ban on soybeans to keep prices from rising in its domestic market. Under the U.S.-Chile FTA, the United States could argue that the ban can be justified only if it meets the requirement of GATT Article XI:2(a) that the ban is “temporary” and is applied to relieve “critical shortages” of foodstuffs.²⁵⁹ Currently, many countries are using export bans not because of food shortages, but to keep prices from rising in the domestic market.²⁶⁰ A country’s motivation to keep prices low is not a justification under this language; only a “critical shortage” satisfies the rule. Moreover, any ban must be “temporary”—it cannot be indefinite—and must be removed once a critical shortage has been alleviated. As these elements are set forth as conditions for an export ban, the United States could argue that Chile has the burden of establishing these elements in any dispute. The United States and Chile are also members of the WTO, but such an argument within the WTO is not only subject to the GATT/WTO’s traditional deference for food protectionism but also faces the problem that Chile can appeal any adverse ruling by a panel that will nullify its effects.

FTAs such as the USMCA, the EU, the U.S.-Chile FTA, and the EU-Chile FTA have their own dispute resolution mechanisms that are independent of the GATT/WTO.²⁶¹ Under Article 22.15 of the U.S.-Chile FTA, a complaining party is allowed to impose trade sanctions on an offending party if the latter does not comply with a panel decision

257. See David Kleimann, *Food Security: The Role and Limits of International Rules on Export Restrictions*, BRUEGEL (June 8, 2022), <https://www.bruegel.org/blog-post/food-security-role-and-limits-international-rules-export-restrictions> [<https://perma.cc/MQ9C-YRWF>] (archived Aug. 18, 2023).

258. See AfCFTA, *supra* note 240, at art. 9; CPTPP, *supra* note 237, at art. 2.10; RCEP, *supra* note 239, at art. 2.17. Mercosur is silent on the issue of export bans. As each of the Mercosur countries are also members of the WTO, it is reasonable to conclude that they will apply the approach of the “no quotas” rule of GATT Article XI.

259. See GATT 1994, *supra* note 18, at art. XI.2(a).

260. See Pangestu & Van Trotsenburg, *supra* note 12.

261. See USMCA, *supra* note 235, at ch. 31 (Dispute Settlement); TFEU, *supra* note 236, tit. I, § 5 (Court of Justice).

requiring the removal of a trade barrier such as an export ban.²⁶² Similar provisions are found in the USMCA, the EU, and in all U.S. and EU trade agreements with other trading partners.²⁶³ The availability of such sanctions should provide a high degree of enforceability of the applicable trade provisions. The crippling of the WTO Appellate Body has no impact on the effectiveness of the dispute resolution mechanisms of FTAs.

This review of FTAs indicates that the EU and the United States are in the strongest position to enforce prohibitions on export taxes and export bans against any country that is a part of a free trade agreement associated with either entity. For other FTAs, restrictions on export taxes on intra-area trade violate rules prohibiting all new intra-area tariffs. Other than the EU, the other five FTAs have incorporated GATT Article XI:2(a), the exception to the no quotas rule for temporary export bans on agriculture. Bans for the purpose of keeping domestic prices low should be open to challenge under the dispute settlement systems of these other FTAs.

3. Strategic Use of FTAs

In light of this discussion, let us review the events that have triggered a new apex in the food crisis: the export restrictions imposed by Russia and Ukraine discussed at the beginning of this Article. It should be evident that the current GATT/WTO offers no meaningful limitations on the use of export restrictions by Russia and Ukraine. Suppose, however, that Ukraine realizes its goal of becoming a member of the EU. At this point, Ukraine's use of export bans and export taxes would run afoul of TFEU Article 1 (export bans) and Article 35 (export taxes).²⁶⁴ Exceptions to these restrictions exist, but these are subject to review by the EU Commission and the caveats that exceptions must be "necessary and proportionate" and not "a disguised restriction in

262. See U.S.–Chile FTA, *supra* note 247, at art. 22.15.

263. See *U.S. Free Trade Agreements*, *supra* note 243 (for U.S. FTAs: Australia FTA, ch. 21 (Institutional Arrangements and Dispute Settlement); Bahrain FTA, ch. 19 (Dispute Settlement); CAFTA-DR (Dominican Republic-Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua), ch. 20 (Dispute Settlement); Chile FTA, ch. 20 (Dispute Settlement); Colombia Trade Promotion Agreement, ch. 21 (Dispute Settlement); Israel FTA, art. 19 (Dispute Settlements); Jordan FTA, art. 17 (Dispute Settlement); Korea FTA (KORUS), ch. 22 (Institutional Provisions and Dispute Settlement); Morocco FTA, ch. 20 (Dispute Settlement); Oman FTA, ch. 20 (Dispute Settlement); Panama FTA, ch. 20 (Dispute Settlement); Panama Trade Promotion Agreement, ch. 20 (Dispute Settlement); Peru Trade Promotion Agreement, ch. 21 (Dispute Settlement); Singapore FTA, art. 10.18 (Dispute Settlement); USMCA, ch. 31 (Dispute Settlement)); *EU Free Trade Agreements*, *supra* note 243 (for EU FTAs: Canada FTA, ch. 29 (Dispute Settlement); Chile FTA, ch. 31 (Dispute Settlement); Japan Economic Partnership, ch. 21 (Dispute Settlement); Singapore FTA, ch. 14 (Dispute Settlement); United Kingdom FTA, Part Six (Dispute Settlement); Vietnam FTA, ch. 15 (Dispute Settlement)).

264. See TFEU, *supra* note 236, at arts. 1, 35.

trade.”²⁶⁵ The EU will become a free trade outlet for food exports from Ukraine. Not only are these food products from Ukraine not subject to export quotas or export taxes, but their presence in the EU markets helps to keep world food prices from rising.

Of course, many political obstacles, such as Russia’s opposition, stand in the way of Ukraine’s entry into the EU in the near future. Suppose, instead, that the United States, the EU, or both, enter into an FTA with Ukraine to bolster its war-torn economy. An FTA with the United States or the EU would contain existing provisions that prohibit or limit the use of export restrictions as a form of domestic price control. These provisions would allow products from Ukraine to reach international markets without the burden of export taxes so world prices would not increase. U.S. and EU distributors could also transship or resell at free trade prices to least developed countries. The United States, EU, and other countries, such as Japan, can repeat this process of using FTAs with other key countries imposing export restrictions.

The FTAs would also contain a dispute resolution mechanism that would allow the United States and EU to enforce these restrictions. Should a country such as Chile, which has FTAs with the United States and the EU, impose export restrictions on food, these two parties can use the FTAs’ dispute resolution mechanisms to oppose the restrictions and to re-establish a free trade outlet from Chile to world markets. Through the strategic use of FTAs, the United States and EU can create a free trade conduit for food to world markets and least developed countries that helps to keep world food prices from spiking and meets demand in a time of crisis.

In the case of Russia, an FTA with the United States or the EU is impossible under current conditions, but an FTA with Asia, such as the CPTPP or more likely RCEP—the FTA led by China— might be achievable. These FTAs also contain stronger restrictions than the WTO. To be sure, it is quite possible that no set of legal rules will be effective in controlling Russia’s conduct, but that prospect raises issues of the abuse of power and aggression by an autocrat that are beyond the scope of this Article.

IV. CONCLUSIONS

Although the world confronts a global food crisis of unprecedented scope and magnitude, nations are exacerbating the crisis by imposing export bans and taxes to keep domestic prices stable. These export restrictions only lead to increases in the world prices of agricultural products as the supply in the world market is kept artificially low. Nations acting in self-interest are harming the interests of all other

265. See discussion *supra* Part III.G.2, note 42; Commission Regulation 2015/479, 2015 O.J. (L 83) 36–37.

nations, especially the poorest countries in the world. The global food crisis is being intensified by a growing global food protectionism, with nations enacting seventy-four export bans or restrictions just since the beginning of 2022.²⁶⁶

Due to the GATT/WTO's historical lack of emphasis on export controls and its deference to the protection of agriculture, the GATT/WTO rules applicable to export taxes and restrictions on agricultural trade are weak and inadequate. Added to these weaknesses is the current inability of the WTO dispute settlement system to fully function, making it impossible to fully enforce WTO obligations. The WTO emerges as an organization that is weak, in disarray, and incapable of responding to a catastrophic food emergency.

An optimistic scenario is that the GATT/WTO can remedy these issues in the Thirteenth Ministerial Conference that will take place in the first quarter of 2024. GATT/WTO trade ministers have declared that they intend to restore the dispute settlement system to a fully functioning body in 2024.²⁶⁷ The issue of export restrictions on agriculture, considered in the Twelfth Ministerial Conference in Geneva, will surely once again be an urgent topic in Abu Dhabi, the site of the next Ministerial Conference. The Ministerial Conference could resuscitate the Appellate Body and adopt binding rules prohibiting or severely limiting export restrictions. Achievement of these goals could be an optimal solution to the current global food crisis and help avert other crises in the future. However, given the current impasse on key issues, political opposition to many of these goals, and the GATT/WTO's recent track record of deadlock, such optimistic results might be impossible to achieve.

A more promising prospect is for the EU and the United States to spearhead the use of FTAs to create free trade channels for food products to reach world markets. These FTAs also provide powerful weapons that can be used to effectively quash some of the many export restrictions that are proliferating around the world. The EU has the most powerful tools to quash export restrictions, followed by the United States. The EU and the United States should take leadership positions in using FTAs to create free trade routes to international markets, quash export restrictions, and encourage other countries to do the same. The 109 members of these FTAs represent nearly two-thirds of the entire 164 country WTO membership and more than half of all of the 195 recognized nations in the world.²⁶⁸ With the proliferation of new FTAs and addition of new member countries, FTAs could soon

266. See Tan, *supra* note 6.

267. See WTO MC12 Outcome, *supra* note 229.

268. See *Members and Observers*, *supra* note 253; Cory Price, *How Many Countries are There in the World?*, WORLD ATLAS (May 18, 2023), <https://www.worldatlas.com/geography/how-many-countries-are-there-in-the-world.html> [https://perma.cc/6AKD-BL8N] (archived Aug. 18, 2023).

surpass the WTO in importance in international trade if they have not done so already.

The systemic weaknesses of the GATT/WTO, coupled with the recent proliferation of FTAs around the world, indicate that the future of multilateral trade may lie outside of the GATT/WTO. The GATT/WTO is beset with many political disagreements that have now resulted in the crippling of its dispute settlement mechanism, one of its most prominent contributions to the multilateral system. These disagreements also may be the cause of the inability of the Geneva Ministerial Conference to agree on binding legal rules on export restrictions. The issues that plague the WTO go well beyond problems in agricultural trade and beyond the scope of this article.²⁶⁹ In the area of agricultural trade, however, until the GATT/WTO can find the political will to overcome its many weaknesses, it is up to countries such as the EU and the United States to lead FTAs around the world in eliminating or offsetting export restrictions on agriculture.

269. See, e.g., Daniel C.K. Chow, *U.S. Trade Infallibility and the Crisis of the World Trade Organization*, 2020 MICH. ST. L. REV. 599, 639 (2020) (describing the life or death struggle of the WTO in the face of an unrelenting attack by the United States).